CRYPTORCHIDISM

A MEDICAL DICTIONARY, BIBLIOGRAPHY,
AND ANNOTATED RESEARCH GUIDE TO
INTERNET REFERENCES

JAMES N. PARKER, M.D.
AND PHILIP M. PARKER, PH.D., EDITORS

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The collective knowledge generated from academic and applied research summarized in various references has been critical in the creation of this book which is best viewed as a comprehensive compilation and collection of information prepared by various official agencies which produce publications on cryptorchidism. Books in this series draw from various agencies and institutions associated with the United States Department of Health and Human Services, and in particular, the Office of the Secretary of Health and Human Services (OS), the Administration for Children and Families (ACF), the Administration on Aging (AOA), the Agency for Healthcare Research and Quality (AHRQ), the Agency for Toxic Substances and Disease Registry (ATSDR), the Centers for Disease Control and Prevention (CDC), the Food and Drug Administration (FDA), the Healthcare Financing Administration (HCFA), the Health Resources and Services Administration (HRSA), the Indian Health Service (IHS), the institutions of the National Institutes of Health (NIH), the Program Support Center (PSC), and the Substance Abuse and Mental Health Services Administration (SAMHSA). In addition to these sources, information gathered from the National Library of Medicine, the United States Patent Office, the European Union, and their related organizations has been invaluable in the creation of this book. Some of the work represented was financially supported by the Research and Development Committee at INSEAD. This support is gratefully acknowledged. Finally, special thanks are owed to Tiffany Freeman for her excellent editorial support.

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Table of Contents

FORWARD

In March 2001, the National Institutes of Health issued the following warning: "The number of Web sites offering health-related resources grows every day. Many sites provide valuable information, while others may have information that is unreliable or misleading."[1] Furthermore, because of the rapid increase in Internet-based information, many hours can be wasted searching, selecting, and printing. Since only the smallest fraction of information dealing with cryptorchidism is indexed in search engines, such as **www.google.com** or others, a non-systematic approach to Internet research can be not only time consuming, but also incomplete. This book was created for medical professionals, students, and members of the general public who want to know as much as possible about cryptorchidism, using the most advanced research tools available and spending the least amount of time doing so.

In addition to offering a structured and comprehensive bibliography, the pages that follow will tell you where and how to find reliable information covering virtually all topics related to cryptorchidism, from the essentials to the most advanced areas of research. Public, academic, government, and peer-reviewed research studies are emphasized. Various abstracts are reproduced to give you some of the latest official information available to date on cryptorchidism. Abundant guidance is given on how to obtain free-of-charge primary research results via the Internet. **While this book focuses on the field of medicine, when some sources provide access to non-medical information relating to cryptorchidism, these are noted in the text.**

E-book and electronic versions of this book are fully interactive with each of the Internet sites mentioned (clicking on a hyperlink automatically opens your browser to the site indicated). If you are using the hard copy version of this book, you can access a cited Web site by typing the provided Web address directly into your Internet browser. You may find it useful to refer to synonyms or related terms when accessing these Internet databases. **NOTE:** At the time of publication, the Web addresses were functional. However, some links may fail due to URL address changes, which is a common occurrence on the Internet.

For readers unfamiliar with the Internet, detailed instructions are offered on how to access electronic resources. For readers unfamiliar with medical terminology, a comprehensive glossary is provided. For readers without access to Internet resources, a directory of medical libraries, that have or can locate references cited here, is given. We hope these resources will prove useful to the widest possible audience seeking information on cryptorchidism.

The Editors

[1] From the NIH, National Cancer Institute (NCI): **http://www.cancer.gov/cancerinfo/ten-things-to-know**.

CHAPTER 1. STUDIES ON CRYPTORCHIDISM

Overview

In this chapter, we will show you how to locate peer-reviewed references and studies on cryptorchidism.

The Combined Health Information Database

The Combined Health Information Database summarizes studies across numerous federal agencies. To limit your investigation to research studies and cryptorchidism, you will need to use the advanced search options. First, go to **http://chid.nih.gov/index.html**. From there, select the "Detailed Search" option (or go directly to that page with the following hyperlink: **http://chid.nih.gov/detail/detail.html**). The trick in extracting studies is found in the drop boxes at the bottom of the search page where "You may refine your search by." Select the dates and language you prefer, and the format option "Journal Article." At the top of the search form, select the number of records you would like to see (we recommend 100) and check the box to display "whole records." We recommend that you type "cryptorchidism" (or synonyms) into the "For these words:" box. Consider using the option "anywhere in record" to make your search as broad as possible. If you want to limit the search to only a particular field, such as the title of the journal, then select this option in the "Search in these fields" drop box. The following is what you can expect from this type of search:

- **Undescended Testes**

  Source: Family Urology. 3(1): 13-16. 1998.

  Contact: Available from American Foundation for Urologic Diseases. 1128 North Charles Street, Baltimore, MD 21201. (410) 727-2908.

  Summary: In men, the testicles (also known as testes) are normally located in the scrotal sac. The purpose of the scrotal sac (scrotum) is to keep the temperature of the testicles 2 to 3 degrees cooler than the core body temperature. This article reviews one of the most common problems managed by pediatric urologists, the **undescended testicle.** This condition is found in boys where a testicle fails to migrate from its original position in the abdominal cavity into the scrotum. Boys with an **undescended testis,** also known as **cryptorchidism,** are at risk for infertility, testicular cancer, inguinal hernia, and

testicular torsion. The authors report on normal testicular development, noting that two thirds of undescended testicles in infants descend by six months of age. Thereafter, spontaneous testicular descent is rare. Pediatric urologists generally recommend that an **undescended testicle** be corrected by the age of 12 to 18 months, before severe, degenerative changes occur in the **undescended testicle.** Men who had an **undescended testicle** as children are at risk for testicular cancer. This malignancy is most common between 15 and 40 years of age. Surgical treatment for an **undescended testicle** does not prevent cancerous changes from occurring. Consequently, men who were treated for an **undescended testicle** as children are encouraged to practice testicular self-examination monthly. The authors conclude by reminding readers to counsel the parents of a child with an **undescended testicle,** to help them realize that this is a fairly common and very treatable condition. One drawing illustrates the three common positions of undescended testicles, as well as the normal scrotal placement. 1 figure.

- **Management of the Undescended Testis**

  Source: Contemporary Urology. 13(3): 20-31. March 2001.

  Contact: Available from Medical Economics Publishing Inc. Montvale, NJ 07645. (800) 432-4570.

  Summary: The goals of treatment for a child with **cryptorchidism** (**undescended testicle**) are to enhance the possibility of fertility, provide accessibility to the testis for self examination, decrease potential susceptibility to malignancy, and minimize the psychological stress associated with an empty scrotum. This article reviews current hormonal options and describes the author's approach to inguinal orchidopexy (surgery to mobilize the **undescended testis,** place it in the scrotum, and attach it). The potential for success with hormonal treatment varies with age as well as with testis location. Older children, those with more caudally positioned testes, and those with testes documented to be scrotal at birth tend to respond more favorably to hormonal therapy, while early treatment has been associated with a much lower success rate. Surgery for **undescended testicle** is recommended when the child is 12 to 18 months of age. The author describes each part of the standard surgical approach, which includes: an inguinal incision; full exposure of the inguinal canal; separation of the processus vaginalis and mobilization of the testis and spermatic cord from the peritoneum anteriorly and the retroperitoneum posteriorly; and placement of the testis into the scrotum. In addition to the usual 1 month postoperative visit, children are evaluated 1 year after surgery to assess testis location, size, and viability. At puberty, boys should have a followup examination with a urologist, at which time the patient should be instructed to perform monthly testicular self examinations. 5 figures. 10 references.

- **Cryptorchidism: Current Concepts**

  Source: Pediatric Clinics of North America. 44(5): 1211-1227. October 1997.

  Contact: Available from W.B. Saunders Company. 6277 Sea Harbor Drive, Orlando, FL 32887-4800. (800) 654-2452.

  Summary: This article reviews the current concepts in the treatment of **cryptorchidism** (failure of one or both testicles to descend into the scrotum). Today, surgery (orchiopexy) is advocated in early infancy, with or without adjuvant hormonal therapy. The better understanding of the hypothalamic pituitary gonadal axis and the histology of the developing testis has significantly influenced the management of the **undescended testicle.** The aims of orchiopexy are to improve fertility, decrease malignancy potential, and minimize psychological stress associated with an empty

scrotum. Surgery may or may not achieve these goals alone. The addition of hormonal therapy to orchiopexy may prove beneficial to achieve all these objectives; however, the operating surgeon is the most important factor in accomplishing a good result. The authors also discuss epidemiology, embryology of testicular development and descent, the etiology of **cryptorchidism,** and the differential diagnosis. 3 figures. 1 table. 79 references.

Federally Funded Research on Cryptorchidism

The U.S. Government supports a variety of research studies relating to cryptorchidism. These studies are tracked by the Office of Extramural Research at the National Institutes of Health.[2] CRISP (Computerized Retrieval of Information on Scientific Projects) is a searchable database of federally funded biomedical research projects conducted at universities, hospitals, and other institutions.

Search the CRISP Web site at **http://crisp.cit.nih.gov/crisp/crisp_query.generate_screen**. You will have the option to perform targeted searches by various criteria, including geography, date, and topics related to cryptorchidism.

For most of the studies, the agencies reporting into CRISP provide summaries or abstracts. As opposed to clinical trial research using patients, many federally funded studies use animals or simulated models to explore cryptorchidism. The following is typical of the type of information found when searching the CRISP database for cryptorchidism:

- **Project Title: BIOLOGICAL ROLE OF A NOVEL TESTIS INSULIN-LIKE PROTEIN**

  Principal Investigator & Institution: Menon, Ram K.; Professor of Pediatrics; Pediatrics & Communicable Dis; University of Michigan at Ann Arbor 3003 South State, Room 1040 Ann Arbor, Mi 481091274

  Timing: Fiscal Year 2003; Project Start 15-SEP-2003; Project End 31-AUG-2005

  Summary: (provided by applicant): The proteins of the insulin family play essential roles in pleotropic physiological processes affecting metabolism, growth, and reproduction. Using the techniques of molecular and computational biology our laboratory recently identified a novel member of the insulin family we termed Insl6 (insulin-like protein 6). Expression of Insl6 is greatest in germ cells of the testis. Evolutionary conservation of the structure of the Insl6 gene suggests an essential biological role for this protein. However, at present the biological role of Insl6 is not known. Our preliminary studies have identified a subject with male infertility with a heterozygous mutation in the INSL6 gene. Our studies indicate that the identified mutation alters the intra-cellular trafficking of the Insl6 protein. Specific Aim 1 expands on these observations and tests the hypothesis that mutations in the INSL6 gene are associated with characteristic phenotypes in the human. The genotype-phenotype correlation will be established by analysis of clinical history, physical examination, sperm analysis, and endocrine profile. Specific Aim 2 tests the hypothesis that the Insl6 null phenotype, generated by targeted disruption of the murine Insl6 gene, will reflect the biological role of Insl6. The Insl6 null mice will be evaluated for phenotypic

[2] Healthcare projects are funded by the National Institutes of Health (NIH), Substance Abuse and Mental Health Services (SAMHSA), Health Resources and Services Administration (HRSA), Food and Drug Administration (FDA), Centers for Disease Control and Prevention (CDCP), Agency for Healthcare Research and Quality (AHRQ), and Office of Assistant Secretary of Health (OASH).

characteristics including viability, sexual differentiation, fertility, testicular macro- and microstructure, sperm analysis, and endocrine profile. The identification of new members of the insulin gene family has led to the elucidation of novel functions for this family of proteins. For example, targeted disruption of insulin-like peptide 3 (Insl3) in the mouse revealed a critical role for this peptide in testicular descent. Furthermore, the recent discovery of the cognate receptor (LGR8) for Insl3 and the elucidation of **cryptorchidism** as one of components of the LGR8 null phenotype underscore the exciting advances made in this field. The results from experiments outlined in this proposal will advance our understanding of the biological role of Insl6 and provide insights into human reproduction and disorders such as infertility.

Website: http://crisp.cit.nih.gov/crisp/Crisp_Query.Generate_Screen

- **Project Title: FERTILITY POTENTIAL OF THE CRYPTORCHID MALE**

  Principal Investigator & Institution: Huff, Dale S.; Children's Hospital of Philadelphia 34Th St and Civic Ctr Blvd Philadelphia, Pa 191044399

  Timing: Fiscal Year 2002

  Summary: This abstract is not available.

  Website: http://crisp.cit.nih.gov/crisp/Crisp_Query.Generate_Screen

- **Project Title: GENETIC CONTROL OF EARLY TESTICULAR DESCENT**

  Principal Investigator & Institution: Agoulnik, Alexander; Assistant Professor; Baylor College of Medicine 1 Baylor Plaza Houston, Tx 77030

  Timing: Fiscal Year 2002; Project Start 01-MAY-2002; Project End 30-APR-2003

  Summary: In human populations **cryptorchidism** occurs in 3-4% of males at birth, making this abnormality the most frequent congenital birth defect in newborn boys. Two main consequences of an abnormal of an abnormal location of the testis are infertility caused by degeneration of the spermatogonial cells and a high risk of malignant tumors in adulthood. Testicular descent during development is a complex, multi-stage process whereby the male gonads progress toward the scrotum. Failure in any stage of this process results in **cryptorchidism** or **undescended testis.** The long-term objectives of this proposal are to identify key genetic components that control the molecular mechanisms of the early phases of testicular descent. A new mouse mutation, crsp (cryptorchidism with spotting), discovered in Baylor College of Medicine, will be used as a model system to study this problem. Male mice homozygous for crsp have a high intra abdominal position of the testes, associated with complete arrest of spermatogenesis in the early stages of proliferation. Our preliminary data have shown that the mutation does not specifically affect spermatogenesis but testicular descent during development. It is caused by a transgene insertion into the telomeric region of mouse chromosome 5 producing a deletion of the chromosomal DNA. We have cloned the critical genomic region into a series of overlapping BAC clones and estimated the physical distance of the deletion. The present application is designed to test the hypothesis that the crsp mutation disrupts one of the early determinants of testicular descent and that malfunction of the crsp gene could be responsible for the **cryptorchidism** in mutant. The specific aims are: 1) to characterize the phenotype and the molecular genetic rearrangements in the mutant mice; 2) to identify genes residing within the critical region; 3) to evaluate potential candidate genes in mouse by BAC transgenic rescue and generation of gene deficient mutants. The resulting information will provide a framework for elucidating the function of the CRSP gene in the etiology of **cryptorchidism,** determination of the CRSP developmental pathways relevant to the

disorder and development of new diagnostic tools and future therapeutic routes for this most common birth defect in men.

Website: http://crisp.cit.nih.gov/crisp/Crisp_Query.Generate_Screen

- **Project Title: GONADOTROPIN-RELEASING HORMONE ACTION**

  Principal Investigator & Institution: Conn, Paul M.; Professor & Chairman of Pharmacology; None; Oregon Health & Science University Portland, or 972393098

  Timing: Fiscal Year 2004; Project Start 01-APR-1984; Project End 28-FEB-2009

  Summary: (provided by applicant): This is a request for continuation of a program begun in 1979. Since isolation of gonadotropin releasing hormone (GnRH) in the early 1970s, basic and clinical discoveries have presented uses for GnRH analogs. Among these are treatments for endometriosis/fibroids, polycystic ovary disease, perimenopause, protection of the ovary and testes (i.e., during chemotherapy), assisted reproduction, precocious puberty, male and female birth control, prostatic, ovarian and mammary carcinomas, **cryptorchidism,** and other conditions. The first GnRH agonist was approved for use in the US in 1985 (Leuprolide (Lupron, TAP/Abbott)); Buserelin (Hoechst) was already in use in Europe at that time. Each of these molecules, and other agonists, continue to be available for international use. Due to patent expirations, they are now sold by various companies and in an array of formulations and delivery systems, adding to their potential utility and comprising a world-wide market in excess of $1.5 billion. Studies of GnRH action have provided a great deal of useful, basic information to the field of neuroendocrine peptides. Among the faciliatory features of GnRH and its analogs are ease of preparing GnRH analog radioligands, availability of model systems with measurable endpoints, the relative specificity of actions, size (i.e., TRH is very small and chemical modifications frequently destroy binding activity, while CRF and GHRH are large and analogs are relatively difficult to synthesize; GnRH is virtually impossible to denature), and availability of vectors encoding the GnRH receptor and many mutants (along with fluorescent probes) from a range of species and tissues. In addition, nearly 10,000 biologically active GnRH analogs are now described in the scientific and patent literature, providing an exquisite database for understanding structure-activity relations; these analogs include well-defined full agonists and full antagonists, many of which are metabolically stable or have other desirable characteristics. Improved understanding of the mechanism of action of this hormone will likely lead to opportunities for improved drugs (i.e., fewer side effects, orally active and cheaper) and more specific therapies. "Non-traditional" approaches also have potential; approaches involving some of these are described in the present proposal. The specific aims of this study will advance both our basic understanding and will identify new sites and approaches potentially amenable to therapeutic intervention.

  Website: http://crisp.cit.nih.gov/crisp/Crisp_Query.Generate_Screen

- **Project Title: ORGANOCHLORINE PESTICIDES AND MALE GENITAL ANOMALIES**

  Principal Investigator & Institution: Bhatia, Rajiv; Public Health Institute Oakland, Ca 946074046

  Timing: Fiscal Year 2002; Project Start 01-AUG-1998; Project End 31-JUL-2004

  Summary: DDT, one of the most ubiquitous of a class of endocrine disrupting chemicals, has been associated with dramatic adverse effects on the reproductive systems of animals. Effects of DDT in animals and experimental systems are observed at levels in the range of human exposure. Chemicals having endocrine activity similar to DDT are

currently in use, and recent studies have suggested male reproductive system disorders are becoming more prevalent. The Investigators propose a nested case-control study of **cryptorchidism** and hypospadias and in utero exposure to DDT within the Child Health and Development Studies (CHDS) cohort. Such an examination of the role of DDT in the causation of human genital anomalies has not been done previously. The CHDS, a longitudinal study of 20,000 pregnancies among Northern California Kaiser Foundation Health Plan members, enrolled subjects between 1959 and 1966 a time of high domestic use of DDT. All subjects were interviewed during pregnancy about habits and socio-demographic characteristics and almost all children were followed for the first five years of life. The subjects will include 155 male liveborn infants with hypospadias or **cryptorchidism** and an equal number of randomly selected controls. Levels of DDT and its major metabolites will be assayed from maternal serum currently stored at the National Institutes of Health. The sex steroid hormone, testosterone, and sex hormone binding globulin, possible markers for reproductive system effects of DDT, will be measured from cord blood samples in a subset of 50 infants. The authors hypothesize that maternal DDT levels will be higher in mothers of male with genital anomalies after controlling for confounders. They will examine th effect of DDT on birth weight, gestational age, and steroid hormones as well as the roles these factors may play in the mechanism of DDT's effects. Finding DD to be a risk factor for male genital malformations, would suggest endocrine disrupting chemicals may be significant causes of male reproductive disorders and potentially causes of cancers of the male and female reproductive systems.

Website: http://crisp.cit.nih.gov/crisp/Crisp_Query.Generate_Screen

- **Project Title: PHYSIOLOGY OF LGR7 AND LGR8 IN GONADAL TISSUES**

  Principal Investigator & Institution: Hsueh, Aaron Jw.; Professor; Gynecology and Obstetrics; Stanford University Stanford, Ca 94305

  Timing: Fiscal Year 2003; Project Start 06-MAY-2003; Project End 30-APR-2008

  Summary: (provided by applicant): The classic hormone relaxin belongs to a family of peptide hormones with a conserved two-chain structure. Extensive studies have demonstrated that relaxin plays important roles in female physiology during pregnant and nonpregnant states and a paralogous gene, INSL3, is important in male reproductive development. Although relaxin is produced by ovarian luteal cells whereas INSL3 is produced by testis Leydig cells as well as ovarian the cal and luteal cells, their physiological roles in the gonads are unclear. Earlier studies suggested the presence of relaxin and INSL3 binding sites in target tissues including the gonads. However, studies on the putative receptors for these ligands were limited due to difficulties involved in performing ligand-binding assays for these proteins expressed at low levels. Our recent studies demonstrated that relaxin activates the orphan receptors LGR7 and LGR8 whereas INSL3 specifically activates LGR8. In addition to demonstrating the role of cAMP pathways in LGR7 and LGR8 signaling, we generated the soluble ligand-binding ectodomain of LGR7 to serve as a functional antagonist. Treatment with the soluble ectodomain of LGR7 delayed parturition of pregnant mice. Here, we propose to analyze the domains of LGR7 and LGR8 that are important for receptor function by testing ligand signaling of chimeric receptors. Based on our findings of LGR8 variants in cryptorchid patients, we will further test INSL3 activation of a LGR8 variant. We have obtained preliminary data indicating the expression of LGR7 and LGR8 in the testis and ovary and propose to elucidate the physiological roles of LGR7 and LGR8 in gonadal physiology. We will characterize the expression of LGR7 and LGR8 in specific gonadal cell types and their responsiveness to relaxin and INSL3

based on cAMP production and other responses. We will use the soluble ectodomains of LGR7 and LGR8 as functional antagonists to demonstrate the physiological roles of relaxin and INSL3 in testis and ovarian physiology in vivo. The proposed studies should provide a better understanding on the role of relaxin-related hormones and LGR7 and LGR8 receptors in gonadal physiology and other reproductive processes.

Website: http://crisp.cit.nih.gov/crisp/Crisp_Query.Generate_Screen

- **Project Title: RELAXIN-LIKE FACTOR IN MALE GONADAL DEVELOPMENT**

  Principal Investigator & Institution: Schwabe, Christian; Professor; Biochem and Molecular Biology; Medical University of South Carolina P O Box 250854 Charleston, Sc 29425

  Timing: Fiscal Year 2002; Project Start 01-APR-2001; Project End 31-MAR-2006

  Summary: (Scanned from the applicant's abstract) In about 3.5 percent of newborn human males the gonads are undescended (chryptorchidism), a condition that leads to infertility and is associated with a high rate of testicular cancer. In the absence of any effective drugs, surgery is used widely to correct that condition. While surgery allows gonadal development to progress to fertility, it appears that the increased threat of testicular cancer is not reduced correspondingly. These are persuasive reasons to study the physiology and biochemistry of testicular development and explore the possibility of drug design to eliminate the defect and, with it, the propensity for testicular cancer formation. RLF (relaxin-like factor), which appears to be an absolute requirement for testicular development, is presently the best candidate for therapeutic intervention in the neonate. RLF can be detected in the sera of prepubertal children (0.3 ng/mL) but rises at puberty to 1.2 ng/mL in males only. Selective deletion of the RLF gene causes infertility in mice, and injection of our anti-RLF antibodies into pregnant rats, 5 days pre-partum, caused retention of testicles in the body cavity at 20 days of age when all the control animals had totally descended gonads. There can be no doubt that RLF is a necessary component of the regulatory chain of events for gonadal development and that absence of or a defect in the RLF gene or the RLF receptor gene may be the cause of the developmental disturbance in segments of our population. Our work will highlight the role RLF is playing in these processes and will significantly improve the prospects for a drug to treat **cryptorchidism.** We intend to use specially designed synthetic RLF derivatives and anti-RLF antibodies to study the process of gonadal development and to examine the prospects of substitution therapy. RLF is a small molecule of about 6,300 Dalton, which will pentrate the intestinal wall of the neonate and enter the bloodstream so that gonadal complications detected at birth could be treated immediately by dietary supplement.

  Website: http://crisp.cit.nih.gov/crisp/Crisp_Query.Generate_Screen

- **Project Title: STUDIES OF ABNORMAL SEXUAL DIFFERENTIATION AND DEVELOPMENT**

  Principal Investigator & Institution: Lee, Peter A.; Children's Hosp Pittsburgh/Upmc Hlth Sys of Upmc Health Systems Pittsburgh, Pa 152132583

  Timing: Fiscal Year 2002; Project Start 01-DEC-2001; Project End 30-NOV-2002

  Summary: Using molecular biology, hormone levels and responses and other clinical diagnostic studies, aspects of pathophysiology of abnormal sexual differentiation are being defined. The new emphasis in upon genetic mutations and inhibin B levels in disorders of male differentiation, particularily **cryptorchidism** among infants and pubertal aged males.

Website: http://crisp.cit.nih.gov/crisp/Crisp_Query.Generate_Screen

E-Journals: PubMed Central[3]

PubMed Central (PMC) is a digital archive of life sciences journal literature developed and managed by the National Center for Biotechnology Information (NCBI) at the U.S. National Library of Medicine (NLM).[4] Access to this growing archive of e-journals is free and unrestricted.[5] To search, go to **http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=Pmc**, and type "cryptorchidism" (or synonyms) into the search box. This search gives you access to full-text articles. The following is a sample of items found for cryptorchidism in the PubMed Central database:

- **Risk of testicular cancer with cryptorchidism and with testicular biopsy: cohort study.** by Moller H, Cortes D, Engholm G, Thorup J.; 1998 Sep 12; http://www.pubmedcentral.gov/articlerender.fcgi?tool=pmcentrez&artid=28664
- **Tissue Guanosine-3[prime prime or minute],5[prime prime or minute]-Cyclic Monophosphate Levels and Soluble Guanylate Cyclase Activity A POSITIVE CORRELATION DURING UNILATERAL CRYPTORCHIDISM IN THE RAT TESTIS.** by Spruill WA, Steiner AL, Earp HS.; 1978 Sep; http://www.pubmedcentral.gov/picrender.fcgi?tool=pmcentrez&action=stream&blobtype=pdf&artid=371801

The National Library of Medicine: PubMed

One of the quickest and most comprehensive ways to find academic studies in both English and other languages is to use PubMed, maintained by the National Library of Medicine.[6] The advantage of PubMed over previously mentioned sources is that it covers a greater number of domestic and foreign references. It is also free to use. If the publisher has a Web site that offers full text of its journals, PubMed will provide links to that site, as well as to sites offering other related data. User registration, a subscription fee, or some other type of fee may be required to access the full text of articles in some journals.

To generate your own bibliography of studies dealing with cryptorchidism, simply go to the PubMed Web site at **http://www.ncbi.nlm.nih.gov/pubmed**. Type "cryptorchidism" (or synonyms) into the search box, and click "Go." The following is the type of output you can expect from PubMed for cryptorchidism (hyperlinks lead to article summaries):

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[3] Adapted from the National Library of Medicine: **http://www.pubmedcentral.nih.gov/about/intro.html**.

[4] With PubMed Central, NCBI is taking the lead in preservation and maintenance of open access to electronic literature, just as NLM has done for decades with printed biomedical literature. PubMed Central aims to become a world-class library of the digital age.

[5] The value of PubMed Central, in addition to its role as an archive, lies in the availability of data from diverse sources stored in a common format in a single repository. Many journals already have online publishing operations, and there is a growing tendency to publish material online only, to the exclusion of print.

[6] PubMed was developed by the National Center for Biotechnology Information (NCBI) at the National Library of Medicine (NLM) at the National Institutes of Health (NIH). The PubMed database was developed in conjunction with publishers of biomedical literature as a search tool for accessing literature citations and linking to full-text journal articles at Web sites of participating publishers. Publishers that participate in PubMed supply NLM with their citations electronically prior to or at the time of publication.

- **A case of growth hormone and gonadotropin deficiency associated with unilateral anophthalmia, microphallus, cryptorchidism, and mental retardation.**
  Author(s): Miyako K, Takemoto M, Ihara K, Kuromaru R, Kohno H, Hara T.
  Source: Endocrine Journal. 2002 February; 49(1): 15-20.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12008745

- **A case-control study of cryptorchidism and maternal hormone concentrations in early pregnancy.**
  Author(s): Key TJ, Bull D, Ansell P, Brett AR, Clark GM, Moore JW, Chilvers CE, Pike MC.
  Source: British Journal of Cancer. 1996 March; 73(5): 698-701.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8605110

- **A case-control study of the aetiology of cryptorchidism.**
  Author(s): Swerdlow AJ, Wood KH, Smith PG.
  Source: Journal of Epidemiology and Community Health. 1983 September; 37(3): 238-44.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6137506

- **A common polymorphism in the human relaxin-like factor (RLF) gene: no relationship with cryptorchidism.**
  Author(s): Koskimies P, Virtanen H, Lindstrom M, Kaleva M, Poutanen M, Huhtaniemi I, Toppari J.
  Source: Pediatric Research. 2000 April; 47(4 Pt 1): 538-41.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10759163

- **A novel mutation of the insulin-like 3 gene in patients with cryptorchidism.**
  Author(s): Canto P, Escudero I, Soderlund D, Nishimura E, Carranza-Lira S, Gutierrez J, Nava A, Mendez JP.
  Source: Journal of Human Genetics. 2003; 48(2): 86-90.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12601553

- **A review and meta-analysis of hormonal treatment of cryptorchidism.**
  Author(s): Pyorala S, Huttunen NP, Uhari M.
  Source: The Journal of Clinical Endocrinology and Metabolism. 1995 September; 80(9): 2795-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7673426

- **A study on cryptorchidism.**
  Author(s): Hsieh JT, Huang TS.
  Source: Taiwan Yi Xue Hui Za Zhi. 1985 August; 84(8): 953-9. No Abstract Available.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2867121

- **Absence of antisperm surface antibodies in prepubertal boys with cryptorchidism and other anomalies of the inguinoscrotal region before and after surgery.**
  Author(s): Mirilas P, De Almeida M.
  Source: The Journal of Urology. 1999 July; 162(1): 177-81.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10379783

- **Absence of microdeletions in the Y chromosome in patients with a history of cryptorchidism and azoospermia or oligospermia.**
  Author(s): Fagerli J, Schneck FX, Lee PA, Bellinger MF, Witchel SF.
  Source: Fertility and Sterility. 1999 April; 71(4): 697-700.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10202881

- **Absence of microdeletions in the Y chromosome in patients with Prader-Willi syndrome with cryptorchidism.**
  Author(s): Suzuki Y, Sasagawa I, Tateno T, Yazawa H, Ashida J, Nakada T.
  Source: International Journal of Andrology. 2002 February; 25(1): 1-5.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11869370

- **Absence of mutations involving the INSL3 gene in human idiopathic cryptorchidism.**
  Author(s): Krausz C, Quintana-Murci L, Fellous M, Siffroi JP, McElreavey K.
  Source: Molecular Human Reproduction. 2000 April; 6(4): 298-302.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10729310

- **An epidemiologic study of paternity after cryptorchidism: initial results.**
  Author(s): Lee PA, Bellinger MF, Songer NJ, O'Leary L, Fishbough R, LaPorte R.
  Source: European Journal of Pediatrics. 1993; 152 Suppl 2: S25-7.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8101807

- **An unusual subset of cryptorchidism: possible end organ failure.**
  Author(s): Hadziselimovic F, Snyder HM, Huff DS.
  Source: The Journal of Urology. 1999 September; 162(3 Pt 2): 983-5.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10458416

- **Analysis of homeobox gene HOXA10 mutations in cryptorchidism.**
  Author(s): Kolon TF, Wiener JS, Lewitton M, Roth DR, Gonzales ET Jr, Lamb DJ.
  Source: The Journal of Urology. 1999 January; 161(1): 275-80.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10037424

- **Analysis of the DAZ gene family in cryptorchidism and idiopathic male infertility.**
  Author(s): Ferlin A, Bettella A, Tessari A, Salata E, Dallapiccola B, Foresta C.
  Source: Fertility and Sterility. 2004 April; 81(4): 1013-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15066457

- **Anatomical and functional aspects of testicular descent and cryptorchidism.**
  Author(s): Hutson JM, Hasthorpe S, Heyns CF.
  Source: Endocrine Reviews. 1997 April; 18(2): 259-80. Review.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9101140

- **Androgen function of the testes and gonadotropic activity of the pituitary in various forms of cryptorchidism in young boys and adolescents.**
  Author(s): Skorodok LM, Savchenko ON, Kogan ME, Krasnitskaya LN.
  Source: Neuroscience and Behavioral Physiology. 1982 November-December; 12(6): 489-93.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6138731

- **Androgen receptor gene alterations are not associated with isolated cryptorchidism.**
  Author(s): Wiener JS, Marcelli M, Gonzales ET Jr, Roth DR, Lamb DJ.
  Source: The Journal of Urology. 1998 September; 160(3 Pt 1): 863-5.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9720578

- **Anomalies associated with cryptorchidism.**
  Author(s): Marshall FF.
  Source: The Urologic Clinics of North America. 1982 October; 9(3): 339-47.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6128816

- **Anorchism versus cryptorchidism: the importance of a diligent search for intra-abdominal testes.**
  Author(s): Brothers LR 3rd, Weber CH Jr, Ball TP Jr.
  Source: The Journal of Urology. 1978 May; 119(5): 707-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=26813

- **Antisperm antibodies in cryptorchidism before and after surgery.**
  Author(s): Sinisi AA, Pasquali D, Papparella A, Valente A, Orio F, Esposito D, Cobellis G, Cuomo A, Angelone G, Martone A, Fioretti GP, Bellastella A.
  Source: The Journal of Urology. 1998 November; 160(5): 1834-7.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9783970

- **Associated renal anomalies in familial cryptorchidism.**
  Author(s): Bishop MC, Whitaker RH, Sherwood T.
  Source: Lancet. 1979 August 4; 2(8136): 249.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=89356

- **Association between abdominal wall defects and cryptorchidism.**
  Author(s): Kaplan LM, Koyle MA, Kaplan GW, Farrer JH, Rajfer J.
  Source: The Journal of Urology. 1986 September; 136(3): 645-7.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2874239

- **Association of diethylstilbestrol exposure in utero with cryptorchidism, testicular hypoplasia and semen abnormalities.**
  Author(s): Gill WB, Schumacher GF, Bibbo M, Straus FH 2nd, Schoenberg HW.
  Source: The Journal of Urology. 1979 July; 122(1): 36-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=37351

- **Association of epididymal anomalies with patent processus vaginalis in hernia, hydrocele and cryptorchidism.**
  Author(s): Barthold JS, Redman JF.
  Source: The Journal of Urology. 1996 December; 156(6): 2054-6.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8911389

- **Association of ureteropelvic pseudo-obstruction with cryptorchidism.**
  Author(s): Barton CH, Vaziri ND, DeRaad C, Martin DC.
  Source: Journal of the National Medical Association. 1985 December; 77(12): 1010-3.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2867224

- **AZF microdeletions associated with idiopathic and non-idiopathic cases with cryptorchidism and varicocele.**
  Author(s): Dada R, Gupta NP, Kucheria K.
  Source: Asian Journal of Andrology. 2002 December; 4(4): 259-63.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12508125

- **Bilateral abdominal cryptorchidism in males: autotransplantation of the testis.**
  Author(s): Shioshvili TI.
  Source: European Urology. 1985; 11(6): 386-7.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2867909

- **Bilateral anophthalmia, esophageal atresia, and right cryptorchidism: a new entity?**
  Author(s): Arroyo I, Garcia MJ, Cimadevilla CE, Carretero V, Bermejo E, Martinez-Frias ML.
  Source: American Journal of Medical Genetics. 1992 July 1; 43(4): 686-7.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1352427

- **Bilateral cryptorchidism associated with 47,XYY karyotype.**
  Author(s): Suzuki Y, Sasagawa I, Kaneko T, Tateno T, Iijima Y, Nakada T.
  Source: International Urology and Nephrology. 1999; 31(5): 709-13.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10755364

- **Bilateral cryptorchidism associated with terminal deletion of 10q.**
  Author(s): Suzuki Y, Sasagawa I, Nakada T, Onmura Y.
  Source: Urologia Internationalis. 1998; 61(3): 186-7.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9933844

- **Bilateral cryptorchidism with bilateral inguinal hernia and retrovesical mass in an infertile man: single-stage laparoscopic management.**
  Author(s): Ansari MS, Mandal S, Ray R, Hemal AK.
  Source: Journal of Laparoendoscopic & Advanced Surgical Techniques. Part A. 2002 February; 12(1): 73-5.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11905867

- **Bilateral cryptorchidism: a cause of male infertility? A follow-up study of young males undergoing bilateral orchiorrhaphy during childhood.**
  Author(s): Shahar E, Schachter A, Wolloch Y, Dintsman M.
  Source: Panminerva Medica. 1979 October-December; 21(4): 197-200.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=45319

- **Bilateral Leydig cell tumors with unilateral cryptorchidism. Case report.**
  Author(s): Safak M, Adsan O, Baltaci S, Beduk Y.
  Source: Scandinavian Journal of Urology and Nephrology. 1994 December; 28(4): 433-4.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7886423

- **Bilateral microphthalmia, esophageal atresia, and cryptorchidism: the anophthalmia-esophageal-genital syndrome.**
  Author(s): Shah D, Jones R, Porter H, Turnpenny P.
  Source: American Journal of Medical Genetics. 1997 May 16; 70(2): 171-3. Review.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9128938

- **Bilateral suprarenal cryptorchidism in a patient with the Pfeiffer syndrome.**
  Author(s): Goldfischer ER, Cromie WJ.
  Source: The Journal of Urology. 1997 August; 158(2): 597-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9224373

- **Bilateral trifid ureters associated with fused kidney, ureterovesical stenosis, left cryptorchidism and angioma of the bladder.**
  Author(s): Kohri K, Nagai N, Kaneko S, Iguchi M, Minami K, Kadowaki T, Akiyama T, Yachiku S, Kurita T.
  Source: The Journal of Urology. 1978 August; 120(2): 249-50.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=27648

- **Brain anomalies, retardation of mentality and growth, ectodermal dysplasia, skeletal malformations, Hirschsprung disease, ear deformity and deafness, eye hypoplasia, cleft palate, cryptorchidism, and kidney dysplasia/hypoplasia (BRESEK/BRESHECK): new X-linked syndrome?**
  Author(s): Reish O, Gorlin RJ, Hordinsky M, Rest EB, Burke B, Berry SA.
  Source: American Journal of Medical Genetics. 1997 February 11; 68(4): 386-90.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9021007

- **Buserelin treatment of cryptorchidism: a randomized, double-blind, placebo-controlled study.**
  Author(s): Bica DT, Hadziselimovic F.
  Source: The Journal of Urology. 1992 August; 148(2 Pt 2): 617-21.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1353540

- **Chromosomal anomalies in cryptorchidism and hypospadias.**
  Author(s): Moreno-Garcia M, Miranda EB.
  Source: The Journal of Urology. 2002 November; 168(5): 2170-2; Discussion 2172.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12394752

- **Clinical, physical, sperm and hormonal data in 251 adults operated on for cryptorchidism in childhood.**
  Author(s): Gracia J, S inverted question markanchez Zalabardo J, S inverted question markanchez Garc inverted question markia J, Garc inverted question markia C, Ferr inverted question markandez A.
  Source: Bju International. 2000 June; 85(9): 1100-3.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10848704

- **Comment on: Cryptorchidism: incidence, risk factors, and potential role of environment; an update.**
  Author(s): Hutson JM.
  Source: Journal of Andrology. 2003 March-April; 24(2): 163.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12634299

- **Comparison of five different hormonal treatment protocols for children with cryptorchidism.**
  Author(s): Esposito C, De Lucia A, Palmieri A, Centonze A, Damiano R, Savanelli A, Valerio G, Settimi A.
  Source: Scandinavian Journal of Urology and Nephrology. 2003; 37(3): 246-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12775284

- **Congenital spigelian hernia and cryptorchidism: cause or coincidence?**
  Author(s): Al-Salem AH.
  Source: Pediatric Surgery International. 2000; 16(5-6): 433-6. Review.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10955584

- **Craniofacial dyssynostosis with cryptorchidism and normal stature.**
  Author(s): Al-Torki NA, Sabry MA, Al-Tawari A, Al-Kandari NH, Al-Awadi SA.
  Source: American Journal of Medical Genetics. 1998 August 27; 79(1): 5-7.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9738859

- **Cryptorchidism and AZF microdeletion.**
  Author(s): Dada R, Gupta NP, Kucheria K.
  Source: Asian Journal of Andrology. 2002 June; 4(2): 148.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12085107

- **Cryptorchidism and hypospadias in sons of gardeners and farmers.**
  Author(s): Weidner IS, Moller H, Jensen TK, Skakkebaek NE.
  Source: Environmental Health Perspectives. 1998 December; 106(12): 793-6.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9831539

- **Cryptorchidism and infertility.**
  Author(s): Scharli AF.
  Source: Pediatric Surgery International. 1998 November; 14(1-2): 1.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9880683

- **Cryptorchidism as a caudal developmental field defect. A new description of cryptorchidism associated with malformations and dysplasias of the kidneys, the ureters and the spine from T10 to S5.**
  Author(s): Cortes D, Thorup JM, Beck BL, Visfeldt J.
  Source: Apmis : Acta Pathologica, Microbiologica, Et Immunologica Scandinavica. 1998 October; 106(10): 953-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9833697

- **Cryptorchidism as a result of burn injury.**
  Author(s): Kara IG, Sarioglu A.
  Source: Burns : Journal of the International Society for Burn Injuries. 1999 November; 25(7): 663-5.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10563696

- **Cryptorchidism associated with meningomyelocele.**
  Author(s): Ferrara P, Rossodivita A, Ruggiero A, Pulitano S, Tortorolo L, Salvaggio E.
  Source: Journal of Paediatrics and Child Health. 1998 February; 34(1): 44-6.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9568940

- **Cryptorchidism, fertility, and cancer.**
  Author(s): Niederberger C.
  Source: Journal of Andrology. 2003 January-February; 24(1): 19-20.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12514074

- **Cryptorchidism, its impact on male fertility.**
  Author(s): Hadziselimovic F.
  Source: European Urology. 2002 February; 41(2): 121-3. Review.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12074397

- **Cryptorchidism, open processus vaginalis, and associated hernia: laparoscopic approach to the internal inguinal ring.**
  Author(s): Radmayr C, Corvin S, Studen M, Bartsch G, Janetschek G.
  Source: European Urology. 1999 December; 36(6): 631-4.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10559618

- **Cryptorchidism: a general surgical perspective.**
  Author(s): Lim KT, Casey RG, Lennon F, Gillen P, Stokes M.
  Source: Ir J Med Sci. 2003 July-September; 172(3): 139-40.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14700118

- **Cryptorchidism: incidence, risk factors, and potential role of environment; an update.**
  Author(s): Thonneau PF, Gandia P, Mieusset R.
  Source: Journal of Andrology. 2003 March-April; 24(2): 155-62. Review. Erratum In: J Androl. 2003 July-August; 24(4): 633. Candia P [corrected to Gandia P].
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12634298

- **Cryptorchidism: medical and surgical treatment in the 1st year of life.**
  Author(s): Canavese F, Cortese MG, Magro P, Lonati L, Teruzzi E, de Sanctis C, Lala R.
  Source: Pediatric Surgery International. 1998 November; 14(1-2): 2-5.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9880684

- **Cryptorchidism: seasonal variations in Greece do not support the theory of light.**
  Author(s): Mamoulakis Ch, Antypas S, Stamatiadou A, Demetriadis D, Kanakas N, Loutradis D, Miyagawa I, Yannakis D, Kaponis A, Tzonou A, Giannakopoulos X, Sofikitis N.
  Source: Andrologia. 2002 June; 34(3): 194-203.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12059817

- **Cryptorchidism: strategies in detection.**
  Author(s): Nguyen HT, Coakley F, Hricak H.
  Source: European Radiology. 1999; 9(2): 336-43. Review.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10101659

- **Decreased immunoreactive inhibin and increased FSH levels in cryptorchidism after orchidopexy.**
  Author(s): Kawada T, Yamanaka H, Hasegawa Y.
  Source: Endocrine Journal. 1995 August; 42(4): 577-80.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8556067

- **Delayed treatment of cryptorchidism with subsequent infertility.**
  Author(s): Scott LS.
  Source: Fertility and Sterility. 1967 November-December; 18(6): 782-7.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4383741

- **Diagnosis and medical-surgical treatment of cryptorchidism.**
  Author(s): de Sanctis C, Lala R.
  Source: J Endocrinol Invest. 2000 May; 23(5): 341-4. No Abstract Available.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10882155

- **Diagnosis of abdominal bilateral cryptorchidism: HCG stimulation test.**
  Author(s): Tzvetkova P, Tzvetkov D.
  Source: Urologia Internationalis. 2001; 67(1): 46-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11464115

- **Diagnosis of bilateral abdominal cryptorchidism by laparoscopy.**
  Author(s): Cortesi N, Ferrari P, Zambarda E, Manenti A, Baldini A, Morano FP.
  Source: Endoscopy. 1976 February; 8(1): 33-4.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=16743

- **Diagnostic maneuvers in cryptorchidism.**
  Author(s): Gearhart JP, Jeffs RD.
  Source: Semin Urol. 1988 May; 6(2): 79-83. Review. No Abstract Available.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2903529

- **Difference in prevalence of congenital cryptorchidism in infants between two Nordic countries.**
  Author(s): Boisen KA, Kaleva M, Main KM, Virtanen HE, Haavisto AM, Schmidt IM, Chellakooty M, Damgaard IN, Mau C, Reunanen M, Skakkebaek NE, Toppari J.
  Source: Lancet. 2004 April 17; 363(9417): 1264-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15094270

- **Differences in the prevalence of cryptorchidism.**
  Author(s): de Kretser DM.
  Source: Lancet. 2004 April 17; 363(9417): 1250-1.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15094266

- **Different insulin-like 3 (INSL3) gene mutations not associated with human cryptorchidism.**
  Author(s): Marin P, Ferlin A, Moro E, Garolla A, Foresta C.
  Source: J Endocrinol Invest. 2001 April; 24(4): Rc13-5.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11383919

- **Difficulty in detection of hernia and hydrocele in cryptorchidism.**
  Author(s): Adamsen S, Borjesson B.
  Source: Lancet. 1989 June 3; 1(8649): 1259-60.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2566795

- **DNA organization in patients with a history of cryptorchidism.**
  Author(s): Barone JG, Christiano AP, Ward WS.
  Source: Urology. 2000 December 20; 56(6): 1068-70.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11113770

- **Early hormonal and surgical treatment of cryptorchidism.**
  Author(s): Lala R, Matarazzo P, Chiabotto P, Gennari F, Cortese MG, Canavese F, de Sanctis C.
  Source: The Journal of Urology. 1997 May; 157(5): 1898-901.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9112559

- **Early postnatal testicular maldevelopment in cryptorchidism.**
  Author(s): Huff DS, Hadziselimovic F, Snyder HM 3rd, Blyth B, Duckett JW.
  Source: The Journal of Urology. 1991 August; 146(2 (Pt 2)): 624-6.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1677687

- **Early treatment of cryptorchidism, semen quality and testicular endocrinology.**
  Author(s): Taskinen S, Hovatta O, Wikstrom S.
  Source: The Journal of Urology. 1996 July; 156(1): 82-4.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8648845

- **Effect of age at operation, location of testis and preoperative hormonal treatment on testicular growth after cryptorchidism.**
  Author(s): Taskinen S, Wikstrom S.
  Source: The Journal of Urology. 1997 August; 158(2): 471-3.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9224326

- **Effect of LHRH treatment on testicular descent and hormonal response in cryptorchidism.**
  Author(s): Wit JM, Delemarre-Van de Waal HA, Bax NM, Van den Brande JL.
  Source: Clinical Endocrinology. 1986 May; 24(5): 539-48.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2878745

- **Effect of surgical repair of cryptorchidism on endocrine testicular function.**
  Author(s): Anoussakis C, Liakakos D, Kiburis J, Papaspyrou P, Doulas NL.
  Source: The Journal of Pediatrics. 1983 December; 103(6): 919-21.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6139423

- **Efficacy of orchiopexy by patient age 1 year for cryptorchidism.**
  Author(s): Kogan SJ, Tennenbaum S, Gill B, Reda E, Levitt SB.
  Source: The Journal of Urology. 1990 August; 144(2 Pt 2): 508-9; Discussion 512-3.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1973740

- **Elevation of serum gonadotropins establishes the diagnosis of anorchism in prepubertal boys with bilateral cryptorchidism.**
  Author(s): Jarow JP, Berkovitz GD, Migeon CJ, Gearhart JP, Walsh PC.
  Source: The Journal of Urology. 1986 July; 136(1 Pt 2): 277-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2873261

- **Endocrine aspects of cryptorchidism.**
  Author(s): Job JC, Gendrel D.
  Source: The Urologic Clinics of North America. 1982 October; 9(3): 353-60.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6128818

- **Epidemiology of cryptorchidism and hypospadias.**
  Author(s): Moller H, Weidner IS.
  Source: Epidemiology (Cambridge, Mass.). 1999 July; 10(4): 352-4.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10401867

- **Epididymal anomalies associated with hydrocele/hernia and cryptorchidism: implications regarding testicular descent.**
  Author(s): Elder JS.
  Source: The Journal of Urology. 1992 August; 148(2 Pt 2): 624-6.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1353542

- **Epididymal anomalies associated with patent processus vaginalis in hydrocele and cryptorchidism.**
  Author(s): Han CH, Kang SH.
  Source: Journal of Korean Medical Science. 2002 October; 17(5): 660-2.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12378019

- **Epididymal growth and differentiation are altered in human cryptorchidism.**
  Author(s): De Miguel MP, Marino JM, Gonzalez-Peramato P, Nistal M, Regadera J.
  Source: Journal of Andrology. 2001 March-April; 22(2): 212-25.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11229795

- **Erythropoietin may reduce the risk of germ cell loss in boys with cryptorchidism.**
  Author(s): Cortes D, Visfeldt J, Thorup JM.
  Source: Hormone Research. 2001; 55(1): 41-5.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11423742

- **Etiopathogenesis of cryptorchidism and male infertility.**
  Author(s): Tzvetkova P, Tzvetkov D.
  Source: Archives of Andrology. 1996 September-October; 37(2): 117-25.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8886261

- **Evidence in favor of the mechanical (intrauterine torsion) theory over the endocrinopathy (cryptorchidism) theory in the pathogenesis of testicular agenesis.**
  Author(s): Huff DS, Wu HY, Snyder HM 3rd, Hadziselimovic F, Blythe B, Duckett JW.
  Source: The Journal of Urology. 1991 August; 146(2 (Pt 2)): 630-1.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1677689

- **Excess fetal estrogen as an etiological cause of human cryptorchidism.**
  Author(s): Husmann DA.
  Source: The Journal of Urology. 2000 November; 164(5): 1696.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11025751

- **Exclusion of Treacher Collins Franceschetti syndrome in a subject with tetralogy of Fallot and cryptorchidism.**
  Author(s): Bruni L, Angeletti B, Pascale E, Tozzi MC, Giammaria P, Verna R, D'Ambrosio E.
  Source: Clinical Genetics. 1996 August; 50(2): 89-92.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8937767

- **Excretory urography in asymptomatic boys with cryptorchidism.**
  Author(s): Donohue RE, Utley WL, Maling TM.
  Source: The Journal of Urology. 1973 May; 109(5): 912-6.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4144678

- **Exposure to pesticides and cryptorchidism: geographical evidence of a possible association.**
  Author(s): Garcia-Rodriguez J, Garcia-Martin M, Nogueras-Ocana M, de Dios Luna-del-Castillo J, Espigares Garcia M, Olea N, Lardelli-Claret P.
  Source: Environmental Health Perspectives. 1996 October; 104(10): 1090-5.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8930551

- **Familial bilateral cryptorchidism.**
  Author(s): Carragher AM, McLean RD.
  Source: Br J Clin Pract. 1990 December; 44(12): 688-9. Review. No Abstract Available.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1983232

- **Familial cryptorchidism and testicular tumors in non-twin brothers.**
  Author(s): Kulkarni R, Netzloff ML, Texera C.
  Source: Ann Clin Lab Sci. 1983 July-August; 13(4): 327-31.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6137993

- **Familial incidence of cryptorchidism.**
  Author(s): Jones IR, Young ID.
  Source: The Journal of Urology. 1982 March; 127(3): 508-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6121061

- **Familial occurrence of cryptorchidism.**
  Author(s): Duvie SO, Evbuomwan I, Scott-Emuakpor AB, Kadiri I.
  Source: West Afr J Med. 1990 October-December; 9(4): 321-3.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1982062

- **Fertility after bilateral cryptorchidism. Evaluation by paternity, hormone, and semen data.**
  Author(s): Lee PA, Coughlin MT.
  Source: Hormone Research. 2001; 55(1): 28-32.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11423739

- **Fertility after cryptorchidism: a comparative analysis of early orchidopexy with and without concomitant hormonal therapy in the young male rat.**
  Author(s): Friedman RM, Lopez FJ, Tucker JA, King LR, Negro-Vilar A.
  Source: The Journal of Urology. 1994 January; 151(1): 227-33.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7902876

- **Fertility after orchiopexy for cryptorchidism: a new approach to assessment.**
  Author(s): Kumar D, Bremner DN, Brown PW.
  Source: British Journal of Urology. 1989 November; 64(5): 516-20.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2575428

- **Fertility after treatment of bilateral cryptorchidism.**
  Author(s): Czaplicki M, Bablok L, Janczewski Z.
  Source: International Urology and Nephrology. 1974; 6(3-4): 259-61.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4156529

- **Fertility after unilateral cryptorchidism. Paternity, time to conception, pretreatment testicular location and size, hormone and sperm parameters.**
  Author(s): Miller KD, Coughlin MT, Lee PA.
  Source: Hormone Research. 2001; 55(5): 249-53.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11740148

- **Fertility and cryptorchidism.**
  Author(s): Hadziselimovic F.
  Source: Am J Dis Child. 1985 October; 139(10): 963-4. No Abstract Available.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2863977

- **Fertility and sexual development after bilateral orchiopexy for cryptorchidism.**
  Author(s): Wolloch Y, Shahar E, Shachter A, Dintsman M.
  Source: Isr J Med Sci. 1980 September-October; 16(9-10): 707-10.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6107281

- **Fertility and sexual development after unilateral orchipodexy for cryptorchidism.**
  Author(s): Wolloch Y, Yahel J, Schachter A, Dinstman M.
  Source: Panminerva Medica. 1983 April-June; 25(2): 121-5.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6139780

- **Fertility in cryptorchidism. An overview in 1987.**
  Author(s): Kogan SJ.
  Source: European Journal of Pediatrics. 1987; 146 Suppl 2: S21-4. Review.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2891514

- **Fertility in cryptorchidism. Does treatment make a difference?**
  Author(s): Lee PA.
  Source: Endocrinology and Metabolism Clinics of North America. 1993 September; 22(3): 479-90. Review.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7902276

- **Fertility in treated cryptorchidism: evaluation during prepuberty and after puberty in surgically treated subjects.**
  Author(s): Cittadini E, Gattuccio F, Gullo D.
  Source: Acta Eur Fertil. 1979 March; 10(1): 15-21. No Abstract Available.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=44630

- **Fertility in unilateral cryptorchidism: review of 104 cases.**
  Author(s): Ponchietti R, Grechi G.
  Source: Acta Eur Fertil. 1986 July-August; 17(4): 277-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2883799

- **Fertility index analysis in cryptorchidism.**
  Author(s): McAleer IM, Packer MG, Kaplan GW, Scherz HC, Krous HF, Billman GF.
  Source: The Journal of Urology. 1995 April; 153(4): 1255-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7869523

- **Fertility prospects for children with cryptorchidism.**
  Author(s): Gilhooly PE, Meyers F, Lattimer JK.
  Source: Am J Dis Child. 1984 October; 138(10): 940-3.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6148009

- **FSH. I. Evidence for its mediating role on testosterone secretion in cryptorchidism.**
  Author(s): Sizonenko PC, Cuendet A, Paunier L.
  Source: The Journal of Clinical Endocrinology and Metabolism. 1973 July; 37(1): 68-73.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4146012

- **Functional and cytologic features of the contralateral testis in cryptorchidism.**
  Author(s): Foresta C, Ferlin A, Garolla A, Milani C, Oliva G, Rossato M.
  Source: Fertility and Sterility. 1996 October; 66(4): 624-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8816628

- **Gene mapping and serendipity. The locus for torticollis, keloids, cryptorchidism and renal dysplasia (31430, Mckusick) is at Xq28, distal to the G6PD locus.**
  Author(s): Zuffardi O, Fraccaro M.
  Source: Human Genetics. 1982; 62(3): 280-1.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6132873

- **Germ cell apoptosis after treatment of cryptorchidism with human chorionic gonadotropin is associated with impaired reproductive function in the adult.**
  Author(s): Dunkel L, Taskinen S, Hovatta O, Tilly JL, Wikstrom S.
  Source: The Journal of Clinical Investigation. 1997 November 1; 100(9): 2341-6.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9410913

- **Gonadal function and testicular histology in Noonan's syndrome with bilateral cryptorchidism.**
  Author(s): Sasagawa I, Nakada T, Kubota Y, Sawamura T, Tateno T, Ishigooka M.
  Source: Archives of Andrology. 1994 March-April; 32(2): 135-40.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7909426

- **Gonadal function in young adults after surgical treatment of cryptorchidism.**
  Author(s): Werder EA, Illig R, Torresani T, Zachmann M, Baumann P, Ott F, Prader A.
  Source: British Medical Journal. 1976 December 4; 2(6048): 1357-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11867

- **Gonadotropin and androgen levels in patients operated upon for cryptorchidism.**
  Author(s): Bollerslev J, Rohl H, Krag Sorensen E, Bennet P.
  Source: Dan Med Bull. 1986 December; 33(6): 336-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2878796

- **Gonadotropin deficiency and cryptorchidism in three prepubertal brothers with congenital adrenal hypoplasia.**
  Author(s): Zachmann M, Illig R, Prader A.
  Source: The Journal of Pediatrics. 1980 August; 97(2): 255-7.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6105176

- **Haemopneumothorax from congenital cystic adenomatoid malformation in a cryptorchidism patient.**
  Author(s): Lee SC, Cheng YL, Yu CP.
  Source: The European Respiratory Journal : Official Journal of the European Society for Clinical Respiratory Physiology. 2000 February; 15(2): 430-2.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10706518

- **hCG stimulation test in prepubertal boys with cryptorchidism.**
  Author(s): Anoussakis C, Alexiou D, Liakakos D, Skopelitis P.
  Source: The Journal of Pediatrics. 1978 October; 93(4): 630-2.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=29952

- **hCG test before surgery for bilateral cryptorchidism?**
  Author(s): Vanderschueren-Lodeweyckx M.
  Source: The Journal of Pediatrics. 1977 July; 91(1): 159-60.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=17660

- **Hernia and hydrocele in cryptorchidism.**
  Author(s): Brereton RJ.
  Source: Lancet. 1989 July 15; 2(8655): 172.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2567952

- **Herniography: a diagnostic refinement in the management of cryptorchidism.**
  Author(s): White JJ, Shaker IJ, O KS, Murphy J, Engel BS, Haller JA Jr.
  Source: The American Surgeon. 1973 November; 39(11): 624-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4147748

- **Histological changes in the testis following adult orchidopexy for unilateral cryptorchidism.**
  Author(s): Duvie SO.
  Source: Archives of Andrology. 1984; 12(2-3): 231-4.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6150688

- **Hormonal control of testicular descent and the cause of cryptorchidism.**
  Author(s): Hutson JM, Baker M, Terada M, Zhou B, Paxton G.
  Source: Reproduction, Fertility, and Development. 1994; 6(2): 151-6. Review.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7991782

- **Hormonal therapy for cryptorchidism with a combination of human chorionic gonadotropin and follicle-stimulating hormone. Success and relapse rate.**
  Author(s): Saggese G, Ghirri P, Gabrielli S, Cosenza GC.
  Source: Am J Dis Child. 1989 August; 143(8): 980-2.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2569267

- **Hormonal therapy for the subfertility of cryptorchidism.**
  Author(s): Huff DS, Snyder HM 3rd, Rusnack SL, Zderic SA, Carr MC, Canning DA.
  Source: Hormone Research. 2001; 55(1): 38-40.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11423741

- **Hormonal therapy of cryptorchidism with human chorionic gonadotropin(HCG).**
  Author(s): Job JC, Canlorbe P, Garagorri JM, Toublanc JE.
  Source: The Urologic Clinics of North America. 1982 October; 9(3): 405-11.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6128824

- **Hormonal therapy of cryptorchidism. A randomized, double-blind study comparing human chorionic gonadotropin and gonadotropin-releasing hormone.**
  Author(s): Rajfer J, Handelsman DJ, Swerdloff RS, Hurwitz R, Kaplan H, Vandergast T, Ehrlich RM.
  Source: The New England Journal of Medicine. 1986 February 20; 314(8): 466-70.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2868413

- **Hormonal treatment may harm the germ cells in 1 to 3-year-old boys with cryptorchidism.**
  Author(s): Cortes D, Thorup J, Visfeldt J.
  Source: The Journal of Urology. 2000 April; 163(4): 1290-2.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10737531

- **Hormonal treatment of cryptorchidism.**
  Author(s): Lee BW.
  Source: J Singapore Paediatr Soc. 1990; 32(1-2): 23-6. No Abstract Available.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1979644

- **Hormonal treatment of cryptorchidism.**
  Author(s): Hadziselimovic F.
  Source: The New England Journal of Medicine. 1986 July 31; 315(5): 322.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2873511

- **Hormonal treatment of cryptorchidism.**
  Author(s): de Muinck Keizer-Schrama SM.
  Source: Hormone Research. 1988; 30(4-5): 178-86. Review.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2907895

- **Hormonal treatment of cryptorchidism: lessons from 15 years of worldwide experience.**
  Author(s): Bourguignon JP, Vanderschueren-Lodeweyckx M.
  Source: Acta Urol Belg. 1995 May; 63(2): 77-81. Review. No Abstract Available.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7785546

- **Hormonal treatment of cryptorchidism: role of pituitary gonadal axis.**
  Author(s): De Muinck Keizer-Schrama SM, Hazebroek FW.
  Source: Semin Urol. 1988 May; 6(2): 84-95. Review. No Abstract Available.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2903530

- **Hormonal treatment of cryptorchidism--hCG or GnRH--a multicentre study.**
  Author(s): Christiansen P, Muller J, Buhl S, Hansen OR, Hobolth N, Jacobsen BB, Jorgensen PH, Kastrup KW, Nielsen K, Nielsen LB, et al.
  Source: Acta Paediatrica (Oslo, Norway : 1992). 1992 August; 81(8): 605-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1356527

- **Human chorionic gonadotropin (hCG) treatment in cryptorchidism.**
  Author(s): Dickerman Z, Bauman B, Sandovsky U, Kleinhouse N, Lahmy O, Savir A, Laron Z.
  Source: Andrologia. 1983; 15 Spec No: 542-7.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6141747

- **Hypothalamo--pituitary--gonadal axis and sperm-agglutinating antibodies in infertile men treated for cryptorchidism.**
  Author(s): Koskimies AI, Hovatta O.
  Source: Archives of Andrology. 1982 May; 8(3): 181-3.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6125129

- **Immunogenetic and hormonal study of cryptorchidism.**
  Author(s): Martinetti M, Maghnie M, Salvaneschi L, Di Ninno N, Daielli C, Palladini G, Cuccia M.
  Source: The Journal of Clinical Endocrinology and Metabolism. 1992 January; 74(1): 39-42.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1345784

- **Immunohistochemical and quantitative study of interstitial and intratubular Leydig cells in normal men, cryptorchidism, and Klinefelter's syndrome.**
  Author(s): Regadera J, Codesal J, Paniagua R, Gonzalez-Peramato P, Nistal M.
  Source: The Journal of Pathology. 1991 August; 164(4): 299-306.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1681041

- **Immunologic aspects of cryptorchidism.**
  Author(s): Mengel W, Zimmermann FA.
  Source: The Urologic Clinics of North America. 1982 October; 9(3): 349-52.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6128817

- **Impalpable cryptorchidism--a review of 170 testes.**
  Author(s): Liu CS, Chin TW, Wei CF.
  Source: Zhonghua Yi Xue Za Zhi (Taipei). 2002 February; 65(2): 63-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12014360

- **Incidence at birth and natural history of cryptorchidism: a study of 10,730 consecutive male infants.**
  Author(s): Ghirri P, Ciulli C, Vuerich M, Cuttano A, Faraoni M, Guerrini L, Spinelli C, Tognetti S, Boldrini A.
  Source: J Endocrinol Invest. 2002 September; 25(8): 709-15.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12240903

- **Incidence of cryptorchidism.**
  Author(s): Frey HL, Rajfer J.
  Source: The Urologic Clinics of North America. 1982 October; 9(3): 327-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6128814

- **Increase in testicular temperature in case of cryptorchidism in boys.**
  Author(s): Mieusset R, Fouda PJ, Vaysse P, Guitard J, Moscovici J, Juskiewenski S.
  Source: Fertility and Sterility. 1993 June; 59(6): 1319-21.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8098695

- **Infertility despite surgery for cryptorchidism in childhood can be classified by patients with normal or elevated follicle-stimulating hormone and identified at orchidopexy.**
  Author(s): Cortes D, Thorup J, Lindenberg S, Visfeldt J.
  Source: Bju International. 2003 May; 91(7): 670-4.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12699482

- **Inheritance of cryptorchidism.**
  Author(s): Rezvani I, Rettig KR, DiGeorge AM.
  Source: Pediatrics. 1976 November; 58(5): 774-5.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10548

- **Inhibin and steroid response to testicular stimulation with pure FSH (Metrodin) in infertile men with unilateral cryptorchidism.**
  Author(s): Mahmoud AM, Comhaire FH, Vereecken A, Verhoeven G, Abdel-Rahim DE, Abdel-Hafez KM.
  Source: Andrologia. 1996 March-April; 28(2): 103-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8849044

- **Inhibiting effect of artificial cryptorchidism on spermatogenesis.**
  Author(s): Mieusset R, Grandjean H, Mansat A, Pontonnier F.
  Source: Fertility and Sterility. 1985 April; 43(4): 589-94.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3987927

- **Intermittent cryptorchidism: a sign of occult inguinal hernia in pubescent boys.**
  Author(s): Redman JF.
  Source: The Journal of Urology. 1985 August; 134(2): 367-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2862292

- **International trends in rates of hypospadias and cryptorchidism.**
  Author(s): Paulozzi LJ.
  Source: Environmental Health Perspectives. 1999 April; 107(4): 297-302.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10090709

- **Intestinotesticular ligament associated with cryptorchidism.**
  Author(s): Cooper CS, Kirsch AJ, Roth JA.
  Source: Urology. 1998 November; 52(5): 890.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9801123

- **Intracranial germ cell tumour in association with cryptorchidism.**
  Author(s): Laing RW, Brada M.
  Source: Clin Oncol (R Coll Radiol). 1992 July; 4(4): 269-70.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1352458

- **Inverse relationship between serum inhibin B and FSH levels in prepubertal boys with cryptorchidism.**
  Author(s): Raivio T, Dunkel L.
  Source: Pediatric Research. 1999 November; 46(5): 496-500.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10541309

- **Is hormonal therapy necessary in prepubertal boys with cryptorchidism?**
  Author(s): Shima H, Okamoto E, Terakawa T, Ohnishi Y, Ikoma F.
  Source: International Urology and Nephrology. 1991; 23(6): 605-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1685151

- **Is infertility after surgery for cryptorchidism congenital or acquired?**
  Author(s): Cortes D, Thorup JM, Visfeldt J, Schwartz M.
  Source: Pediatric Surgery International. 1998 November; 14(1-2): 6-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9880685

- **Is the scrotal testis normal in unilateral cryptorchidism?**
  Author(s): Kirby RS, Chapple CR, Ward SP, Williams C.
  Source: British Journal of Urology. 1985 April; 57(2): 187-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2859073

- **Is there a relationship with anomalous insertions of the distal gubernaculum testis and testicular ectopia? Analysis in human fetuses and patients with cryptorchidism.**
  Author(s): Favorito LA, Klojda CA, Costa WS, Sampaio FJ.
  Source: The Journal of Urology. 2003 August; 170(2 Pt 1): 554-7.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12853828

- **Klinefelter's syndrome associated with unilateral cryptorchidism and chordee without hypospadia.**
  Author(s): Sasagawa I, Nakada T, Hashimoto T, Ishigooka M, Adachi Y, Kubota Y, Watanabe H.
  Source: Urologia Internationalis. 1992; 48(4): 428-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1357810

- **Klinefelter's syndrome associated with unilateral cryptorchidism in childhood.**
  Author(s): Sasagawa I, Yamaguchi O, Shiraiwa Y, Nakada T.
  Source: Urologia Internationalis. 1991; 47(3): 178-80.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1685272

- **Klinefelter's syndrome with hypospadias and bilateral cryptorchidism.**
  Author(s): Moriyama M, Senga Y, Satomi Y.
  Source: Urologia Internationalis. 1988; 43(5): 313-4.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2904716

- **Lack of LGR8 gene mutation in Finnish patients with a family history of cryptorchidism.**
  Author(s): Roh J, Virtanen H, Kumagai J, Sudo S, Kaleva M, Toppari J, Hsueh AJ.
  Source: Reproductive Biomedicine Online. 2003 October-November; 7(4): 400-6.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14656401

- **Laparoscopic diagnosis and treatment of splenogonadal fusion associated with intra-abdominal cryptorchidism in a child.**
  Author(s): Braga LH, Braga MM, Dias MA.
  Source: Pediatric Surgery International. 1999; 15(7): 465-6.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10525899

- **Laparoscopic management of cryptorchidism and associated inguinal hernia.**
  Author(s): Banwell PE, Hill AD, Menzies-Gow N, Darzi A.
  Source: British Journal of Urology. 1994 August; 74(2): 245-6.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7921945

- **Laparoscopic orchidectomy in cryptorchidism.**
  Author(s): Hennigan TW, Young RA.
  Source: The British Journal of Surgery. 1992 November; 79(11): 1166.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1361404

- **Laparoscopic orchiectomy for cryptorchidism.**
  Author(s): Naver L, Kock J.
  Source: J Laparoendosc Surg. 1992 October; 2(5): 245-6.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1358274

- **Laparoscopy for cryptorchidism.**
  Author(s): Uson AC.
  Source: The Journal of Urology. 1982 October; 128(4): 829-30.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6128432

- **Late diagnosis of cryptorchidism: a failure of medical screening?**
  Author(s): Sarmah A.
  Source: Archives of Disease in Childhood. 1992 June; 67(6): 728-30.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1352673

- **Late presentation of cryptorchidism: the etiology of testicular re-ascent.**
  Author(s): Rabinowitz R, Hulbert WC Jr.
  Source: The Journal of Urology. 1997 May; 157(5): 1892-4.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9112557

- **Late results of operative treatment of intersexuality in children with advanced hypospadias and simultaneous cryptorchidism.**
  Author(s): Fryczkowski M, Paradysz A, Krauze-Balwinska Z.
  Source: International Urology and Nephrology. 1996; 28(2): 241-5.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8836797

- **Letter: Cryptorchidism: is routine intravenous pyelography indicated?**
  Author(s): Waaler PE, Maurseth K.
  Source: Archives of Disease in Childhood. 1976 April; 51(4): 324-5.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=5965

- **Letter: Familial cryptorchidism.**
  Author(s): Pardo-Mindan FJ, Vargas Torcal F, Garcia Julian G, Virto Ruiz MT.
  Source: Pediatrics. 1975 October; 56(4): 616.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=241049

- **Letter: Familial cryptorchidism.**
  Author(s): Abrams HJ.
  Source: Urology. 1975 June; 5(6): 849.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=237359

- **Letter: Testis tumor and unilateral cryptorchidism.**
  Author(s): Szalay GC.
  Source: Urology. 1975 September; 6(3): 397.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=240228

- **Leydig cell function after cryptorchidism: evidence of the beneficial result of early surgery.**
  Author(s): Lee PA, Coughlin MT.
  Source: The Journal of Urology. 2002 April; 167(4): 1824-7.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11912442

- **Leydig cell tumour in a case of bilateral cryptorchidism.**
  Author(s): Jan GM, Kaul S, Dewani K, Wani NA.
  Source: Indian Journal of Cancer. 1984 July-August; 21(3): 106-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6152655

- **LHRH and cryptorchidism.**
  Author(s): Frick J.
  Source: European Journal of Pediatrics. 1993; 152 Suppl 2: S28-30.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8101808

- **LHRH therapy for cryptorchidism.**
  Author(s): de Vries JD.
  Source: The Journal of Pediatrics. 1986 January; 108(1): 162.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2868084

- **LHRH treatment in unilateral cryptorchidism: effect on testicular descent and hormonal response.**
  Author(s): Karpe B, Eneroth P, Ritzen EM.
  Source: The Journal of Pediatrics. 1983 December; 103(6): 892-7.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6139422

- **Life-threatening germ cell tumor arising in cryptorchidism: a case report.**
  Author(s): Kuo JY, Chiu AW, Chen KK, Chang LS.
  Source: Zhonghua Yi Xue Za Zhi (Taipei). 1999 February; 62(2): 116-20.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10063723

- **Luteinising-hormone-releasing hormone and cryptorchidism.**
  Author(s): Chilvers C, Jackson MB, Pike MC.
  Source: Lancet. 1986 July 12; 2(8498): 101.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2873357

- **Male fertility in patients treated for cryptorchidism before puberty.**
  Author(s): Albescu JZ, Bergada C, Cullen M.
  Source: Fertility and Sterility. 1971 December; 22(12): 829-33.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4399585

- **Management of an unusually high postpubertal presentation of cryptorchidism.**
  Author(s): Taha SA, Abdulkader A, Kamal BA, Anikwe RA.
  Source: Int Surg. 1990 April-June; 75(2): 105-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1974246

- **Management of the postpubertal patient with cryptorchidism: an updated analysis.**
  Author(s): Oh J, Landman J, Evers A, Yan Y, Kibel AS.
  Source: The Journal of Urology. 2002 March; 167(3): 1329-33.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11832725

- **Maternal and gestational factors affecting the risk of cryptorchidism and inguinal hernia.**
  Author(s): Depue RH.
  Source: International Journal of Epidemiology. 1984 September; 13(3): 311-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6149198

- **Maternal and gestational factors in cryptorchidism.**
  Author(s): McBride ML, Van den Steen N, Lamb CW, Gallagher RP.
  Source: International Journal of Epidemiology. 1991 December; 20(4): 964-70.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1686874

- **Maternal and neonatal risk factors for cryptorchidism.**
  Author(s): Berkowitz GS, Lapinski RH, Godbold JH, Dolgin SE, Holzman IR.
  Source: Epidemiology (Cambridge, Mass.). 1995 March; 6(2): 127-31.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7742397

- **Maternal and other factors of cryptorchidism--a case-control study in Japan.**
  Author(s): Mori M, Davies TW, Tsukamoto T, Kumamoto Y, Fukuda K.
  Source: Kurume Med J. 1992; 39(2): 53-60.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1357225

- **Maternal risk factors for cryptorchidism.**
  Author(s): Czeizel AE.
  Source: Epidemiology (Cambridge, Mass.). 1995 November; 6(6): 638-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8589099

- **Maternal serum human chorionic gonadotrophin during early pregnancy resulting in boys with hypospadias or cryptorchidism.**
  Author(s): Kiely EA, Chapman RS, Bajoria SK, Hollyer JS, Hurley R.
  Source: British Journal of Urology. 1995 September; 76(3): 389-92.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7551854

- **Maternal serum level of 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene and risk of cryptorchidism, hypospadias, and polythelia among male offspring.**
  Author(s): Longnecker MP, Klebanoff MA, Brock JW, Zhou H, Gray KA, Needham LL, Wilcox AJ.
  Source: American Journal of Epidemiology. 2002 February 15; 155(4): 313-22.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11836195

- **Maternal, delivery, and perinatal characteristics associated with cryptorchidism: a population-based case-control study among births in Washington State.**
  Author(s): Biggs ML, Baer A, Critchlow CW.
  Source: Epidemiology (Cambridge, Mass.). 2002 March; 13(2): 197-204.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11880761

- **Measurement of Mullerian inhibiting substance facilitates management of boys with microphallus and cryptorchidism.**
  Author(s): Misra M, MacLaughlin DT, Donahoe PK, Lee MM.
  Source: The Journal of Clinical Endocrinology and Metabolism. 2002 August; 87(8): 3598-602.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12161481

- **Mechanisms in the association of cryptorchidism and X-linked recessive ichthyosis.**
  Author(s): Traupe H, Happle R.
  Source: Dermatologica. 1986; 172(6): 327-8. No Abstract Available.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2874062

- **Mentally retarded siblings with congenital heart defect, peculiar facies and cryptorchidism in the male: possible McDonough syndrome with coincidental (X; 20) translocation.**
  Author(s): Garcia-Sagredo JM, Lozano C, Ferrando P, San Roman C.
  Source: Clinical Genetics. 1984 August; 26(2): 117-24.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6147215

- **Microsurgery of cryptorchidism. I: Lengthening the short vas deferens.**
  Author(s): Yunusov MYu, Kajumchodzaev AA.
  Source: Annals of Plastic Surgery. 1993 August; 31(2): 149-50.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8105743

- **Microsurgery of cryptorchidism. II: Managing arterial caliber discrepancy.**
  Author(s): Yunusov MYu.
  Source: Annals of Plastic Surgery. 1993 August; 31(2): 151-3.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8105744

- **Morphology of testicular germ cell tumours in treated and untreated cryptorchidism.**
  Author(s): Halme A, Kellokumpu-Lehtinen P, Lehtonen T, Teppo L.
  Source: British Journal of Urology. 1989 July; 64(1): 78-83.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2569902

- **Mutations of the GREAT gene cause cryptorchidism.**
  Author(s): Gorlov IP, Kamat A, Bogatcheva NV, Jones E, Lamb DJ, Truong A, Bishop CE, McElreavey K, Agoulnik AI.
  Source: Human Molecular Genetics. 2002 September 15; 11(19): 2309-18.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12217959

- **Nanophthalmos associated with cryptorchidism.**
  Author(s): Barad RF, Nelson LB, Cowchock FS, Spaeth GL.
  Source: Ann Ophthalmol. 1985 May; 17(5): 284-6, 288.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2860837

- **Needlescopic surgery for cryptorchidism: the initial series.**
  Author(s): Gill IS, Ross JH, Sung GT, Kay R.
  Source: Journal of Pediatric Surgery. 2000 October; 35(10): 1426-30.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11051142

- **No relationship of testicular size at orchiopexy with fertility in men who previously had unilateral cryptorchidism.**
  Author(s): Lee PA, Coughlin MT, Bellinger MF.
  Source: The Journal of Urology. 2001 July; 166(1): 236-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11435877

- **Nomenclature of cryptorchidism.**
  Author(s): Kaplan GW.
  Source: European Journal of Pediatrics. 1993; 152 Suppl 2: S17-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8101804

- **Noonan's syndrome and cryptorchidism.**
  Author(s): Redman JF.
  Source: The Journal of Urology. 1973 May; 109(5): 909-11.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4144677

- **Normal testicular descent and the aetiology of cryptorchidism.**
  Author(s): Hutson JM, Terada M, Zhou B, Williams MP.
  Source: Adv Anat Embryol Cell Biol. 1996; 132: 1-56. Review. No Abstract Available.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8561048

- **Novel insulin-like 3 (INSL3) gene mutation associated with human cryptorchidism.**
  Author(s): Marin P, Ferlin A, Moro E, Rossi A, Bartoloni L, Rossato M, Foresta C.
  Source: American Journal of Medical Genetics. 2001 November 1; 103(4): 348-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11746019

- **Obstructive cardiomyopathy in a male dwarf with cryptorchidism.**
  Author(s): Fatourechi V, Sheikhzadeh AH, Gavam M.
  Source: Clin Cardiol. 1982 April; 5(4): 301-3.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6123397

- **Occurrence of testicular cancer in patients operated on for cryptorchidism and inguinal hernia.**
  Author(s): Pinczowski D, McLaughlin JK, Lackgren G, Adami HO, Persson I.
  Source: The Journal of Urology. 1991 November; 146(5): 1291-4.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1682512

- **Omphalocele, cryptorchidism and brain malformations.**
  Author(s): Hutson JM, Beasley SW.
  Source: Journal of Pediatric Surgery. 1988 May; 23(5): 506-7.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2898015

- **Omphalocele, cryptorchidism, and brain malformations.**
  Author(s): Hadziselimovic F, Duckett JW, Snyder HM 3rd, Schnaufer L, Huff D.
  Source: Journal of Pediatric Surgery. 1987 September; 22(9): 854-6.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2889822

- **Opening remarks: cryptorchidism.**
  Author(s): Hinman F Jr.
  Source: European Journal of Pediatrics. 1993; 152 Suppl 2: S3-5. Review.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8101809

- **Orchidopexy in cryptorchidism assessed by clinical, histologic and sperm examinations.**
  Author(s): Bar-Maor JA, Nissan S, Lernau OZ, Oren M, Levy E.
  Source: Surg Gynecol Obstet. 1979 June; 148(6): 855-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=36676

- **Partial vesiculectomy in an infertile man with seminal vesicle cyst, ipsilateral renal agenesis, and cryptorchidism.**
  Author(s): Manousakas T, Kyriakou G, Serafetinides E, Giannopoulou M, Kyroudi A, Giannopoulos A.
  Source: Urology. 2002 April; 59(4): 602.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11927335

- **Paternity after bilateral cryptorchidism. A controlled study.**
  Author(s): Lee PA, O'Leary LA, Songer NJ, Coughlin MT, Bellinger MF, LaPorte RE.
  Source: Archives of Pediatrics & Adolescent Medicine. 1997 March; 151(3): 260-3.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9080933

- **Paternity after cryptorchidism: lack of correlation with age at orchidopexy.**
  Author(s): Lee PA, O'Leary LA, Songer NJ, Bellinger MF, LaPorte RE.
  Source: British Journal of Urology. 1995 June; 75(6): 704-7.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7613823

- **Paternity after unilateral cryptorchidism: a controlled study.**
  Author(s): Lee PA, O'Leary LA, Songer NJ, Coughlin MT, Bellinger MF, LaPorte RE.
  Source: Pediatrics. 1996 October; 98(4 Pt 1): 676-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8885945

- **Persistence of mullerian duct derivative syndrome in 2 male patients with bilateral cryptorchidism.**
  Author(s): Souto CA, Oliveira Mda C, Teloken C, Paskulin G, Hoffmann K.
  Source: The Journal of Urology. 1995 May; 153(5): 1637-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7714994

- **Persistent mullerian duct syndrome: report of a case with bilateral cryptorchidism.**
  Author(s): Sarica K, Albayrak S, Sargin H, Can C, Keskin T.
  Source: International Urology and Nephrology. 1995; 27(4): 431-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8586516

- **Postpubertal cryptorchidism: review and evaluation of the fertility.**
  Author(s): Grasso M, Buonaguidi A, Lania C, Bergamaschi F, Castelli M, Rigatti P.
  Source: European Urology. 1991; 20(2): 126-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1684324

- **Prenatal risk factors for cryptorchidism: a record linkage study.**
  Author(s): Jones ME, Swerdlow AJ, Griffith M, Goldacre MJ.
  Source: Paediatric and Perinatal Epidemiology. 1998 October; 12(4): 383-96.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9805712

- **Prenatal scrotal ultrasound: providing new clues in cryptorchidism.**
  Author(s): Freedman AL.
  Source: Ultrasound in Obstetrics & Gynecology : the Official Journal of the International Society of Ultrasound in Obstetrics and Gynecology. 1998 April; 11(4): 240.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9618843

- **Preschool screening for cryptorchidism.**
  Author(s): Kaul S, Roberts DP.
  Source: Bmj (Clinical Research Ed.). 1992 September 12; 305(6854): 650.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1356549

- **Preschool screening for cryptorchidism.**
  Author(s): Morecroft JA, Brereton RJ.
  Source: Bmj (Clinical Research Ed.). 1992 August 15; 305(6850): 424-5.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1356547

- **Preschool screening for cryptorchidism.**
  Author(s): Kaul SA, Roberts DP.
  Source: Bmj (Clinical Research Ed.). 1992 July 18; 305(6846): 181.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1355382

- **Prevalence and characteristics of cryptorchidism in a Nigerian district.**
  Author(s): Okeke AA, Osegbe DN.
  Source: Bju International. 2001 December; 88(9): 941-5.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11851618

- **Prevalence and natural history of cryptorchidism.**
  Author(s): Berkowitz GS, Lapinski RH, Dolgin SE, Gazella JG, Bodian CA, Holzman IR.
  Source: Pediatrics. 1993 July; 92(1): 44-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8100060

- **Prevalence of carcinoma in situ and other histopathological abnormalities in testes of men with a history of cryptorchidism.**
  Author(s): Giwercman A, Bruun E, Frimodt-Moller C, Skakkebaek NE.
  Source: The Journal of Urology. 1989 October; 142(4): 998-1001: Discussion 1001-2.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2571738

- **Primary gonadotropin releasing hormone and adjunctive human chorionic gonadotropin treatment in cryptorchidism: a clinical trial.**
  Author(s): Nane I, Ziylan O, Esen T, Kocak T, Ander H, Tellaloglu S.
  Source: Urology. 1997 January; 49(1): 108-11.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9000196

- **Prospective evaluation of human chorionic gonadotropin in the treatment of cryptorchidism.**
  Author(s): Adamsen S, Aronson S, Borjesson B.
  Source: Acta Chir Scand. 1989 October; 155(10): 509-14.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2574929

- **Proximal insertion of gubernaculum testis in normal human fetuses and in boys with cryptorchidism.**
  Author(s): Favorito LA, Sampaio FJ, Javaroni V, Cardoso LE, Costa WS.
  Source: The Journal of Urology. 2000 September; 164(3 Pt 1): 792-4.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10953158

- **Psychopathological aspects of cryptorchidism in children and adolescents.**
  Author(s): Masi G, Millepiedi S, Brovedani P, Favilla L, Mucci M.
  Source: Child Psychiatry and Human Development. 1999 Winter; 30(2): 75-85.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10668304

- **Puberty does not induce serum antisperm surface antibodies in patients with previously operated cryptorchidism.**
  Author(s): Mirilas P, Mamoulakis C, De Almeida M.
  Source: The Journal of Urology. 2003 December; 170(6 Pt 1): 2432-5.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14634446

- **Re: paternity and hormone levels after unilateral cryptorchidism: association with pretreatment testicular location.**
  Author(s): Cendron M.
  Source: The Journal of Urology. 2001 May; 165(5): 1644.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11345949

- **Reciprocal translocation t(4;16) (p14;q24) associated with bilateral cryptorchidism.**
  Author(s): Miura M, Sasagawa I, Ishigooka M, Sawamura T, Kubota Y, Nakada T, Onnmura Y.
  Source: International Urology and Nephrology. 1996; 28(4): 529-32.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9119639

- **Reduced level of sex-specific antigen (H-Y antigen) on lymphocytes in some patients with bilateral cryptorchidism.**
  Author(s): Fedder J, Hansen LG, Hjort T.
  Source: Archives of Andrology. 1989; 22(1): 67-75.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2565709

- **Results of early treatment of cryptorchidism with human chorionic gonadotropin.**
  Author(s): Garagorri JM, Job JC, Canlorbe P, Chaussain JL.
  Source: The Journal of Pediatrics. 1982 December; 101(6): 923-7.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6128381

- **Risk factor patterns for cryptorchidism and hypospadias.**
  Author(s): Akre O, Lipworth L, Cnattingius S, Sparen P, Ekbom A.
  Source: Epidemiology (Cambridge, Mass.). 1999 July; 10(4): 364-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10401869

- **Risk factors for cryptorchidism and hypospadias.**
  Author(s): Weidner IS, Moller H, Jensen TK, Skakkebaek NE.
  Source: The Journal of Urology. 1999 May; 161(5): 1606-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10210427

- **Risk factors for cryptorchidism: a nested case-control study.**
  Author(s): Berkowitz GS, Lapinski RH.
  Source: Paediatric and Perinatal Epidemiology. 1996 January; 10(1): 39-51.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8746430

- **Risk of testicular cancer in boys with cryptorchidism. Study was based on small number of cancers.**
  Author(s): Davenport M.
  Source: Bmj (Clinical Research Ed.). 1997 November 29; 315(7120): 1462-3.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9418105

- **Risk of testicular cancer in cohort of boys with cryptorchidism.**
  Author(s): Swerdlow AJ, Higgins CD, Pike MC.
  Source: Bmj (Clinical Research Ed.). 1997 May 24; 314(7093): 1507-11. Erratum In: Bmj 1997 November 1; 315(7116): 1129.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9169396

- **Risk of testicular cancer with cryptorchidism and with testicular biopsy: cohort study.**
  Author(s): Moller H, Cortes D, Engholm G, Thorup J.
  Source: Bmj (Clinical Research Ed.). 1998 September 12; 317(7160): 729.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9732342

- **Risks of testicular cancer and cryptorchidism in relation to socio-economic status and related factors: case-control studies in Denmark.**
  Author(s): Moller H, Skakkebaek NE.
  Source: International Journal of Cancer. Journal International Du Cancer. 1996 May 3; 66(3): 287-93.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8621244

- **Roentgenological findings in cryptorchidism.**
  Author(s): Tveter KJ, Fjaerli J.
  Source: Scandinavian Journal of Urology and Nephrology. 1975; 9(3): 171-3.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1849

- **Scientific basis of testicular descent and management implications for cryptorchidism.**
  Author(s): Kiely EA.
  Source: Br J Clin Pract. 1994 January-February; 48(1): 37-41. Review.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7910032

- **Screening for mutations of the androgen receptor gene in patients with isolated cryptorchidism.**
  Author(s): Suzuki Y, Sasagawa I, Ashida J, Nakada T, Muroya K, Ogata T.
  Source: Fertility and Sterility. 2001 October; 76(4): 834-6.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11591424

- **Selective testicular venography in abdominal cryptorchidism.**
  Author(s): Amin M, Wheeler CS.
  Source: The Journal of Urology. 1976 June; 115(6): 760-1.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7683

- **Seminoma arising in corrected and uncorrected inguinal cryptorchidism: treatment and prognosis in 66 patients.**
  Author(s): Li YX, Coucke PA, Qian TN, Huang YR, Gu DZ, Mirimanoff RO, Yu ZH.
  Source: International Journal of Radiation Oncology, Biology, Physics. 1997 May 1; 38(2): 343-50.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9226322

- **Seminoma associated with bilateral cryptorchidism in Down's syndrome: a case report.**
  Author(s): Miki M, Ohtake N, Hasumi M, Ohi M, Moriyama S.
  Source: International Journal of Urology : Official Journal of the Japanese Urological Association. 1999 July; 6(7): 377-80.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10445309

- **Serum gonadotropins in cryptorchidism. An indicator of functional testes.**
  Author(s): Lee PA, Hoffman WH, White JJ, Engel RM, Blizzard RM.
  Source: Am J Dis Child. 1974 April; 127(4): 530-2. No Abstract Available.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4150728

- **Serum inhibin B, FSH, LH and testosterone levels before and after human chorionic gonadotropin stimulation in prepubertal boys with cryptorchidism.**
  Author(s): Christiansen P, Andersson AM, Skakkebaek NE, Juul A.
  Source: European Journal of Endocrinology / European Federation of Endocrine Societies. 2002 July; 147(1): 95-101.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12088925

- **Serum levels of Mullerian inhibiting substance in boys with cryptorchidism.**
  Author(s): Yamanaka J, Baker M, Metcalfe S, Hutson JM.
  Source: Journal of Pediatric Surgery. 1991 May; 26(5): 621-3.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1676417

- **Sex hormone-binding globulin response to human chorionic gonadotropin stimulation in children with cryptorchidism, anorchia, male pseudohermaphroditism, and micropenis.**
  Author(s): Belgorosky A, Rivarola MA.
  Source: The Journal of Clinical Endocrinology and Metabolism. 1982 April; 54(4): 698-704.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6120946

- **Sexual development in patients treated for cryptorchidism.**
  Author(s): Taskinen S, Hovatta O, Wikstrom S.
  Source: Scandinavian Journal of Urology and Nephrology. 1997 August; 31(4): 361-4.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9290166

- **Simple cryptorchidism: the value of the excretory urogram as a screening method.**
  Author(s): Watson RA, Lennox KW, Gangai MP.
  Source: The Journal of Urology. 1974 June; 111(6): 789-90.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4151538

- **Somatomedin response to testosterone stimulation in children with male pseudohermaphroditism, cryptorchidism, anorchia, or micropenis.**
  Author(s): Jasper HG.
  Source: The Journal of Clinical Endocrinology and Metabolism. 1985 May; 60(5): 910-3.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2858491

- **Splenic-gonadal fusion in cryptorchidism.**
  Author(s): Lanza P, Scalfari A, Docimo C.
  Source: European Urology. 1987; 13(3): 210-2.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2886339

- **SRY-positive 46,XX male with cryptorchidism as the only presenting clinical feature.**
  Author(s): Moreno-Garcia M, Sanchez Del Pozo J, Gutierrez-Diez P, Gil-Fournier B, Barreiro Miranda E.
  Source: Urologia Internationalis. 2003; 71(2): 219-21.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12890966

- **Studies on cryptorchidism: a comparison of histological findings in the germinative epithelium before and after the second year of life.**
  Author(s): Mengel W, Hienz HA, Sippe WG 2nd, Hecker WC.
  Source: Journal of Pediatric Surgery. 1974 August; 9(4): 445-50.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4152535

- **Study on risk factors of cryptorchidism.**
  Author(s): Wang J, Wang B.
  Source: Zhonghua Liu Xing Bing Xue Za Zhi. 2002 June; 23(3): 190-3.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12411087

- **Success and relapse rate after treatment of cryptorchidism with intranasal LHRH.**
  Author(s): Schwarz HP, Aebi S, Perisic M.
  Source: Acta Paediatr Scand. 1985 March; 74(2): 274-80.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2859731

- **Surgical and hormonal therapy for cryptorchidism: an overview.**
  Author(s): Rajfer J.
  Source: Hormone Research. 1988; 30(4-5): 139-43.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2907889

- **Surgical treatment of cryptorchidism.**
  Author(s): Canavese F, Lalla R, Linari A, Cortese MG, Gennari F, Hadziselimovic F.
  Source: European Journal of Pediatrics. 1993; 152 Suppl 2: S43-4.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8101814

- **Surgical treatment of cryptorchidism.**
  Author(s): Rabinowitz R.
  Source: Semin Urol. 1988 May; 6(2): 96-102. Review. No Abstract Available.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2903531

- **Testicular "tumor" of the adrenogenital syndrome: a case report of an unusual association with myelolipoma and seminoma in cryptorchidism.**
  Author(s): Adesokan A, Adegboyega PA, Cowan DF, Kocurek J, Neal DE Jr.
  Source: Cancer. 1997 December 1; 80(11): 2120-7.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9392334

- **Testicular cancer and cryptorchidism in relation to prenatal factors: case-control studies in Denmark.**
  Author(s): Moller H, Skakkebaek NE.
  Source: Cancer Causes & Control : Ccc. 1997 November; 8(6): 904-12.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9427433

- **Testicular cancer, cryptorchidism, inguinal hernia, testicular atrophy, and genital malformations: case-control studies in Denmark.**
  Author(s): Moller H, Prener A, Skakkebaek NE.
  Source: Cancer Causes & Control : Ccc. 1996 March; 7(2): 264-74.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8740739

- **Testicular feminization: radiologic considerations in a unique form of cryptorchidism.**
  Author(s): Koren AT, Lautin EM, Kutcher R, Rozenblit A, Banerjee TD.
  Source: Abdominal Imaging. 1996 May-June; 21(3): 272-4.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8661565

- **Testicular sperm extraction with intracytoplasmic sperm injection is successful for the treatment of nonobstructive azoospermia associated with cryptorchidism.**
  Author(s): Raman JD, Schlegel PN.
  Source: The Journal of Urology. 2003 October; 170(4 Pt 1): 1287-90.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14501743

- **Testicular volume and masculine identity in men with unilateral cryptorchidism: results of a community-based survey in Korea.**
  Author(s): Ku JH, Kim ME, Lee NK, Park YH.
  Source: Urological Research. 2003 October; 31(5): 312-6. Epub 2003 July 25.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14574535

- **Testicular volume does not predict germ cell count in patients with cryptorchidism.**
  Author(s): Noh PH, Cooper CS, Snyder HM 3rd, Zderic SA, Canning DA, Huff DS.
  Source: The Journal of Urology. 2000 February; 163(2): 593-6.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10647693

- **Testis histopathology in boys with cryptorchidism correlates with future fertility potential.**
  Author(s): Rusnack SL, Wu HY, Huff DS, Snyder HM 3rd, Carr MC, Bellah RD, Zderic SA, Canning DA.
  Source: The Journal of Urology. 2003 February; 169(2): 659-62.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12544338

- **The effect of cryptorchidism on inhibin B in a subfertile population.**
  Author(s): de Gouveia Brazao CA, Pierik FH, Erenpreiss Y, de Jong FH, Dohle GR, Weber RF.
  Source: Clinical Endocrinology. 2003 July; 59(1): 136-41.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12807515

- **The epidemiology of congenital cryptorchidism, testicular ascent and orchiopexy.**
  Author(s): Barthold JS, Gonzalez R.
  Source: The Journal of Urology. 2003 December; 170(6 Pt 1): 2396-401. Review.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14634436

- **The histological effect of the human chorionic gonadotropin and luteinizing hormone-releasing hormone on experimental cryptorchidism in rats.**
  Author(s): Vigueras RM, Reyes G, Osvaldo Cuevas J, Rojas JC, Merchant-Larios H.
  Source: Proc West Pharmacol Soc. 1999; 42: 71-3. No Abstract Available.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10697694

- **The incidence of intersexuality in children with cryptorchidism and hypospadias: stratification based on gonadal palpability and meatal position.**
  Author(s): Kaefer M, Diamond D, Hendren WH, Vemulapalli S, Bauer SB, Peters CA, Atala A, Retik AB.
  Source: The Journal of Urology. 1999 September; 162(3 Pt 2): 1003-6; Discussion 1006-7.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10458421

- **The influence of patency of the vaginal process on the efficacy of hormonal treatment of cryptorchidism.**
  Author(s): Varela Cives R, Bautista Casasnovas A, Alonso Martin A, Pombo Arias M, Tojo Sierra R.
  Source: European Journal of Pediatrics. 1996 November; 155(11): 932-6.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8911891

- **The INSL3-LGR8/GREAT ligand-receptor pair in human cryptorchidism.**
  Author(s): Ferlin A, Simonato M, Bartoloni L, Rizzo G, Bettella A, Dottorini T, Dallapiccola B, Foresta C.
  Source: The Journal of Clinical Endocrinology and Metabolism. 2003 September; 88(9): 4273-9.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12970298

- **The insulin-3 gene: lack of a genetic basis for human cryptorchidism.**
  Author(s): Baker LA, Nef S, Nguyen MT, Stapleton R, Nordenskjold A, Pohl H, Parada LF.
  Source: The Journal of Urology. 2002 June; 167(6): 2534-7. Erratum In: J Urol. 2003 February; 169(2): 622.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11992081

- **The molecular basis of cryptorchidism.**
  Author(s): Ivell R, Hartung S.
  Source: Molecular Human Reproduction. 2003 April; 9(4): 175-81. Review.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12651898

- **The predictive value of inguinal herniography for the diagnosis and treatment of cryptorchidism.**
  Author(s): Varela-Cives R, Bautista-Casasnovas A, Gude F, Cimadevila-Garcia A, Tojo R, Pombo M.
  Source: The Journal of Urology. 2000 March; 163(3): 964-7.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10688033

- **The role of orchiectomy in the management of postpubertal cryptorchidism.**
  Author(s): Rogers E, Teahan S, Gallagher H, Butler MR, Grainger R, McDermott TE, Thornhill JA.
  Source: The Journal of Urology. 1998 March; 159(3): 851-4.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9474167

- **The single testis: paternity after presentation as unilateral cryptorchidism.**
  Author(s): Lee PA, Coughlin MT.
  Source: The Journal of Urology. 2002 October; 168(4 Pt 2): 1680-2; Discussion 1682-3.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12352333

- **Treatment with human chorionic gonadotrophin for cryptorchidism: clinical and histological effects.**
  Author(s): Kaleva M, Arsalo A, Louhimo I, Rapola J, Perheentupa J, Henriksen K, Toppari J.
  Source: International Journal of Andrology. 1996 October; 19(5): 293-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8985778

- **Ultrasonographic late results after surgically treated cryptorchidism.**
  Author(s): Riebel T, Herrmann C, Wit J, Sellin S.
  Source: Pediatric Radiology. 2000 March; 30(3): 151-5.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10755751

- **Ultrasonography and colour Doppler flow in the testes of adult patients after treatment of cryptorchidism.**
  Author(s): Taskinen S, Lehtinen A, Hovatta O, Wikstrom S.
  Source: British Journal of Urology. 1996 August; 78(2): 248-51.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8813922

- **Ultrastructural changes in the seminiferous tubule wall and intertubular blood vessels in human cryptorchidism.**
  Author(s): Francavilla S, Santiemma V, Francavilla F, De Martino C, Santucci R, Fabbrini A.
  Source: Archives of Andrology. 1979; 2(1): 21-30.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=36050

- **Unilateral abdominal cryptorchidism.**
  Author(s): Hinman F Jr.
  Source: The Journal of Urology. 1979 July; 122(1): 71-5. Review.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=37352

- **Unilateral cryptorchidism corrected in prepubertal age: evaluation of sperm parameters, hormones, and antisperm antibodies in adult age.**
  Author(s): Lenzi A, Gandini L, Lombardo F, Dondero F, Culasso F, Ferro F, Cambiaso P, Caione P, Cappa M.
  Source: Fertility and Sterility. 1997 May; 67(5): 943-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9130905

- **Unilateral cryptorchidism with compensatory hypertrophy of descended testicle in prepubertal boys.**
  Author(s): Tato L, Corgnati A, Boner A, Pinelli L, Zatti M, Gaburro D.
  Source: Hormone Research. 1978; 9(4): 185-93.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=27440

- **Unilateral testicular hypertrophy: an apparently benign occurrence without cryptorchidism.**
  Author(s): Lee PA, Marshall FF, Greco JM, Jeffs RD.
  Source: The Journal of Urology. 1982 February; 127(2): 329-31.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6121060

- **Update on cryptorchidism: endocrine, environmental and therapeutic aspects.**
  Author(s): Brucker-Davis F, Pointis G, Chevallier D, Fenichel P.
  Source: J Endocrinol Invest. 2003 June; 26(6): 575-87. Review.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12952375

- **Upper urinary tract abnormalities associated with cryptorchidism.**
  Author(s): Laneri JP Jr.
  Source: Int Surg. 1970 November; 54(5): 382-4. No Abstract Available.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4394399

- **Use of luteinizing-hormone-releasing hormone nasal spray in the treatment of cryptorchidism: is there still an indication? A clinical study in 78 boys with 103 undescended testicles.**
  Author(s): Witjes JA, de Vries JD, Lock MT, Debruyne FM.
  Source: European Urology. 1990; 17(3): 226-8.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1972065

- **Use of serum mullerian inhibiting substance in the diagnostic evaluation of cryptorchidism and intersex disorders.**
  Author(s): Becker C.
  Source: Endocrine Practice : Official Journal of the American College of Endocrinology and the American Association of Clinical Endocrinologists. 2000 September-October; 6(5): 411-2.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11141597

- **What is the rate of spontaneous testicular descent in infants with cryptorchidism?**
  Author(s): Wenzler DL, Bloom DA, Park JM.
  Source: The Journal of Urology. 2004 February; 171(2 Pt 1): 849-51.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14713841

- **What is the relationship between spermatozoa per milliliter at adulthood and the tubular fertility index at surgical age for patients with cryptorchidism?**
  Author(s): Gracia J, Sanchez J, Garcia C, Pueyo C, Ferrandez A.
  Source: Journal of Pediatric Surgery. 1998 April; 33(4): 594-6.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9574758

- **Wilm's tumour, hypospadias, and cryptorchidism in twins.**
  Author(s): Bond JV.
  Source: Archives of Disease in Childhood. 1977 March; 52(3): 243-5.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15524

- **X-linked ichthyosis and cryptorchidism.**
  Author(s): Unamuno P, Martin C, Fernandez E.
  Source: Dermatologica. 1986; 172(6): 326-7. No Abstract Available.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2874061

- **X-linked ichthyosis, bilateral cryptorchidism, hypogenitalism and mental retardation in two siblings.**
  Author(s): Abe K, Matsuda I, Matsuura N, Murayama T, Uzuki K, Okuno A.
  Source: Clinical Genetics. 1976 March; 9(3): 341-5.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4250

- **X-linked recessive microencephaly, microphthalmia with corneal opacities, spastic quadriplesia, hypospadias and cryptorchidism.**
  Author(s): Siber M.
  Source: Clinical Genetics. 1984 November; 26(5): 453-6.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6149829

- **Y chromosome microdeletions in cryptorchidism and idiopathic infertility.**
  Author(s): Foresta C, Moro E, Garolla A, Onisto M, Ferlin A.
  Source: The Journal of Clinical Endocrinology and Metabolism. 1999 October; 84(10): 3660-5.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10523011

CHAPTER 2. NUTRITION AND CRYPTORCHIDISM

Overview

In this chapter, we will show you how to find studies dedicated specifically to nutrition and cryptorchidism.

Finding Nutrition Studies on Cryptorchidism

The National Institutes of Health's Office of Dietary Supplements (ODS) offers a searchable bibliographic database called the IBIDS (International Bibliographic Information on Dietary Supplements; National Institutes of Health, Building 31, Room 1B29, 31 Center Drive, MSC 2086, Bethesda, Maryland 20892-2086, Tel: 301-435-2920, Fax: 301-480-1845, E-mail: ods@nih.gov). The IBIDS contains over 460,000 scientific citations and summaries about dietary supplements and nutrition as well as references to published international, scientific literature on dietary supplements such as vitamins, minerals, and botanicals.[7] The IBIDS includes references and citations to both human and animal research studies.

As a service of the ODS, access to the IBIDS database is available free of charge at the following Web address: **http://ods.od.nih.gov/databases/ibids.html**. After entering the search area, you have three choices: (1) IBIDS Consumer Database, (2) Full IBIDS Database, or (3) Peer Reviewed Citations Only.

Now that you have selected a database, click on the "Advanced" tab. An advanced search allows you to retrieve up to 100 fully explained references in a comprehensive format. Type "cryptorchidism" (or synonyms) into the search box, and click "Go." To narrow the search, you can also select the "Title" field.

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[7] Adapted from **http://ods.od.nih.gov**. IBIDS is produced by the Office of Dietary Supplements (ODS) at the National Institutes of Health to assist the public, healthcare providers, educators, and researchers in locating credible, scientific information on dietary supplements. IBIDS was developed and will be maintained through an interagency partnership with the Food and Nutrition Information Center of the National Agricultural Library, U.S. Department of Agriculture.

The following information is typical of that found when using the "Full IBIDS Database" to search for "cryptorchidism" (or a synonym):

- **Beware the undescended testis and abdominal mass.**
  Author(s): Department of Surgery, University Hospital, Kuala Lumpur, Malaysia.
  Source: Koh, K B Aust-N-Z-J-Surg. 1996 December; 66(12): 851-3 0004-8682

- **Does treatment with human chorionic gonadotropin induce reversible changes in undescended testes in boys?**
  Author(s): Department of Pediatric Surgery and Pathology, Social Security Council, Ankara Children's Hospital, Ankara, Turkey.
  Source: Demirbilek, S Atayurt, H F Celik, N Aydin, G Pediatr-Surg-Int. 1997; 12(8): 591-4 0179-0358

- **Results of combined hormonal and surgical treatment for undescended testis in boys under 3 years of age. A randomized study.**
  Author(s): Children's Hospital, Department of Paediatrics and Paediatric Surgery, Ostrasjukhuset, Goteborg, Sweden.
  Source: Hagberg, S Westphal, O Eur-J-Pediatr. 1987; 146 Suppl 2S38-9 0340-6199

- **Reversal of flutamide-induced cryptorchidism by prenatal time-specific androgens.**
  Author(s): Department of Urology, Mayo Clinic, Rochester, Minnesota 55905.
  Source: Husmann, D A McPhaul, M J Endocrinology. 1992 October; 131(4): 1711-5 0013-7227

- **The pharmacological effect of the gonadotrophin-releasing hormone on experimental cryptorchidism in rats.**
  Author(s): Urological Department of the Charite, University Hospital, Humboldt University, Berlin, Germany.
  Source: Lein, M Fahlenkamp, D Schonberger, B Prollius, S Loening, S Scand-J-Urol-Nephrol. 1996 June; 30(3): 185-91 0036-5599

- **Therapeutic results in cryptorchidism after combination therapy with LH-RH nasal spray and hCG.**
  Author(s): Kinderchirurgische Abteilung, Klinikum Steglitz, Freie Universitat Berlin.
  Source: Waldschmidt, J el Dessouky, M Priefer, A Eur-J-Pediatr. 1987; 146 Suppl 2S31-4 0340-6199

- **Treatment of cryptorchidism with human chorionic gonadotropin or gonadotropin releasing hormone. A double-blind controlled study of 243 boys.**
  Author(s): University Department of Pediatrics, Hvidovre Hospital, Copenhagen, Denmark.
  Source: Christiansen, P Muller, J Buhl, S Hansen, O R Hobolth, N Jacobsen, B B Jorgensen, P H Kastrup, K W Nielsen, K Nielsen, L B et al. Horm-Res. 1988; 30(4-5): 187-92 0301-0163

- **Treatment of undescended testes with hMG and hMG plus hCG: clinical, hormonal and sonographic evaluation.**
  Author(s): Institute of Endocrinology, Catholic University School of Medicine, Rome, Italy.
  Source: De Rosa, G Della Casa, S Corsello, S M Colabucci, F Rossodivita, A Ferdinandi, A Cecchini, L Ann-Endocrinol-(Paris). 1987; 48(6): 468-72 0003-4266

Federal Resources on Nutrition

In addition to the IBIDS, the United States Department of Health and Human Services (HHS) and the United States Department of Agriculture (USDA) provide many sources of information on general nutrition and health. Recommended resources include:

- healthfinder®, HHS's gateway to health information, including diet and nutrition: **http://www.healthfinder.gov/scripts/SearchContext.asp?topic=238&page=0**
- The United States Department of Agriculture's Web site dedicated to nutrition information: **www.nutrition.gov**
- The Food and Drug Administration's Web site for federal food safety information: **www.foodsafety.gov**
- The National Action Plan on Overweight and Obesity sponsored by the United States Surgeon General: **http://www.surgeongeneral.gov/topics/obesity/**
- The Center for Food Safety and Applied Nutrition has an Internet site sponsored by the Food and Drug Administration and the Department of Health and Human Services: **http://vm.cfsan.fda.gov/**
- Center for Nutrition Policy and Promotion sponsored by the United States Department of Agriculture: **http://www.usda.gov/cnpp/**
- Food and Nutrition Information Center, National Agricultural Library sponsored by the United States Department of Agriculture: **http://www.nal.usda.gov/fnic/**
- Food and Nutrition Service sponsored by the United States Department of Agriculture: **http://www.fns.usda.gov/fns/**

Additional Web Resources

A number of additional Web sites offer encyclopedic information covering food and nutrition. The following is a representative sample:

- AOL: **http://search.aol.com/cat.adp?id=174&layer=&from=subcats**
- Family Village: **http://www.familyvillage.wisc.edu/med_nutrition.html**
- Google: **http://directory.google.com/Top/Health/Nutrition/**
- Healthnotes: **http://www.healthnotes.com/**
- Open Directory Project: **http://dmoz.org/Health/Nutrition/**
- Yahoo.com: **http://dir.yahoo.com/Health/Nutrition/**
- WebMD®Health: **http://my.webmd.com/nutrition**
- WholeHealthMD.com: **http://www.wholehealthmd.com/reflib/0,1529,00.html**

CHAPTER 3. ALTERNATIVE MEDICINE AND CRYPTORCHIDISM

Overview

In this chapter, we will begin by introducing you to official information sources on complementary and alternative medicine (CAM) relating to cryptorchidism. At the conclusion of this chapter, we will provide additional sources.

National Center for Complementary and Alternative Medicine

The National Center for Complementary and Alternative Medicine (NCCAM) of the National Institutes of Health (**http://nccam.nih.gov/**) has created a link to the National Library of Medicine's databases to facilitate research for articles that specifically relate to cryptorchidism and complementary medicine. To search the database, go to the following Web site: **http://www.nlm.nih.gov/nccam/camonpubmed.html**. Select "CAM on PubMed." Enter "cryptorchidism" (or synonyms) into the search box. Click "Go." The following references provide information on particular aspects of complementary and alternative medicine that are related to cryptorchidism:

- **A case-control study of dietary phytoestrogens and testicular cancer risk.**
  Author(s): Walcott FL, Hauptmann M, Duphorne CM, Pillow PC, Strom SS, Sigurdson AJ.
  Source: Nutrition and Cancer. 2002; 44(1): 44-51.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12672640

- **Acupuncture and postoperative vomiting in day-stay paediatric patients.**
  Author(s): Schwager KL, Baines DB, Meyer RJ.
  Source: Anaesthesia and Intensive Care. 1996 December; 24(6): 674-7.
  http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8971315

- **Beware the undescended testis and abdominal mass.**
  Author(s): Koh KB.

Source: The Australian and New Zealand Journal of Surgery. 1996 December; 66(12): 851-3.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8996073

- **Development of a marker of estrogenic exposure in human serum.**
Author(s): Sonnenschein C, Soto AM, Fernandez MF, Olea N, Olea-Serrano MF, Ruiz-Lopez MD.
Source: Clinical Chemistry. 1995 December; 41(12 Pt 2): 1888-95.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7497650

- **Distribution and activation of protein kinase C in the rat testis tissue.**
Author(s): Nikula H, Naor Z, Parvinen M, Huhtaniemi I.
Source: Molecular and Cellular Endocrinology. 1987 January; 49(1): 39-49.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2881817

- **First report of an isolated jejunal seminoma: presentation with melaena and iron deficiency anaemia.**
Author(s): Brown RS, Yassin J, Colville DH, Harland SJ, Payne HA.
Source: Clin Oncol (R Coll Radiol). 2001; 13(6): 455-7.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11824886

- **Impact of exposure to endocrine disrupters in utero and in childhood on adult reproduction.**
Author(s): Norgil Damgaard I, Main KM, Toppari J, Skakkebaek NE.
Source: Best Practice & Research. Clinical Endocrinology & Metabolism. 2002 June; 16(2): 289-309. Review.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12064894

- **Management of carcinoma-in-situ of the testis.**
Author(s): von der Maase H, Giwercman A, Muller J, Skakkebaek NE.
Source: International Journal of Andrology. 1987 February; 10(1): 209-20.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2438219

- **Mania in a patient receiving testosterone replacement postorchidectomy taking St John's wort and sertraline.**
Author(s): Barbenel DM, Yusufi B, O'Shea D, Bench CJ.
Source: Journal of Psychopharmacology (Oxford, England). 2000 March; 14(1): 84-6.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10757260

- **Noonan's syndrome and seminoma of undescended testicle.**
Author(s): Aggarwal A, Krishnan J, Kwart A, Perry D.

Source: Southern Medical Journal. 2001 April; 94(4): 432-4.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11332913

- **Preventable causes of male infertility.**
Author(s): Thompson ST.
Source: World Journal of Urology. 1993; 11(2): 111-9. Review.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8343795

- **Psychologic implications of scrotal sac and testes for the male child.**
Author(s): Bell AI.
Source: Clinical Pediatrics. 1974 October; 13(10): 838-43, 846-7. Review.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4153451

- **Successful treatment on an out-patient basis of a patient with Down's syndrome and disseminated testicular seminoma.**
Author(s): Sleijfer S, Koops HS, van der Graaf WT.
Source: The Netherlands Journal of Medicine. 1996 March; 48(3): 89-91.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8935748

- **Temperature sensitivity of cholesteryl ester hydrolases in the rat testis.**
Author(s): Durham LA 3rd, Grogan WM.
Source: Lipids. 1982 December; 17(12): 970-5.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6131373

- **Testicular tumors in 2 families.**
Author(s): Peschel RE, Schiff M, Knowlton AH.
Source: The Journal of Urology. 1981 March; 125(3): 432-3.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6162971

- **Tumors in undescended testis.**
Author(s): Kulkarni JN, Kamat MR.
Source: Journal of Surgical Oncology. 1991 April; 46(4): 257-60.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1706815

- **Two case reports of distant healing: new paradigms at work?**
Author(s): Koopman BG, Blasband RA.
Source: Alternative Therapies in Health and Medicine. 2002 January-February; 8(1): 120, 116-9.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11795611

Additional Web Resources

A number of additional Web sites offer encyclopedic information covering CAM and related topics. The following is a representative sample:

- Alternative Medicine Foundation, Inc.: **http://www.herbmed.org/**
- AOL: **http://search.aol.com/cat.adp?id=169&layer=&from=subcats**
- Chinese Medicine: **http://www.newcenturynutrition.com/**
- drkoop.com®: **http://www.drkoop.com/InteractiveMedicine/IndexC.html**
- Family Village: **http://www.familyvillage.wisc.edu/med_altn.htm**
- Google: **http://directory.google.com/Top/Health/Alternative/**
- Healthnotes: **http://www.healthnotes.com/**
- MedWebPlus: **http://medwebplus.com/subject/Alternative_and_Complementary_Medicine**
- Open Directory Project: **http://dmoz.org/Health/Alternative/**
- HealthGate: **http://www.tnp.com/**
- WebMD®Health: **http://my.webmd.com/drugs_and_herbs**
- WholeHealthMD.com: **http://www.wholehealthmd.com/reflib/0,1529,00.html**
- Yahoo.com: **http://dir.yahoo.com/Health/Alternative_Medicine/**

General References

A good place to find general background information on CAM is the National Library of Medicine. It has prepared within the MEDLINEplus system an information topic page dedicated to complementary and alternative medicine. To access this page, go to the MEDLINEplus site at **http://www.nlm.nih.gov/medlineplus/alternativemedicine.html**. This Web site provides a general overview of various topics and can lead to a number of general sources.

CHAPTER 4. PATENTS ON CRYPTORCHIDISM

Overview

Patents can be physical innovations (e.g. chemicals, pharmaceuticals, medical equipment) or processes (e.g. treatments or diagnostic procedures). The United States Patent and Trademark Office defines a patent as a grant of a property right to the inventor, issued by the Patent and Trademark Office.[8] Patents, therefore, are intellectual property. For the United States, the term of a new patent is 20 years from the date when the patent application was filed. If the inventor wishes to receive economic benefits, it is likely that the invention will become commercially available within 20 years of the initial filing. It is important to understand, therefore, that an inventor's patent does not indicate that a product or service is or will be commercially available. The patent implies only that the inventor has "the right to exclude others from making, using, offering for sale, or selling" the invention in the United States. While this relates to U.S. patents, similar rules govern foreign patents.

In this chapter, we show you how to locate information on patents and their inventors. If you find a patent that is particularly interesting to you, contact the inventor or the assignee for further information. **IMPORTANT NOTE:** When following the search strategy described below, you may discover non-medical patents that use the generic term "cryptorchidism" (or a synonym) in their titles. To accurately reflect the results that you might find while conducting research on cryptorchidism, we have not necessarily excluded non-medical patents in this bibliography.

Patent Applications on Cryptorchidism

As of December 2000, U.S. patent applications are open to public viewing.[9] Applications are patent requests which have yet to be granted. (The process to achieve a patent can take several years.) The following patent applications have been filed since December 2000 relating to cryptorchidism:

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[8] Adapted from the United States Patent and Trademark Office: **http://www.uspto.gov/web/offices/pac/doc/general/whatis.htm**.

[9] This has been a common practice outside the United States prior to December 2000.

- **Great gene and protein**

  Inventor(s): Agoulnik, Alexander I.; (Houston, TX)

  Correspondence: Michael A. Sanzo; Fitch, Even, Tabin & Flannery; Suite 401 L; 1801 K Street; Washington; DC; 20006-1201; US

  Patent Application Number: 20030082650

  Date filed: August 29, 2002

  Abstract: The present invention is directed to a G protein-coupled receptor that is necessary for normal testicular descent during embryonic development. Mutations in this receptor lead to **cryptorchidism.** In addition to the receptor and genes encoding the receptor, the invention includes assays for mutations in the receptor gene, binding assays which utilize the receptor and transgenic animals which have been engineered to have non-functional receptor alleles. The animals may be used in assays designed to identify agents useful in treating **cryptorchidism.**

  Excerpt(s): The present application claims the benefit of U.S. provisional application No. 60/315,696, filed on Aug. 30, 2001, and No. 60/351,432, filed on Jan. 28, 2002. The present invention relates to a G protein-coupled receptor in mice and humans that promotes testicular descent during male fetal development. Mutations in the gene encoding the receptor result in **cryptorchidism.** The invention includes binding assays for the receptor and transgenic mice which can be used in assaying test compounds for their effect on **cryptorchidism.** Cryptorchidism is a condition in which at least one testes fails to descend fully into the scrotum. It is one of the most frequently observed congenital birth defects with an incidence of 3-4% in newborn boys. Untreated, the condition results in infertility and a significantly increased risk of testicular cancer. Although the causes of **cryptorchidism** are not fully understood, the Hoxa10 and Insl3 (insulin-like factor 3) genes appear to be required for the normal descent of testes (Rijli, et al., Proc. Nat'l Acid. Sci. USA 92:8185-8189 (1995); Satokata, et al., Nature 374:460-463 (1995); Nef, et al., Nat. Genet. 22:295-299 (1999); Zimmermann, et al., Mol. Endocrinol. 13:681-691 (1999)).

  Web site: http://appft1.uspto.gov/netahtml/PTO/search-bool.html

Keeping Current

In order to stay informed about patents and patent applications dealing with cryptorchidism, you can access the U.S. Patent Office archive via the Internet at the following Web address: **http://www.uspto.gov/patft/index.html**. You will see two broad options: (1) Issued Patent, and (2) Published Applications. To see a list of issued patents, perform the following steps: Under "Issued Patents," click "Quick Search." Then, type "cryptorchidism" (or synonyms) into the "Term 1" box. After clicking on the search button, scroll down to see the various patents which have been granted to date on cryptorchidism.

You can also use this procedure to view pending patent applications concerning cryptorchidism. Simply go back to **http://www.uspto.gov/patft/index.html**. Select "Quick Search" under "Published Applications." Then proceed with the steps listed above.

CHAPTER 5. BOOKS ON CRYPTORCHIDISM

Overview

This chapter provides bibliographic book references relating to cryptorchidism. In addition to online booksellers such as **www.amazon.com** and **www.bn.com**, excellent sources for book titles on cryptorchidism include the Combined Health Information Database and the National Library of Medicine. Your local medical library also may have these titles available for loan.

Book Summaries: Federal Agencies

The Combined Health Information Database collects various book abstracts from a variety of healthcare institutions and federal agencies. To access these summaries, go directly to the following hyperlink: **http://chid.nih.gov/detail/detail.html**. You will need to use the "Detailed Search" option. To find book summaries, use the drop boxes at the bottom of the search page where "You may refine your search by." Select the dates and language you prefer. For the format option, select "Monograph/Book." Now type "cryptorchidism" (or synonyms) into the "For these words:" box. You should check back periodically with this database which is updated every three months. The following is a typical result when searching for books on cryptorchidism:

- **Laparoscopy in Children**

  Source: Heidelberg, Germany: Springer-Verlag. 2003. 147 p.

  Contact: Available from Springer-Verlag. Tiergartenstr. 17, D-69121 Heidelberg, Germany. (49)6221-487-0. Website: www.springer.de. E-mail: orders@springer.de. PRICE: $69.95 plus shipping and handling. ISBN: 3540429751.

  Summary: Most surgeons are familiar with the techniques of laparoscopic surgery, however, in children there are variations in size and technical approach. This book describes the differences and characteristic aspects of laparoscopy in small children. The book is an atlas of numerous drawings, accompanied by textual descriptions. Technical guidelines are given on how to perform laparoscopy safely, even in small children. Topics include patient selection, anesthesia, insufflation, trocar insertion, instruments, ligating, needle insertion, suturing, adhesiolysis, appendectomy, cholecystectomy

(gallbladder removal), **cryptorchidism,** fundoplication, inguinal hernia, intussusception, liver biopsy, Meckel's diverticulum, ovary, pyloromyotomy, sigmoid resection, splenectomy, varicocele, thoracoscopy, and postoperative care. The aim of the book is to provide surgeons with the knowledge to extend their expertise in adult laparoscopy to children. A subject index concludes the textbook.

- **20 Common Problems in Urology**

  Source: New York, NY: McGraw-Hill, Inc. 2001. 335 p.

  Contact: Available from McGraw-Hill, Inc. 1221 Avenue of the Americas, New York, NY 10020. (612) 832-7869. Website: www.bookstore.mcgraw-hill.com. PRICE: $45.00;plus shipping and handling. ISBN: 0070634130.

  Summary: This text on common problems in urology is designed for the primary care provider. The text covers both pediatric and adult conditions and features quick reference algorithms, charts and tables that organize presenting signs and symptoms, diagnostic tests, and treatments. Twenty chapters cover fetal and postnatal hydronephrosis (fluid accumulation in the kidneys), urinary tract infections (UTIs) in children, **cryptorchidism** (undescended testicles), circumcision, nocturnal enuresis (bedwetting), UTIs in adults, urethritis, urinary incontinence, interstitial cystitis, geriatric urology, hematuria (blood in the urine), prostate cancer screening, benign prostatic hyperplasia (BPH), scrotal mass and pain, genital skin rash, urinary calculi (stones), erectile dysfunction (impotence), male infertility, vasectomy, male menopause, and imaging studies (diagnostic tests). Most chapters define the condition and then discuss the differential diagnosis, the physical examination, recommended diagnostic tests, special considerations, treatment options, and patient care strategies. The text also offers practice advice on when to refer to a specialist and what to expect post-referral. The text concludes with a subject index and is illustrated with black and white photographs and diagrams.

- **Pediatric Urology Practice**

  Source: Philadelphia, PA: Lippincott Williams and Wilkins. 1999. 736 p.

  Contact: Available from Lippincott Williams and Wilkins. P.O. Box 1600, Hagerstown, MD 21741. (800) 638-3030 or (301) 714-2300. Fax (301) 824-7390. Website: lww.com. PRICE: $150.00 plus shipping and handling. ISBN: 0397513682.

  Summary: This textbook on pediatric urology practice defines pediatric urology, provides an understanding of the physiology of the maturing urinary tract, considers the psychological impact that reconstruction has on the child and his or her family, and encourages a compassion for and a willingness to undertake and manage the many nonsurgical urologic conditions that are common to pediatric urologic practice (e.g., dysfunctional voiding and urinary infection). The text begins with a thorough chapter on the pediatric physical examination. The remaining 39 chapters cover pediatric anesthesia, the surgical physiology of the neonate, the workup of hematuria and tubular disorders, the management of renal failure in children, prenatal diagnosis and therapy, imaging the urinary tract in children, the molecular basis of pediatric urologic disease, clinical genetics, ureteropelvic junction obstruction, megaureter, posterior urethral valves and other obstructions of the urethra, the effect of obstruction on the detrusor, nonvirilizing adrenal disease, disorders of renal position and parenchymal development, ureteral ectopy, ureteroceles, anatomic abnormalities of the bladder, bladder and cloacal exstrophy, pediatric neurogenic bladder, the surgical and nonsurgical management of the neurogenic bladder, physiology of micturition

(urination) and dysfunctional voiding, urinary infection in children, vesicoureteral reflex, hypospadias, **cryptorchidism** (undescended testicle), adolescent varicocele, anomalies of the penis and scrotum, intersex states, menstrual problems in the adolescent, urolithiasis (urinary stones) in children, pediatric oncology, hydrocele and hernia, imperforate anus and caudal regression syndrome, urogenital sinus and cloaca, the role of urinary diversion in childhood, and indications for laparoscopic procedures in pediatric urology. Each chapter is written by specialists in the field and includes references, black and white photographs, tables, and figures. A subject index concludes the textbook.

- **Urology Annual: Volume 7**

  Source: Scranton, PA: W.W. Norton and Company. 1993. 358 p.

  Contact: Available from W.W. Norton and Company. National Book Company, 800 Keystone Industrial Park, Scranton, PA 18512-4601. (212) 354-5500; (800) 233-4830. PRICE: $85. ISBN: 0393710122.

  Summary: This volume, the seventh in an annual series, offers comprehensive and timely presentations of various subjects that are of interest to practicing urologists. Fifteen articles cover topics including the management of carcinoma of the prostate; laparoscopic pelvic node dissection; DNA quantitation; supravesical urinary diversion and bladder diversion; bladder preservation in the management of invasive bladder cancer; systemic cytotoxic chemotherapy in the management of muscle-invasive bladder cancer; oncogenes and tumor suppressor genes in urologic oncology; hyperthermia in the treatment of benign prostatic hyperplasia; human papillomavirus infection and its relationship to carcinoma of the penis; complicated urinary tract infections and the status of the fluoroquinolones; the importance of bacterial biofilms in urology; managing incontinence in the elderly; the diagnosis and management of acute renal failure; **cryptorchidism;** and the current management of enuresis. A subject index is appended.

Chapters on Cryptorchidism

In order to find chapters that specifically relate to cryptorchidism, an excellent source of abstracts is the Combined Health Information Database. You will need to limit your search to book chapters and cryptorchidism using the "Detailed Search" option. Go to the following hyperlink: **http://chid.nih.gov/detail/detail.html**. To find book chapters, use the drop boxes at the bottom of the search page where "You may refine your search by." Select the dates and language you prefer, and the format option "Book Chapter." Type "cryptorchidism" (or synonyms) into the "For these words:" box. The following is a typical result when searching for book chapters on cryptorchidism:

- **Cryptorchidism and Pediatric Hydrocele/Hernia**

  Source: in Graham, S.D., Jr., et al., eds. Glenn's Urologic Surgery. 5th ed. Philadelphia, PA: Lippincott Williams and Wilkins. 1998. p. 833-842.

  Contact: Available from Lippincott Williams and Wilkins. P.O. Box 1600, Hagerstown, MD 21741. (800) 638-3030 or (301) 714-2300. Fax (301) 824-7390. Website: lww.com. PRICE: $199.00 plus shipping and handling. ISBN: 0397587376.

Summary: Childhood hernia repair and **cryptorchidism** (**undescended testicle**) surgery represent by far the most common surgical conditions encountered in a pediatric urology practice. This chapter on **cryptorchidism** and pediatric hydrocele (accumulation of fluid in the testes) and hernia is from an exhaustive textbook on urologic surgery. The authors note that early treatment seems to offer a superior approach to the traditional treatment advocated at older ages. The authors review the diagnosis of these problems, detailing the physical examination to classify **cryptorchidism.** The usual presentation of a childhood inguinal hernia is an intermittently palpable asymptomatic groin swelling. Hydrocele presents as a scrotal mass in which the testis is not palpable and transilluminates. Current treatment indications include possible improvement and preservation of fertility; possible prevention of malignancy; prevention of testis torsion, which occurs with an increased frequency in **cryptorchidism;** and improvement in body image with two testes in a normal appearing scrotum. The authors briefly review hormonal therapy for **cryptorchidism** and then detail the surgical techniques used for these congenital anomalies, including herniorrhaphy, hydrocelectomy, orchiopexy, diagnosing absent testes, and the anticipated outcomes of the surgery. Retraction is the most common complication of orchiopexy, occurring in up to 10 percent of patients. Complications are rare following the hernia repair and hydrocelectomy. Analysis of the surgical results following orchiopexy regarding testis size, consistency, location, and vas deferens injury, indicated an overall success rate that exceeds 90 percent. 6 figures. 10 references.

- **Cryptorchidism**

  Source: in Complete Directory for Pediatric Disorders. Millerton, NY: Grey House Publishing, Inc. 2002. p. 233.

  Contact: Available from Grey House Publishing, Inc. 185 Millerton Road, Millerton, NY 12546. Website: www.greyhouse.com. PRICE: $165.00 plus shipping and handling. ISBN: 1930956614.

  Summary: Cryptorchidism is characterized by the failure of one or both testes to descend into the pouch-like structure known as the scrotum. This entry on **cryptorchidism** is from a directory of pediatric disorders. The entry covers the pathology of this condition, its common resolution and treatment, and the incidence of **cryptorchidism.** In many cases, **undescended testes** may move down into the scrotum before one year of age. However, testes that fail to spontaneously descend during the first year of life typically fail to develop properly , may decrease in size, and have decreased numbers of reproductive cells. Without treatment, affected males are at an increased risk of infertility; malignant tumor development in the affected testes during the third or fourth decade of life; or pain, swelling, and in some cases, localized areas of tissue loss (necrosis). Treatment of **cryptorchidism** often includes early surgery to relocate **undescended testes** into the scrotum and to correct inguinal hernias. **Cryptorchidism** affects about 3.5 percent of full term male newborns and increases in incidence in premature newborns. The entry concludes with a reference to organizations that may be helpful (listed in the General Resources Section of the book) and the address of a related website (www.icondata.com/health/pedbase/files/CRYPTORC.HTM).

CHAPTER 6. MULTIMEDIA ON CRYPTORCHIDISM

Overview

In this chapter, we show you how to keep current on multimedia sources of information on cryptorchidism. We start with sources that have been summarized by federal agencies, and then show you how to find bibliographic information catalogued by the National Library of Medicine.

Video Recordings

An excellent source of multimedia information on cryptorchidism is the Combined Health Information Database. You will need to limit your search to "Videorecording" and "cryptorchidism" using the "Detailed Search" option. Go directly to the following hyperlink: **http://chid.nih.gov/detail/detail.html**. To find video productions, use the drop boxes at the bottom of the search page where "You may refine your search by." Select the dates and language you prefer, and the format option "Videorecording (videotape, videocassette, etc.)." Type "cryptorchidism" (or synonyms) into the "For these words:" box. The following is a typical result when searching for video recordings on cryptorchidism:

- **Pediatric Urology: Cryptorchidism**

  Source: Bellaire, TX: American Urological Association (AUA) Office of Education. 1990. (videocassette).

  Contact: Available from Karol Media. 350 North Pennsylvania Avenue, P.O. Box 7600, Wilkes-Barre, PA 18773-7600. (800) 608-0096. Fax (717) 822-8226. PRICE: $20.00. Item number 919-2071.

  Summary: This videocassette program, one of a series from the American Urological Association, presents interviews with six urologists discussing various topics in pediatric urology related to **cryptorchidism.** Topics include the optimal age for treatment; excerpts from the 'Koop Orchiopexy' procedure; retractile testes; hormones in the management of **cryptorchidism;** non-palpable testes; and **cryptorchidism** in the older patient, including malignancy, testis biopsy, and patient follow-up.

CHAPTER 7. PERIODICALS AND NEWS ON CRYPTORCHIDISM

Overview

In this chapter, we suggest a number of news sources and present various periodicals that cover cryptorchidism.

News Services and Press Releases

One of the simplest ways of tracking press releases on cryptorchidism is to search the news wires. In the following sample of sources, we will briefly describe how to access each service. These services only post recent news intended for public viewing.

PR Newswire

To access the PR Newswire archive, simply go to **http://www.prnewswire.com/**. Select your country. Type "cryptorchidism" (or synonyms) into the search box. You will automatically receive information on relevant news releases posted within the last 30 days. The search results are shown by order of relevance.

Reuters Health

The Reuters' Medical News and Health eLine databases can be very useful in exploring news archives relating to cryptorchidism. While some of the listed articles are free to view, others are available for purchase for a nominal fee. To access this archive, go to **http://www.reutershealth.com/en/index.html** and search by "cryptorchidism" (or synonyms). The following was recently listed in this archive for cryptorchidism:

- **Shared and unique risk factors for cryptorchidism and hypospadias determined**
  Source: Reuters Medical News
  Date: July 06, 1999

- **Hormone Therapy Effective For Cryptorchidism In Prepubescent Boys**
  Source: Reuters Medical News
  Date: February 13, 1997

The NIH

Within MEDLINEplus, the NIH has made an agreement with the New York Times Syndicate, the AP News Service, and Reuters to deliver news that can be browsed by the public. Search news releases at **http://www.nlm.nih.gov/medlineplus/alphanews_a.html**. MEDLINEplus allows you to browse across an alphabetical index. Or you can search by date at the following Web page: **http://www.nlm.nih.gov/medlineplus/newsbydate.html**. Often, news items are indexed by MEDLINEplus within its search engine.

Business Wire

Business Wire is similar to PR Newswire. To access this archive, simply go to **http://www.businesswire.com/**. You can scan the news by industry category or company name.

Market Wire

Market Wire is more focused on technology than the other wires. To browse the latest press releases by topic, such as alternative medicine, biotechnology, fitness, healthcare, legal, nutrition, and pharmaceuticals, access Market Wire's Medical/Health channel at **http://www.marketwire.com/mw/release_index?channel=MedicalHealth**. Or simply go to Market Wire's home page at **http://www.marketwire.com/mw/home**, type "cryptorchidism" (or synonyms) into the search box, and click on "Search News." As this service is technology oriented, you may wish to use it when searching for press releases covering diagnostic procedures or tests.

Search Engines

Medical news is also available in the news sections of commercial Internet search engines. See the health news page at Yahoo (**http://dir.yahoo.com/Health/News_and_Media/**), or you can use this Web site's general news search page at **http://news.yahoo.com/**. Type in "cryptorchidism" (or synonyms). If you know the name of a company that is relevant to cryptorchidism, you can go to any stock trading Web site (such as **http://www.etrade.com/**) and search for the company name there. News items across various news sources are reported on indicated hyperlinks. Google offers a similar service at **http://news.google.com/**.

BBC

Covering news from a more European perspective, the British Broadcasting Corporation (BBC) allows the public free access to their news archive located at **http://www.bbc.co.uk/**. Search by "cryptorchidism" (or synonyms).

Academic Periodicals covering Cryptorchidism

Numerous periodicals are currently indexed within the National Library of Medicine's PubMed database that are known to publish articles relating to cryptorchidism. In addition to these sources, you can search for articles covering cryptorchidism that have been published by any of the periodicals listed in previous chapters. To find the latest studies published, go to **http://www.ncbi.nlm.nih.gov/pubmed**, type the name of the periodical into the search box, and click "Go."

If you want complete details about the historical contents of a journal, you can also visit the following Web site: **http://www.ncbi.nlm.nih.gov/entrez/jrbrowser.cgi**. Here, type in the name of the journal or its abbreviation, and you will receive an index of published articles. At **http://locatorplus.gov/**, you can retrieve more indexing information on medical periodicals (e.g. the name of the publisher). Select the button "Search LOCATORplus." Then type in the name of the journal and select the advanced search option "Journal Title Search."

CHAPTER 8. RESEARCHING MEDICATIONS

Overview

While a number of hard copy or CD-ROM resources are available for researching medications, a more flexible method is to use Internet-based databases. Broadly speaking, there are two sources of information on approved medications: public sources and private sources. We will emphasize free-to-use public sources.

U.S. Pharmacopeia

Because of historical investments by various organizations and the emergence of the Internet, it has become rather simple to learn about the medications recommended for cryptorchidism. One such source is the United States Pharmacopeia. In 1820, eleven physicians met in Washington, D.C. to establish the first compendium of standard drugs for the United States. They called this compendium the U.S. Pharmacopeia (USP). Today, the USP is a non-profit organization consisting of 800 volunteer scientists, eleven elected officials, and 400 representatives of state associations and colleges of medicine and pharmacy. The USP is located in Rockville, Maryland, and its home page is located at **http://www.usp.org/**. The USP currently provides standards for over 3,700 medications. The resulting USP DI® Advice for the Patient® can be accessed through the National Library of Medicine of the National Institutes of Health. The database is partially derived from lists of federally approved medications in the Food and Drug Administration's (FDA) Drug Approvals database, located at **http://www.fda.gov/cder/da/da.htm**.

While the FDA database is rather large and difficult to navigate, the Phamacopeia is both user-friendly and free to use. It covers more than 9,000 prescription and over-the-counter medications. To access this database, simply type the following hyperlink into your Web browser: **http://www.nlm.nih.gov/medlineplus/druginformation.html**. To view examples of a given medication (brand names, category, description, preparation, proper use, precautions, side effects, etc.), simply follow the hyperlinks indicated within the United States Pharmacopeia (USP).

Below, we have compiled a list of medications associated with cryptorchidism. If you would like more information on a particular medication, the provided hyperlinks will direct you to ample documentation (e.g. typical dosage, side effects, drug-interaction risks, etc.). The

following drugs have been mentioned in the Pharmacopeia and other sources as being potentially applicable to cryptorchidism:

Chorionic Gonadotropin

- **Systemic - U.S. Brands:** Chorex; Novarel; Pregnyl; Profasi
  http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202266.html

Commercial Databases

In addition to the medications listed in the USP above, a number of commercial sites are available by subscription to physicians and their institutions. Or, you may be able to access these sources from your local medical library.

Mosby's Drug Consult™

Mosby's Drug Consult™ database (also available on CD-ROM and book format) covers 45,000 drug products including generics and international brands. It provides prescribing information, drug interactions, and patient information. Subscription information is available at the following hyperlink: **http://www.mosbysdrugconsult.com/**.

PDR*health*

The PDR*health* database is a free-to-use, drug information search engine that has been written for the public in layman's terms. It contains FDA-approved drug information adapted from the Physicians' Desk Reference (PDR) database. PDR*health* can be searched by brand name, generic name, or indication. It features multiple drug interactions reports. Search PDR*health* at **http://www.pdrhealth.com/drug_info/index.html**.

Other Web Sites

Drugs.com (**www.drugs.com**) reproduces the information in the Pharmacopeia as well as commercial information. You may also want to consider the Web site of the Medical Letter, Inc. (**http://www.medletter.com/**) which allows users to download articles on various drugs and therapeutics for a nominal fee.

If you have any questions about a medical treatment, the FDA may have an office near you. Look for their number in the blue pages of the phone book. You can also contact the FDA through its toll-free number, 1-888-INFO-FDA (1-888-463-6332), or on the World Wide Web at **www.fda.gov**.

APPENDICES

APPENDIX A. PHYSICIAN RESOURCES

Overview

In this chapter, we focus on databases and Internet-based guidelines and information resources created or written for a professional audience.

NIH Guidelines

Commonly referred to as "clinical" or "professional" guidelines, the National Institutes of Health publish physician guidelines for the most common diseases. Publications are available at the following by relevant Institute[10]:

- Office of the Director (OD); guidelines consolidated across agencies available at **http://www.nih.gov/health/consumer/conkey.htm**
- National Institute of General Medical Sciences (NIGMS); fact sheets available at **http://www.nigms.nih.gov/news/facts/**
- National Library of Medicine (NLM); extensive encyclopedia (A.D.A.M., Inc.) with guidelines: **http://www.nlm.nih.gov/medlineplus/healthtopics.html**
- National Cancer Institute (NCI); guidelines available at **http://www.cancer.gov/cancerinfo/list.aspx?viewid=5f35036e-5497-4d86-8c2c-714a9f7c8d25**
- National Eye Institute (NEI); guidelines available at **http://www.nei.nih.gov/order/index.htm**
- National Heart, Lung, and Blood Institute (NHLBI); guidelines available at **http://www.nhlbi.nih.gov/guidelines/index.htm**
- National Human Genome Research Institute (NHGRI); research available at **http://www.genome.gov/page.cfm?pageID=10000375**
- National Institute on Aging (NIA); guidelines available at **http://www.nia.nih.gov/health/**

[10] These publications are typically written by one or more of the various NIH Institutes.

- National Institute on Alcohol Abuse and Alcoholism (NIAAA); guidelines available at **http://www.niaaa.nih.gov/publications/publications.htm**
- National Institute of Allergy and Infectious Diseases (NIAID); guidelines available at **http://www.niaid.nih.gov/publications/**
- National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS); fact sheets and guidelines available at **http://www.niams.nih.gov/hi/index.htm**
- National Institute of Child Health and Human Development (NICHD); guidelines available at **http://www.nichd.nih.gov/publications/pubskey.cfm**
- National Institute on Deafness and Other Communication Disorders (NIDCD); fact sheets and guidelines at **http://www.nidcd.nih.gov/health/**
- National Institute of Dental and Craniofacial Research (NIDCR); guidelines available at **http://www.nidr.nih.gov/health/**
- National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK); guidelines available at **http://www.niddk.nih.gov/health/health.htm**
- National Institute on Drug Abuse (NIDA); guidelines available at **http://www.nida.nih.gov/DrugAbuse.html**
- National Institute of Environmental Health Sciences (NIEHS); environmental health information available at **http://www.niehs.nih.gov/external/facts.htm**
- National Institute of Mental Health (NIMH); guidelines available at **http://www.nimh.nih.gov/practitioners/index.cfm**
- National Institute of Neurological Disorders and Stroke (NINDS); neurological disorder information pages available at **http://www.ninds.nih.gov/health_and_medical/disorder_index.htm**
- National Institute of Nursing Research (NINR); publications on selected illnesses at **http://www.nih.gov/ninr/news-info/publications.html**
- National Institute of Biomedical Imaging and Bioengineering; general information at **http://grants.nih.gov/grants/becon/becon_info.htm**
- Center for Information Technology (CIT); referrals to other agencies based on keyword searches available at **http://kb.nih.gov/www_query_main.asp**
- National Center for Complementary and Alternative Medicine (NCCAM); health information available at **http://nccam.nih.gov/health/**
- National Center for Research Resources (NCRR); various information directories available at **http://www.ncrr.nih.gov/publications.asp**
- Office of Rare Diseases; various fact sheets available at **http://rarediseases.info.nih.gov/html/resources/rep_pubs.html**
- Centers for Disease Control and Prevention; various fact sheets on infectious diseases available at **http://www.cdc.gov/publications.htm**

NIH Databases

In addition to the various Institutes of Health that publish professional guidelines, the NIH has designed a number of databases for professionals.[11] Physician-oriented resources provide a wide variety of information related to the biomedical and health sciences, both past and present. The format of these resources varies. Searchable databases, bibliographic citations, full-text articles (when available), archival collections, and images are all available. The following are referenced by the National Library of Medicine:[12]

- **Bioethics:** Access to published literature on the ethical, legal, and public policy issues surrounding healthcare and biomedical research. This information is provided in conjunction with the Kennedy Institute of Ethics located at Georgetown University, Washington, D.C.: **http://www.nlm.nih.gov/databases/databases_bioethics.html**
- **HIV/AIDS Resources:** Describes various links and databases dedicated to HIV/AIDS research: **http://www.nlm.nih.gov/pubs/factsheets/aidsinfs.html**
- **NLM Online Exhibitions:** Describes "Exhibitions in the History of Medicine": **http://www.nlm.nih.gov/exhibition/exhibition.html**. Additional resources for historical scholarship in medicine: **http://www.nlm.nih.gov/hmd/hmd.html**
- **Biotechnology Information:** Access to public databases. The National Center for Biotechnology Information conducts research in computational biology, develops software tools for analyzing genome data, and disseminates biomedical information for the better understanding of molecular processes affecting human health and disease: **http://www.ncbi.nlm.nih.gov/**
- **Population Information:** The National Library of Medicine provides access to worldwide coverage of population, family planning, and related health issues, including family planning technology and programs, fertility, and population law and policy: **http://www.nlm.nih.gov/databases/databases_population.html**
- **Cancer Information:** Access to cancer-oriented databases: **http://www.nlm.nih.gov/databases/databases_cancer.html**
- **Profiles in Science:** Offering the archival collections of prominent twentieth-century biomedical scientists to the public through modern digital technology: **http://www.profiles.nlm.nih.gov/**
- **Chemical Information:** Provides links to various chemical databases and references: **http://sis.nlm.nih.gov/Chem/ChemMain.html**
- **Clinical Alerts:** Reports the release of findings from the NIH-funded clinical trials where such release could significantly affect morbidity and mortality: **http://www.nlm.nih.gov/databases/alerts/clinical_alerts.html**
- **Space Life Sciences:** Provides links and information to space-based research (including NASA): **http://www.nlm.nih.gov/databases/databases_space.html**
- **MEDLINE:** Bibliographic database covering the fields of medicine, nursing, dentistry, veterinary medicine, the healthcare system, and the pre-clinical sciences: **http://www.nlm.nih.gov/databases/databases_medline.html**

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[11] Remember, for the general public, the National Library of Medicine recommends the databases referenced in MEDLINE*plus* (**http://medlineplus.gov/** or **http://www.nlm.nih.gov/medlineplus/databases.html**).

[12] See **http://www.nlm.nih.gov/databases/databases.html**.

- **Toxicology and Environmental Health Information (TOXNET):** Databases covering toxicology and environmental health: **http://sis.nlm.nih.gov/Tox/ToxMain.html**
- **Visible Human Interface:** Anatomically detailed, three-dimensional representations of normal male and female human bodies: **http://www.nlm.nih.gov/research/visible/visible_human.html**

The NLM Gateway[13]

The NLM (National Library of Medicine) Gateway is a Web-based system that lets users search simultaneously in multiple retrieval systems at the U.S. National Library of Medicine (NLM). It allows users of NLM services to initiate searches from one Web interface, providing one-stop searching for many of NLM's information resources or databases.[14] To use the NLM Gateway, simply go to the search site at **http://gateway.nlm.nih.gov/gw/Cmd**. Type "cryptorchidism" (or synonyms) into the search box and click "Search." The results will be presented in a tabular form, indicating the number of references in each database category.

Results Summary

Category	Items Found
Journal Articles	6247
Books / Periodicals / Audio Visual	55
Consumer Health	88
Meeting Abstracts	1
Other Collections	215
Total	6606

HSTAT[15]

HSTAT is a free, Web-based resource that provides access to full-text documents used in healthcare decision-making.[16] These documents include clinical practice guidelines, quick-reference guides for clinicians, consumer health brochures, evidence reports and technology assessments from the Agency for Healthcare Research and Quality (AHRQ), as well as AHRQ's Put Prevention Into Practice.[17] Simply search by "cryptorchidism" (or synonyms) at the following Web site: **http://text.nlm.nih.gov**.

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[13] Adapted from NLM: **http://gateway.nlm.nih.gov/gw/Cmd?Overview.x**.

[14] The NLM Gateway is currently being developed by the Lister Hill National Center for Biomedical Communications (LHNCBC) at the National Library of Medicine (NLM) of the National Institutes of Health (NIH).

[15] Adapted from HSTAT: **http://www.nlm.nih.gov/pubs/factsheets/hstat.html**.

[16] The HSTAT URL is **http://hstat.nlm.nih.gov/**.

[17] Other important documents in HSTAT include: the National Institutes of Health (NIH) Consensus Conference Reports and Technology Assessment Reports; the HIV/AIDS Treatment Information Service (ATIS) resource documents; the Substance Abuse and Mental Health Services Administration's Center for Substance Abuse Treatment (SAMHSA/CSAT) Treatment Improvement Protocols (TIP) and Center for Substance Abuse Prevention (SAMHSA/CSAP) Prevention Enhancement Protocols System (PEPS); the Public Health Service (PHS) Preventive Services Task Force's *Guide to Clinical Preventive Services*; the independent, nonfederal Task Force on Community Services' *Guide to Community Preventive Services*; and the Health Technology Advisory Committee (HTAC) of the Minnesota Health Care Commission (MHCC) health technology evaluations.

Coffee Break: Tutorials for Biologists[18]

Coffee Break is a general healthcare site that takes a scientific view of the news and covers recent breakthroughs in biology that may one day assist physicians in developing treatments. Here you will find a collection of short reports on recent biological discoveries. Each report incorporates interactive tutorials that demonstrate how bioinformatics tools are used as a part of the research process. Currently, all Coffee Breaks are written by NCBI staff.[19] Each report is about 400 words and is usually based on a discovery reported in one or more articles from recently published, peer-reviewed literature.[20] This site has new articles every few weeks, so it can be considered an online magazine of sorts. It is intended for general background information. You can access the Coffee Break Web site at the following hyperlink: **http://www.ncbi.nlm.nih.gov/Coffeebreak/**.

Other Commercial Databases

In addition to resources maintained by official agencies, other databases exist that are commercial ventures addressing medical professionals. Here are some examples that may interest you:

- **CliniWeb International:** Index and table of contents to selected clinical information on the Internet; see **http://www.ohsu.edu/cliniweb/**.
- **Medical World Search:** Searches full text from thousands of selected medical sites on the Internet; see **http://www.mwsearch.com/**.

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[18] Adapted from **http://www.ncbi.nlm.nih.gov/Coffeebreak/Archive/FAQ.html**.

[19] The figure that accompanies each article is frequently supplied by an expert external to NCBI, in which case the source of the figure is cited. The result is an interactive tutorial that tells a biological story.

[20] After a brief introduction that sets the work described into a broader context, the report focuses on how a molecular understanding can provide explanations of observed biology and lead to therapies for diseases. Each vignette is accompanied by a figure and hypertext links that lead to a series of pages that interactively show how NCBI tools and resources are used in the research process.

APPENDIX B. PATIENT RESOURCES

Overview

Official agencies, as well as federally funded institutions supported by national grants, frequently publish a variety of guidelines written with the patient in mind. These are typically called "Fact Sheets" or "Guidelines." They can take the form of a brochure, information kit, pamphlet, or flyer. Often they are only a few pages in length. Since new guidelines on cryptorchidism can appear at any moment and be published by a number of sources, the best approach to finding guidelines is to systematically scan the Internet-based services that post them.

Patient Guideline Sources

The remainder of this chapter directs you to sources which either publish or can help you find additional guidelines on topics related to cryptorchidism. Due to space limitations, these sources are listed in a concise manner. Do not hesitate to consult the following sources by either using the Internet hyperlink provided, or, in cases where the contact information is provided, contacting the publisher or author directly.

The National Institutes of Health

The NIH gateway to patients is located at **http://health.nih.gov/**. From this site, you can search across various sources and institutes, a number of which are summarized below.

Topic Pages: MEDLINEplus

The National Library of Medicine has created a vast and patient-oriented healthcare information portal called MEDLINEplus. Within this Internet-based system are "health topic pages" which list links to available materials relevant to cryptorchidism. To access this system, log on to **http://www.nlm.nih.gov/medlineplus/healthtopics.html**. From there you can either search using the alphabetical index or browse by broad topic areas. Recently, MEDLINEplus listed the following when searched for "cryptorchidism":

Cardiomyopathy
http://www.nlm.nih.gov/medlineplus/cardiomyopathy.html

Infertility
http://www.nlm.nih.gov/medlineplus/infertility.html

Male Genital Disorders
http://www.nlm.nih.gov/medlineplus/malegenitaldisorders.html

Prader-Willi Syndrome
http://www.nlm.nih.gov/medlineplus/praderwillisyndrome.html

Skin Diseases
http://www.nlm.nih.gov/medlineplus/skindiseases.html

Testicular Cancer
http://www.nlm.nih.gov/medlineplus/testicularcancer.html

You may also choose to use the search utility provided by MEDLINEplus at the following Web address: **http://www.nlm.nih.gov/medlineplus/**. Simply type a keyword into the search box and click "Search." This utility is similar to the NIH search utility, with the exception that it only includes materials that are linked within the MEDLINEplus system (mostly patient-oriented information). It also has the disadvantage of generating unstructured results. We recommend, therefore, that you use this method only if you have a very targeted search.

The NIH Search Utility

The NIH search utility allows you to search for documents on over 100 selected Web sites that comprise the NIH-WEB-SPACE. Each of these servers is "crawled" and indexed on an ongoing basis. Your search will produce a list of various documents, all of which will relate in some way to cryptorchidism. The drawbacks of this approach are that the information is not organized by theme and that the references are often a mix of information for professionals and patients. Nevertheless, a large number of the listed Web sites provide useful background information. We can only recommend this route, therefore, for relatively rare or specific disorders, or when using highly targeted searches. To use the NIH search utility, visit the following Web page: **http://search.nih.gov/index.html**.

PEDBASE

Similar to NORD, PEDBASE covers relatively rare disorders, limited mainly to pediatric conditions. PEDBASE was designed by Dr. Alan Gandy. To access the database, which is more oriented to researchers than patients, you can view the current list of health topics covered at the following Web site: **http://www.icondata.com/health/pedbase/pedlynx.htm**.

Additional Web Sources

A number of Web sites are available to the public that often link to government sites. These can also point you in the direction of essential information. The following is a representative sample:

- AOL: **http://search.aol.com/cat.adp?id=168&layer=&from=subcats**

- Family Village: **http://www.familyvillage.wisc.edu/specific.htm**
- Google: **http://directory.google.com/Top/Health/Conditions_and_Diseases/**
- Med Help International: **http://www.medhelp.org/HealthTopics/A.html**
- Open Directory Project: **http://dmoz.org/Health/Conditions_and_Diseases/**
- Yahoo.com: **http://dir.yahoo.com/Health/Diseases_and_Conditions/**
- WebMD®Health: **http://my.webmd.com/health_topics**

Finding Associations

There are several Internet directories that provide lists of medical associations with information on or resources relating to cryptorchidism. By consulting all of associations listed in this chapter, you will have nearly exhausted all sources for patient associations concerned with cryptorchidism.

The National Health Information Center (NHIC)

The National Health Information Center (NHIC) offers a free referral service to help people find organizations that provide information about cryptorchidism. For more information, see the NHIC's Web site at **http://www.health.gov/NHIC/** or contact an information specialist by calling 1-800-336-4797.

Directory of Health Organizations

The Directory of Health Organizations, provided by the National Library of Medicine Specialized Information Services, is a comprehensive source of information on associations. The Directory of Health Organizations database can be accessed via the Internet at **http://www.sis.nlm.nih.gov/Dir/DirMain.html**. It is composed of two parts: DIRLINE and Health Hotlines.

The DIRLINE database comprises some 10,000 records of organizations, research centers, and government institutes and associations that primarily focus on health and biomedicine. To access DIRLINE directly, go to the following Web site: **http://dirline.nlm.nih.gov/**. Simply type in "cryptorchidism" (or a synonym), and you will receive information on all relevant organizations listed in the database.

Health Hotlines directs you to toll-free numbers to over 300 organizations. You can access this database directly at **http://www.sis.nlm.nih.gov/hotlines/**. On this page, you are given the option to search by keyword or by browsing the subject list. When you have received your search results, click on the name of the organization for its description and contact information.

The Combined Health Information Database

Another comprehensive source of information on healthcare associations is the Combined Health Information Database. Using the "Detailed Search" option, you will need to limit

your search to "Organizations" and "cryptorchidism". Type the following hyperlink into your Web browser: **http://chid.nih.gov/detail/detail.html**. To find associations, use the drop boxes at the bottom of the search page where "You may refine your search by." For publication date, select "All Years." Then, select your preferred language and the format option "Organization Resource Sheet." Type "cryptorchidism" (or synonyms) into the "For these words:" box. You should check back periodically with this database since it is updated every three months.

The National Organization for Rare Disorders, Inc.

The National Organization for Rare Disorders, Inc. has prepared a Web site that provides, at no charge, lists of associations organized by health topic. You can access this database at the following Web site: **http://www.rarediseases.org/search/orgsearch.html**. Type "cryptorchidism" (or a synonym) into the search box, and click "Submit Query."

APPENDIX C. FINDING MEDICAL LIBRARIES

Overview

In this Appendix, we show you how to quickly find a medical library in your area.

Preparation

Your local public library and medical libraries have interlibrary loan programs with the National Library of Medicine (NLM), one of the largest medical collections in the world. According to the NLM, most of the literature in the general and historical collections of the National Library of Medicine is available on interlibrary loan to any library. If you would like to access NLM medical literature, then visit a library in your area that can request the publications for you.[21]

Finding a Local Medical Library

The quickest method to locate medical libraries is to use the Internet-based directory published by the National Network of Libraries of Medicine (NN/LM). This network includes 4626 members and affiliates that provide many services to librarians, health professionals, and the public. To find a library in your area, simply visit **http://nnlm.gov/members/adv.html** or call 1-800-338-7657.

Medical Libraries in the U.S. and Canada

In addition to the NN/LM, the National Library of Medicine (NLM) lists a number of libraries with reference facilities that are open to the public. The following is the NLM's list and includes hyperlinks to each library's Web site. These Web pages can provide information on hours of operation and other restrictions. The list below is a small sample of

[21] Adapted from the NLM: **http://www.nlm.nih.gov/psd/cas/interlibrary.html**.

libraries recommended by the National Library of Medicine (sorted alphabetically by name of the U.S. state or Canadian province where the library is located)[22]:

- **Alabama:** Health InfoNet of Jefferson County (Jefferson County Library Cooperative, Lister Hill Library of the Health Sciences), **http://www.uab.edu/infonet/**
- **Alabama:** Richard M. Scrushy Library (American Sports Medicine Institute)
- **Arizona:** Samaritan Regional Medical Center: The Learning Center (Samaritan Health System, Phoenix, Arizona), **http://www.samaritan.edu/library/bannerlibs.htm**
- **California:** Kris Kelly Health Information Center (St. Joseph Health System, Humboldt), **http://www.humboldt1.com/~kkhic/index.html**
- **California:** Community Health Library of Los Gatos, **http://www.healthlib.org/orgresources.html**
- **California:** Consumer Health Program and Services (CHIPS) (County of Los Angeles Public Library, Los Angeles County Harbor-UCLA Medical Center Library) - Carson, CA, **http://www.colapublib.org/services/chips.html**
- **California:** Gateway Health Library (Sutter Gould Medical Foundation)
- **California:** Health Library (Stanford University Medical Center), **http://www-med.stanford.edu/healthlibrary/**
- **California:** Patient Education Resource Center - Health Information and Resources (University of California, San Francisco), **http://sfghdean.ucsf.edu/barnett/PERC/default.asp**
- **California:** Redwood Health Library (Petaluma Health Care District), **http://www.phcd.org/rdwdlib.html**
- **California:** Los Gatos PlaneTree Health Library, **http://planetreesanjose.org/**
- **California:** Sutter Resource Library (Sutter Hospitals Foundation, Sacramento), **http://suttermedicalcenter.org/library/**
- **California:** Health Sciences Libraries (University of California, Davis), **http://www.lib.ucdavis.edu/healthsci/**
- **California:** ValleyCare Health Library & Ryan Comer Cancer Resource Center (ValleyCare Health System, Pleasanton), **http://gaelnet.stmarys-ca.edu/other.libs/gbal/east/vchl.html**
- **California:** Washington Community Health Resource Library (Fremont), **http://www.healthlibrary.org/**
- **Colorado:** William V. Gervasini Memorial Library (Exempla Healthcare), **http://www.saintjosephdenver.org/yourhealth/libraries/**
- **Connecticut:** Hartford Hospital Health Science Libraries (Hartford Hospital), **http://www.harthosp.org/library/**
- **Connecticut:** Healthnet: Connecticut Consumer Health Information Center (University of Connecticut Health Center, Lyman Maynard Stowe Library), **http://library.uchc.edu/departm/hnet/**

[22] Abstracted from **http://www.nlm.nih.gov/medlineplus/libraries.html**.

- **Connecticut:** Waterbury Hospital Health Center Library (Waterbury Hospital, Waterbury), **http://www.waterburyhospital.com/library/consumer.shtml**
- **Delaware:** Consumer Health Library (Christiana Care Health System, Eugene du Pont Preventive Medicine & Rehabilitation Institute, Wilmington), **http://www.christianacare.org/health_guide/health_guide_pmri_health_info.cfm**
- **Delaware:** Lewis B. Flinn Library (Delaware Academy of Medicine, Wilmington), **http://www.delamed.org/chls.html**
- **Georgia:** Family Resource Library (Medical College of Georgia, Augusta), **http://cmc.mcg.edu/kids_families/fam_resources/fam_res_lib/frl.htm**
- **Georgia:** Health Resource Center (Medical Center of Central Georgia, Macon), **http://www.mccg.org/hrc/hrchome.asp**
- **Hawaii:** Hawaii Medical Library: Consumer Health Information Service (Hawaii Medical Library, Honolulu), **http://hml.org/CHIS/**
- **Idaho:** DeArmond Consumer Health Library (Kootenai Medical Center, Coeur d'Alene), **http://www.nicon.org/DeArmond/index.htm**
- **Illinois:** Health Learning Center of Northwestern Memorial Hospital (Chicago), **http://www.nmh.org/health_info/hlc.html**
- **Illinois:** Medical Library (OSF Saint Francis Medical Center, Peoria), **http://www.osfsaintfrancis.org/general/library/**
- **Kentucky:** Medical Library - Services for Patients, Families, Students & the Public (Central Baptist Hospital, Lexington), **http://www.centralbap.com/education/community/library.cfm**
- **Kentucky:** University of Kentucky - Health Information Library (Chandler Medical Center, Lexington), **http://www.mc.uky.edu/PatientEd/**
- **Louisiana:** Alton Ochsner Medical Foundation Library (Alton Ochsner Medical Foundation, New Orleans), **http://www.ochsner.org/library/**
- **Louisiana:** Louisiana State University Health Sciences Center Medical Library-Shreveport, **http://lib-sh.lsuhsc.edu/**
- **Maine:** Franklin Memorial Hospital Medical Library (Franklin Memorial Hospital, Farmington), **http://www.fchn.org/fmh/lib.htm**
- **Maine:** Gerrish-True Health Sciences Library (Central Maine Medical Center, Lewiston), **http://www.cmmc.org/library/library.html**
- **Maine:** Hadley Parrot Health Science Library (Eastern Maine Healthcare, Bangor), **http://www.emh.org/hll/hpl/guide.htm**
- **Maine:** Maine Medical Center Library (Maine Medical Center, Portland), **http://www.mmc.org/library/**
- **Maine:** Parkview Hospital (Brunswick), **http://www.parkviewhospital.org/**
- **Maine:** Southern Maine Medical Center Health Sciences Library (Southern Maine Medical Center, Biddeford), **http://www.smmc.org/services/service.php3?choice=10**
- **Maine:** Stephens Memorial Hospital's Health Information Library (Western Maine Health, Norway), **http://www.wmhcc.org/Library/**

- **Manitoba, Canada:** Consumer & Patient Health Information Service (University of Manitoba Libraries), **http://www.umanitoba.ca/libraries/units/health/reference/chis.html**
- **Manitoba, Canada:** J.W. Crane Memorial Library (Deer Lodge Centre, Winnipeg), **http://www.deerlodge.mb.ca/crane_library/about.asp**
- **Maryland:** Health Information Center at the Wheaton Regional Library (Montgomery County, Dept. of Public Libraries, Wheaton Regional Library), **http://www.mont.lib.md.us/healthinfo/hic.asp**
- **Massachusetts:** Baystate Medical Center Library (Baystate Health System), **http://www.baystatehealth.com/1024/**
- **Massachusetts:** Boston University Medical Center Alumni Medical Library (Boston University Medical Center), **http://med-libwww.bu.edu/library/lib.html**
- **Massachusetts:** Lowell General Hospital Health Sciences Library (Lowell General Hospital, Lowell), **http://www.lowellgeneral.org/library/HomePageLinks/WWW.htm**
- **Massachusetts:** Paul E. Woodard Health Sciences Library (New England Baptist Hospital, Boston), **http://www.nebh.org/health_lib.asp**
- **Massachusetts:** St. Luke's Hospital Health Sciences Library (St. Luke's Hospital, Southcoast Health System, New Bedford), **http://www.southcoast.org/library/**
- **Massachusetts:** Treadwell Library Consumer Health Reference Center (Massachusetts General Hospital), **http://www.mgh.harvard.edu/library/chrcindex.html**
- **Massachusetts:** UMass HealthNet (University of Massachusetts Medical School, Worchester), **http://healthnet.umassmed.edu/**
- **Michigan:** Botsford General Hospital Library - Consumer Health (Botsford General Hospital, Library & Internet Services), **http://www.botsfordlibrary.org/consumer.htm**
- **Michigan:** Helen DeRoy Medical Library (Providence Hospital and Medical Centers), **http://www.providence-hospital.org/library/**
- **Michigan:** Marquette General Hospital - Consumer Health Library (Marquette General Hospital, Health Information Center), **http://www.mgh.org/center.html**
- **Michigan:** Patient Education Resouce Center - University of Michigan Cancer Center (University of Michigan Comprehensive Cancer Center, Ann Arbor), **http://www.cancer.med.umich.edu/learn/leares.htm**
- **Michigan:** Sladen Library & Center for Health Information Resources - Consumer Health Information (Detroit), **http://www.henryford.com/body.cfm?id=39330**
- **Montana:** Center for Health Information (St. Patrick Hospital and Health Sciences Center, Missoula)
- **National:** Consumer Health Library Directory (Medical Library Association, Consumer and Patient Health Information Section), **http://caphis.mlanet.org/directory/index.html**
- **National:** National Network of Libraries of Medicine (National Library of Medicine) - provides library services for health professionals in the United States who do not have access to a medical library, **http://nnlm.gov/**
- **National:** NN/LM List of Libraries Serving the Public (National Network of Libraries of Medicine), **http://nnlm.gov/members/**

- **Nevada:** Health Science Library, West Charleston Library (Las Vegas-Clark County Library District, Las Vegas), **http://www.lvccld.org/special_collections/medical/index.htm**
- **New Hampshire:** Dartmouth Biomedical Libraries (Dartmouth College Library, Hanover), **http://www.dartmouth.edu/~biomed/resources.htmld/conshealth.htmld/**
- **New Jersey:** Consumer Health Library (Rahway Hospital, Rahway), **http://www.rahwayhospital.com/library.htm**
- **New Jersey:** Dr. Walter Phillips Health Sciences Library (Englewood Hospital and Medical Center, Englewood), **http://www.englewoodhospital.com/links/index.htm**
- **New Jersey:** Meland Foundation (Englewood Hospital and Medical Center, Englewood), **http://www.geocities.com/ResearchTriangle/9360/**
- **New York:** Choices in Health Information (New York Public Library) - NLM Consumer Pilot Project participant, **http://www.nypl.org/branch/health/links.html**
- **New York:** Health Information Center (Upstate Medical University, State University of New York, Syracuse), **http://www.upstate.edu/library/hic/**
- **New York:** Health Sciences Library (Long Island Jewish Medical Center, New Hyde Park), **http://www.lij.edu/library/library.html**
- **New York:** ViaHealth Medical Library (Rochester General Hospital), **http://www.nyam.org/library/**
- **Ohio:** Consumer Health Library (Akron General Medical Center, Medical & Consumer Health Library), **http://www.akrongeneral.org/hwlibrary.htm**
- **Oklahoma:** The Health Information Center at Saint Francis Hospital (Saint Francis Health System, Tulsa), **http://www.sfh-tulsa.com/services/healthinfo.asp**
- **Oregon:** Planetree Health Resource Center (Mid-Columbia Medical Center, The Dalles), **http://www.mcmc.net/phrc/**
- **Pennsylvania:** Community Health Information Library (Milton S. Hershey Medical Center, Hershey), **http://www.hmc.psu.edu/commhealth/**
- **Pennsylvania:** Community Health Resource Library (Geisinger Medical Center, Danville), **http://www.geisinger.edu/education/commlib.shtml**
- **Pennsylvania:** HealthInfo Library (Moses Taylor Hospital, Scranton), **http://www.mth.org/healthwellness.html**
- **Pennsylvania:** Hopwood Library (University of Pittsburgh, Health Sciences Library System, Pittsburgh), **http://www.hsls.pitt.edu/guides/chi/hopwood/index_html**
- **Pennsylvania:** Koop Community Health Information Center (College of Physicians of Philadelphia), **http://www.collphyphil.org/kooppg1.shtml**
- **Pennsylvania:** Learning Resources Center - Medical Library (Susquehanna Health System, Williamsport), **http://www.shscares.org/services/lrc/index.asp**
- **Pennsylvania:** Medical Library (UPMC Health System, Pittsburgh), **http://www.upmc.edu/passavant/library.htm**
- **Quebec, Canada:** Medical Library (Montreal General Hospital), **http://www.mghlib.mcgill.ca/**

- **South Dakota:** Rapid City Regional Hospital Medical Library (Rapid City Regional Hospital), **http://www.rcrh.org/Services/Library/Default.asp**
- **Texas:** Houston HealthWays (Houston Academy of Medicine-Texas Medical Center Library), **http://hhw.library.tmc.edu/**
- **Washington:** Community Health Library (Kittitas Valley Community Hospital), **http://www.kvch.com/**
- **Washington:** Southwest Washington Medical Center Library (Southwest Washington Medical Center, Vancouver), **http://www.swmedicalcenter.com/body.cfm?id=72**

ONLINE GLOSSARIES

The Internet provides access to a number of free-to-use medical dictionaries. The National Library of Medicine has compiled the following list of online dictionaries:

- ADAM Medical Encyclopedia (A.D.A.M., Inc.), comprehensive medical reference: **http://www.nlm.nih.gov/medlineplus/encyclopedia.html**
- MedicineNet.com Medical Dictionary (MedicineNet, Inc.): **http://www.medterms.com/Script/Main/hp.asp**
- Merriam-Webster Medical Dictionary (Inteli-Health, Inc.): **http://www.intelihealth.com/IH/**
- Multilingual Glossary of Technical and Popular Medical Terms in Eight European Languages (European Commission) - Danish, Dutch, English, French, German, Italian, Portuguese, and Spanish: **http://allserv.rug.ac.be/~rvdstich/eugloss/welcome.html**
- On-line Medical Dictionary (CancerWEB): **http://cancerweb.ncl.ac.uk/omd/**
- Rare Diseases Terms (Office of Rare Diseases): **http://ord.aspensys.com/asp/diseases/diseases.asp**
- Technology Glossary (National Library of Medicine) - Health Care Technology: **http://www.nlm.nih.gov/nichsr/ta101/ta10108.htm**

Beyond these, MEDLINEplus contains a very patient-friendly encyclopedia covering every aspect of medicine (licensed from A.D.A.M., Inc.). The ADAM Medical Encyclopedia can be accessed at **http://www.nlm.nih.gov/medlineplus/encyclopedia.html**. ADAM is also available on commercial Web sites such as drkoop.com (**http://www.drkoop.com/**) and Web MD (**http://my.webmd.com/adam/asset/adam_disease_articles/a_to_z/a**). The NIH suggests the following Web sites in the ADAM Medical Encyclopedia when searching for information on cryptorchidism:

- **Basic Guidelines for Cryptorchidism**

  Undescended testicle
  Web site: http://www.nlm.nih.gov/medlineplus/ency/article/000973.htm

  Undescended testicle repair
  Web site: http://www.nlm.nih.gov/medlineplus/ency/article/003002.htm

- **Signs & Symptoms for Cryptorchidism**

  Problems breathing
  Web site: http://www.nlm.nih.gov/medlineplus/ency/article/003075.htm

- **Diagnostics and Tests for Cryptorchidism**

  ALT
  Web site: http://www.nlm.nih.gov/medlineplus/ency/article/003473.htm

  CT
  Web site: http://www.nlm.nih.gov/medlineplus/ency/article/003330.htm

Testicular self examination
Web site: http://www.nlm.nih.gov/medlineplus/ency/article/003909.htm

X-ray
Web site: http://www.nlm.nih.gov/medlineplus/ency/article/003337.htm

- **Surgery and Procedures for Cryptorchidism**

Orchiopexy
Web site: http://www.nlm.nih.gov/medlineplus/ency/article/003002.htm

- **Background Topics for Cryptorchidism**

Bleeding
Web site: http://www.nlm.nih.gov/medlineplus/ency/article/000045.htm

Scrotum
Web site: http://www.nlm.nih.gov/medlineplus/ency/article/002296.htm

Testes
Web site: http://www.nlm.nih.gov/medlineplus/ency/article/002334.htm

Testicles
Web site: http://www.nlm.nih.gov/medlineplus/ency/article/002334.htm

Testis
Web site: http://www.nlm.nih.gov/medlineplus/ency/article/002334.htm

Online Dictionary Directories

The following are additional online directories compiled by the National Library of Medicine, including a number of specialized medical dictionaries:

- Medical Dictionaries: Medical & Biological (World Health Organization): **http://www.who.int/hlt/virtuallibrary/English/diction.htm#Medical**
- MEL-Michigan Electronic Library List of Online Health and Medical Dictionaries (Michigan Electronic Library): **http://mel.lib.mi.us/health/health-dictionaries.html**
- Patient Education: Glossaries (DMOZ Open Directory Project): **http://dmoz.org/Health/Education/Patient_Education/Glossaries/**
- Web of Online Dictionaries (Bucknell University): **http://www.yourdictionary.com/diction5.html#medicine**

CRYPTORCHIDISM DICTIONARY

The definitions below are derived from official public sources, including the National Institutes of Health [NIH] and the European Union [EU].

Abdominal: Having to do with the abdomen, which is the part of the body between the chest and the hips that contains the pancreas, stomach, intestines, liver, gallbladder, and other organs. [NIH]

Acute renal: A condition in which the kidneys suddenly stop working. In most cases, kidneys can recover from almost complete loss of function. [NIH]

Adjuvant: A substance which aids another, such as an auxiliary remedy; in immunology, nonspecific stimulator (e.g., BCG vaccine) of the immune response. [EU]

Adverse Effect: An unwanted side effect of treatment. [NIH]

Aetiology: Study of the causes of disease. [EU]

Affinity: 1. Inherent likeness or relationship. 2. A special attraction for a specific element, organ, or structure. 3. Chemical affinity; the force that binds atoms in molecules; the tendency of substances to combine by chemical reaction. 4. The strength of noncovalent chemical binding between two substances as measured by the dissociation constant of the complex. 5. In immunology, a thermodynamic expression of the strength of interaction between a single antigen-binding site and a single antigenic determinant (and thus of the stereochemical compatibility between them), most accurately applied to interactions among simple, uniform antigenic determinants such as haptens. Expressed as the association constant (K litres mole -1), which, owing to the heterogeneity of affinities in a population of antibody molecules of a given specificity, actually represents an average value (mean intrinsic association constant). 6. The reciprocal of the dissociation constant. [EU]

Agenesis: Lack of complete or normal development; congenital absence of an organ or part. [NIH]

Agonist: In anatomy, a prime mover. In pharmacology, a drug that has affinity for and stimulates physiologic activity at cell receptors normally stimulated by naturally occurring substances. [EU]

Algorithms: A procedure consisting of a sequence of algebraic formulas and/or logical steps to calculate or determine a given task. [NIH]

Alleles: Mutually exclusive forms of the same gene, occupying the same locus on homologous chromosomes, and governing the same biochemical and developmental process. [NIH]

Alternative medicine: Practices not generally recognized by the medical community as standard or conventional medical approaches and used instead of standard treatments. Alternative medicine includes the taking of dietary supplements, megadose vitamins, and herbal preparations; the drinking of special teas; and practices such as massage therapy, magnet therapy, spiritual healing, and meditation. [NIH]

Amino Acid Sequence: The order of amino acids as they occur in a polypeptide chain. This is referred to as the primary structure of proteins. It is of fundamental importance in determining protein conformation. [NIH]

Amino Acids: Organic compounds that generally contain an amino (-NH2) and a carboxyl (-COOH) group. Twenty alpha-amino acids are the subunits which are polymerized to form proteins. [NIH]

Amino Acids: Organic compounds that generally contain an amino (-NH2) and a carboxyl (-COOH) group. Twenty alpha-amino acids are the subunits which are polymerized to form proteins. [NIH]

Amniotic Fluid: Amniotic cavity fluid which is produced by the amnion and fetal lungs and kidneys. [NIH]

Anaemia: A reduction below normal in the number of erythrocytes per cu. mm., in the quantity of haemoglobin, or in the volume of packed red cells per 100 ml. of blood which occurs when the equilibrium between blood loss (through bleeding or destruction) and blood production is disturbed. [EU]

Anal: Having to do with the anus, which is the posterior opening of the large bowel. [NIH]

Analog: In chemistry, a substance that is similar, but not identical, to another. [NIH]

Analogous: Resembling or similar in some respects, as in function or appearance, but not in origin or development;. [EU]

Androgens: A class of sex hormones associated with the development and maintenance of the secondary male sex characteristics, sperm induction, and sexual differentiation. In addition to increasing virility and libido, they also increase nitrogen and water retention and stimulate skeletal growth. [NIH]

Anesthesia: A state characterized by loss of feeling or sensation. This depression of nerve function is usually the result of pharmacologic action and is induced to allow performance of surgery or other painful procedures. [NIH]

Angioma: A tumor composed of lymphatic or blood vessels. [NIH]

Anomalies: Birth defects; abnormalities. [NIH]

Anophthalmia: Absence of an eye or eyes in the newborn due to failure of development of the optic cup or to disappearance of the eyes after partial development. [NIH]

Anophthalmos: Congenital absence of the eye or eyes. [NIH]

Antibiotics: Substances produced by microorganisms that can inhibit or suppress the growth of other microorganisms. [NIH]

Antibodies: Immunoglobulin molecules having a specific amino acid sequence by virtue of which they interact only with the antigen that induced their synthesis in cells of the lymphoid series (especially plasma cells), or with an antigen closely related to it. [NIH]

Antibody: A type of protein made by certain white blood cells in response to a foreign substance (antigen). Each antibody can bind to only a specific antigen. The purpose of this binding is to help destroy the antigen. Antibodies can work in several ways, depending on the nature of the antigen. Some antibodies destroy antigens directly. Others make it easier for white blood cells to destroy the antigen. [NIH]

Antigen: Any substance which is capable, under appropriate conditions, of inducing a specific immune response and of reacting with the products of that response, that is, with specific antibody or specifically sensitized T-lymphocytes, or both. Antigens may be soluble substances, such as toxins and foreign proteins, or particulate, such as bacteria and tissue cells; however, only the portion of the protein or polysaccharide molecule known as the antigenic determinant (q.v.) combines with antibody or a specific receptor on a lymphocyte. Abbreviated Ag. [EU]

Aplasia: Lack of development of an organ or tissue, or of the cellular products from an organ or tissue. [EU]

Apoptosis: One of the two mechanisms by which cell death occurs (the other being the pathological process of necrosis). Apoptosis is the mechanism responsible for the

physiological deletion of cells and appears to be intrinsically programmed. It is characterized by distinctive morphologic changes in the nucleus and cytoplasm, chromatin cleavage at regularly spaced sites, and the endonucleolytic cleavage of genomic DNA (DNA fragmentation) at internucleosomal sites. This mode of cell death serves as a balance to mitosis in regulating the size of animal tissues and in mediating pathologic processes associated with tumor growth. [NIH]

Appendectomy: An operation to remove the appendix. [NIH]

Arterial: Pertaining to an artery or to the arteries. [EU]

Arteries: The vessels carrying blood away from the heart. [NIH]

Arterioles: The smallest divisions of the arteries located between the muscular arteries and the capillaries. [NIH]

Artery: Vessel-carrying blood from the heart to various parts of the body. [NIH]

Asymptomatic: Having no signs or symptoms of disease. [NIH]

Atrophy: Decrease in the size of a cell, tissue, organ, or multiple organs, associated with a variety of pathological conditions such as abnormal cellular changes, ischemia, malnutrition, or hormonal changes. [NIH]

Azoospermia: Absence of spermatozoa in the semen, or failure of formation of spermatozoa. [EU]

Bacteria: Unicellular prokaryotic microorganisms which generally possess rigid cell walls, multiply by cell division, and exhibit three principal forms: round or coccal, rodlike or bacillary, and spiral or spirochetal. [NIH]

Base: In chemistry, the nonacid part of a salt; a substance that combines with acids to form salts; a substance that dissociates to give hydroxide ions in aqueous solutions; a substance whose molecule or ion can combine with a proton (hydrogen ion); a substance capable of donating a pair of electrons (to an acid) for the formation of a coordinate covalent bond. [EU]

Basement Membrane: Ubiquitous supportive tissue adjacent to epithelium and around smooth and striated muscle cells. This tissue contains intrinsic macromolecular components such as collagen, laminin, and sulfated proteoglycans. As seen by light microscopy one of its subdivisions is the basal (basement) lamina. [NIH]

Benign: Not cancerous; does not invade nearby tissue or spread to other parts of the body. [NIH]

Benign prostatic hyperplasia: A benign (noncancerous) condition in which an overgrowth of prostate tissue pushes against the urethra and the bladder, blocking the flow of urine. Also called benign prostatic hypertrophy or BPH. [NIH]

Bilateral: Affecting both the right and left side of body. [NIH]

Bile: An emulsifying agent produced in the liver and secreted into the duodenum. Its composition includes bile acids and salts, cholesterol, and electrolytes. It aids digestion of fats in the duodenum. [NIH]

Binding Sites: The reactive parts of a macromolecule that directly participate in its specific combination with another molecule. [NIH]

Biochemical: Relating to biochemistry; characterized by, produced by, or involving chemical reactions in living organisms. [EU]

Biofilms: Films of bacteria or other microbial organisms, usually embedded in extracellular polymers such as implanted medical devices, which adhere to surfaces submerged in, or subjected to, aquatic environments (From Singleton & Sainsbury, Dictionary of Microbiology and Molecular Biology, 2d ed). Biofilms consist of multilayers of microbial

cells glued together to form microbial communities which are highly resistant to both phagocytes and antibiotics. [NIH]

Biopsy: Removal and pathologic examination of specimens in the form of small pieces of tissue from the living body. [NIH]

Biotechnology: Body of knowledge related to the use of organisms, cells or cell-derived constituents for the purpose of developing products which are technically, scientifically and clinically useful. Alteration of biologic function at the molecular level (i.e., genetic engineering) is a central focus; laboratory methods used include transfection and cloning technologies, sequence and structure analysis algorithms, computer databases, and gene and protein structure function analysis and prediction. [NIH]

Bladder: The organ that stores urine. [NIH]

Blastocyst: The mammalian embryo in the post-morula stage in which a fluid-filled cavity, enclosed primarily by trophoblast, contains an inner cell mass which becomes the embryonic disc. [NIH]

Blood vessel: A tube in the body through which blood circulates. Blood vessels include a network of arteries, arterioles, capillaries, venules, and veins. [NIH]

Body Fluids: Liquid components of living organisms. [NIH]

Body Image: Individuals' personal concept of their bodies as objects in and bound by space, independently and apart from all other objects. [NIH]

Bowel: The long tube-shaped organ in the abdomen that completes the process of digestion. There is both a small and a large bowel. Also called the intestine. [NIH]

Breast Self-Examination: The inspection of one's breasts, usually for signs of disease, especially neoplastic disease. [NIH]

Calculi: An abnormal concretion occurring mostly in the urinary and biliary tracts, usually composed of mineral salts. Also called stones. [NIH]

Carcinogenic: Producing carcinoma. [EU]

Carcinoma: Cancer that begins in the skin or in tissues that line or cover internal organs. [NIH]

Carcinoma in Situ: A malignant tumor that has not yet invaded the basement membrane of the epithelial cell of origin and has not spread to other tissues. [NIH]

Cardiac: Having to do with the heart. [NIH]

Cardiomyopathy: A general diagnostic term designating primary myocardial disease, often of obscure or unknown etiology. [EU]

Case report: A detailed report of the diagnosis, treatment, and follow-up of an individual patient. Case reports also contain some demographic information about the patient (for example, age, gender, ethnic origin). [NIH]

Case series: A group or series of case reports involving patients who were given similar treatment. Reports of case series usually contain detailed information about the individual patients. This includes demographic information (for example, age, gender, ethnic origin) and information on diagnosis, treatment, response to treatment, and follow-up after treatment. [NIH]

Case-Control Studies: Studies which start with the identification of persons with a disease of interest and a control (comparison, referent) group without the disease. The relationship of an attribute to the disease is examined by comparing diseased and non-diseased persons with regard to the frequency or levels of the attribute in each group. [NIH]

Caudal: Denoting a position more toward the cauda, or tail, than some specified point of

reference; same as inferior, in human anatomy. [EU]

Cell: The individual unit that makes up all of the tissues of the body. All living things are made up of one or more cells. [NIH]

Cell Count: A count of the number of cells of a specific kind, usually measured per unit volume of sample. [NIH]

Cell Death: The termination of the cell's ability to carry out vital functions such as metabolism, growth, reproduction, responsiveness, and adaptability. [NIH]

Cell proliferation: An increase in the number of cells as a result of cell growth and cell division. [NIH]

Cerebral: Of or pertaining of the cerebrum or the brain. [EU]

Cerebral Palsy: Refers to a motor disability caused by a brain dysfunction. [NIH]

Cervical: Relating to the neck, or to the neck of any organ or structure. Cervical lymph nodes are located in the neck; cervical cancer refers to cancer of the uterine cervix, which is the lower, narrow end (the "neck") of the uterus. [NIH]

Cervix: The lower, narrow end of the uterus that forms a canal between the uterus and vagina. [NIH]

Character: In current usage, approximately equivalent to personality. The sum of the relatively fixed personality traits and habitual modes of response of an individual. [NIH]

Chemotherapy: Treatment with anticancer drugs. [NIH]

Chin: The anatomical frontal portion of the mandible, also known as the mentum, that contains the line of fusion of the two separate halves of the mandible (symphysis menti). This line of fusion divides inferiorly to enclose a triangular area called the mental protuberance. On each side, inferior to the second premolar tooth, is the mental foramen for the passage of blood vessels and a nerve. [NIH]

Cholecystectomy: Surgical removal of the gallbladder. [NIH]

Cholesterol: The principal sterol of all higher animals, distributed in body tissues, especially the brain and spinal cord, and in animal fats and oils. [NIH]

Chromatin: The material of chromosomes. It is a complex of DNA, histones, and nonhistone proteins (chromosomal proteins, non-histone) found within the nucleus of a cell. [NIH]

Chromosomal: Pertaining to chromosomes. [EU]

Chromosome: Part of a cell that contains genetic information. Except for sperm and eggs, all human cells contain 46 chromosomes. [NIH]

Chronic: A disease or condition that persists or progresses over a long period of time. [NIH]

Chronic renal: Slow and progressive loss of kidney function over several years, often resulting in end-stage renal disease. People with end-stage renal disease need dialysis or transplantation to replace the work of the kidneys. [NIH]

Circumcision: Excision of the prepuce or part of it. [NIH]

Clear cell carcinoma: A rare type of tumor of the female genital tract in which the inside of the cells looks clear when viewed under a microscope. [NIH]

Cleft Palate: Congenital fissure of the soft and/or hard palate, due to faulty fusion. [NIH]

Clinical study: A research study in which patients receive treatment in a clinic or other medical facility. Reports of clinical studies can contain results for single patients (case reports) or many patients (case series or clinical trials). [NIH]

Clinical trial: A research study that tests how well new medical treatments or other

interventions work in people. Each study is designed to test new methods of screening, prevention, diagnosis, or treatment of a disease. [NIH]

Cloaca: The common chamber into which the intestinal, urinary, and genital tracts discharge in birds, reptiles, amphibians and many fishes; also a phylogenetically related embryonic structure in mammals. [NIH]

Cloning: The production of a number of genetically identical individuals; in genetic engineering, a process for the efficient replication of a great number of identical DNA molecules. [NIH]

Combination Therapy: Association of 3 drugs to treat AIDS (AZT + DDC or DDI + protease inhibitor). [NIH]

Complement: A term originally used to refer to the heat-labile factor in serum that causes immune cytolysis, the lysis of antibody-coated cells, and now referring to the entire functionally related system comprising at least 20 distinct serum proteins that is the effector not only of immune cytolysis but also of other biologic functions. Complement activation occurs by two different sequences, the classic and alternative pathways. The proteins of the classic pathway are termed 'components of complement' and are designated by the symbols C1 through C9. C1 is a calcium-dependent complex of three distinct proteins C1q, C1r and C1s. The proteins of the alternative pathway (collectively referred to as the properdin system) and complement regulatory proteins are known by semisystematic or trivial names. Fragments resulting from proteolytic cleavage of complement proteins are designated with lower-case letter suffixes, e.g., C3a. Inactivated fragments may be designated with the suffix 'i', e.g. C3bi. Activated components or complexes with biological activity are designated by a bar over the symbol e.g. C1 or C4b,2a. The classic pathway is activated by the binding of C1 to classic pathway activators, primarily antigen-antibody complexes containing IgM, IgG1, IgG3; C1q binds to a single IgM molecule or two adjacent IgG molecules. The alternative pathway can be activated by IgA immune complexes and also by nonimmunologic materials including bacterial endotoxins, microbial polysaccharides, and cell walls. Activation of the classic pathway triggers an enzymatic cascade involving C1, C4, C2 and C3; activation of the alternative pathway triggers a cascade involving C3 and factors B, D and P. Both result in the cleavage of C5 and the formation of the membrane attack complex. Complement activation also results in the formation of many biologically active complement fragments that act as anaphylatoxins, opsonins, or chemotactic factors. [EU]

Complementary and alternative medicine: CAM. Forms of treatment that are used in addition to (complementary) or instead of (alternative) standard treatments. These practices are not considered standard medical approaches. CAM includes dietary supplements, megadose vitamins, herbal preparations, special teas, massage therapy, magnet therapy, spiritual healing, and meditation. [NIH]

Complementary medicine: Practices not generally recognized by the medical community as standard or conventional medical approaches and used to enhance or complement the standard treatments. Complementary medicine includes the taking of dietary supplements, megadose vitamins, and herbal preparations; the drinking of special teas; and practices such as massage therapy, magnet therapy, spiritual healing, and meditation. [NIH]

Computational Biology: A field of biology concerned with the development of techniques for the collection and manipulation of biological data, and the use of such data to make biological discoveries or predictions. This field encompasses all computational methods and theories applicable to molecular biology and areas of computer-based techniques for solving biological problems including manipulation of models and datasets. [NIH]

Conception: The onset of pregnancy, marked by implantation of the blastocyst; the formation of a viable zygote. [EU]

Concomitant: Accompanying; accessory; joined with another. [EU]

Congenita: Displacement, subluxation, or malposition of the crystalline lens. [NIH]

Contraindications: Any factor or sign that it is unwise to pursue a certain kind of action or treatment, e. g. giving a general anesthetic to a person with pneumonia. [NIH]

Contralateral: Having to do with the opposite side of the body. [NIH]

Controlled study: An experiment or clinical trial that includes a comparison (control) group. [NIH]

Corneum: The superficial layer of the epidermis containing keratinized cells. [NIH]

Corpus: The body of the uterus. [NIH]

Curative: Tending to overcome disease and promote recovery. [EU]

Cyanosis: A bluish or purplish discoloration of the skin and mucous membranes due to an increase in the amount of deoxygenated hemoglobin in the blood or a structural defect in the hemoglobin molecule. [NIH]

Cyproterone: An anti-androgen that, in the form of its acetate, also has progestational properties. It is used in the treatment of hypersexuality in males, as a palliative in prostatic carcinoma, and, in combination with estrogen, for the therapy of severe acne and hirsutism in females. [NIH]

Cyst: A sac or capsule filled with fluid. [NIH]

Cystine: A covalently linked dimeric nonessential amino acid formed by the oxidation of cysteine. Two molecules of cysteine are joined together by a disulfide bridge to form cystine. [NIH]

Cystitis: Inflammation of the urinary bladder. [EU]

Cytoplasm: The protoplasm of a cell exclusive of that of the nucleus; it consists of a continuous aqueous solution (cytosol) and the organelles and inclusions suspended in it (phaneroplasm), and is the site of most of the chemical activities of the cell. [EU]

Cytotoxic: Cell-killing. [NIH]

Cytotoxic chemotherapy: Anticancer drugs that kill cells, especially cancer cells. [NIH]

Decubitus: An act of lying down; also the position assumed in lying down. [EU]

Degenerative: Undergoing degeneration : tending to degenerate; having the character of or involving degeneration; causing or tending to cause degeneration. [EU]

Deletion: A genetic rearrangement through loss of segments of DNA (chromosomes), bringing sequences, which are normally separated, into close proximity. [NIH]

Diagnostic procedure: A method used to identify a disease. [NIH]

Diethylstilbestrol: DES. A synthetic hormone that was prescribed from the early 1940s until 1971 to help women with complications of pregnancy. DES has been linked to an increased risk of clear cell carcinoma of the vagina in daughters of women who used DES. DES may also increase the risk of breast cancer in women who used DES. [NIH]

Digestion: The process of breakdown of food for metabolism and use by the body. [NIH]

Direct: 1. Straight; in a straight line. 2. Performed immediately and without the intervention of subsidiary means. [EU]

Dissection: Cutting up of an organism for study. [NIH]

Distal: Remote; farther from any point of reference; opposed to proximal. In dentistry, used to designate a position on the dental arch farther from the median line of the jaw. [EU]

Diverticulum: A pathological condition manifested as a pouch or sac opening from a

tubular or sacular organ. [NIH]

Dorsal: 1. Pertaining to the back or to any dorsum. 2. Denoting a position more toward the back surface than some other object of reference; same as posterior in human anatomy; superior in the anatomy of quadrupeds. [EU]

Double-blind: Pertaining to a clinical trial or other experiment in which neither the subject nor the person administering treatment knows which treatment any particular subject is receiving. [EU]

Drug Design: The molecular designing of drugs for specific purposes (such as DNA-binding, enzyme inhibition, anti-cancer efficacy, etc.) based on knowledge of molecular properties such as activity of functional groups, molecular geometry, and electronic structure, and also on information cataloged on analogous molecules. Drug design is generally computer-assisted molecular modeling and does not include pharmacokinetics, dosage analysis, or drug administration analysis. [NIH]

Drug Interactions: The action of a drug that may affect the activity, metabolism, or toxicity of another drug. [NIH]

Duct: A tube through which body fluids pass. [NIH]

Dysplasia: Cells that look abnormal under a microscope but are not cancer. [NIH]

Dyspnea: Difficult or labored breathing. [NIH]

Ectoderm: The outer of the three germ layers of the embryo. [NIH]

Ectodermal Dysplasia: A group of hereditary disorders involving tissues and structures derived from the embryonic ectoderm. They are characterized by the presence of abnormalities at birth and involvement of both the epidermis and skin appendages. They are generally nonprogressive and diffuse. Various forms exist, including anhidrotic and hidrotic dysplasias, focal dermal hypoplasia, and aplasia cutis congenita. [NIH]

Efficacy: The extent to which a specific intervention, procedure, regimen, or service produces a beneficial result under ideal conditions. Ideally, the determination of efficacy is based on the results of a randomized control trial. [NIH]

Ejaculation: The release of semen through the penis during orgasm. [NIH]

Elective: Subject to the choice or decision of the patient or physician; applied to procedures that are advantageous to the patient but not urgent. [EU]

Embryo: The prenatal stage of mammalian development characterized by rapid morphological changes and the differentiation of basic structures. [NIH]

Embryology: The study of the development of an organism during the embryonic and fetal stages of life. [NIH]

Endocrine System: The system of glands that release their secretions (hormones) directly into the circulatory system. In addition to the endocrine glands, included are the chromaffin system and the neurosecretory systems. [NIH]

Endocrinology: A subspecialty of internal medicine concerned with the metabolism, physiology, and disorders of the endocrine system. [NIH]

Endometrial: Having to do with the endometrium (the layer of tissue that lines the uterus). [NIH]

Endometriosis: A condition in which tissue more or less perfectly resembling the uterine mucous membrane (the endometrium) and containing typical endometrial granular and stromal elements occurs aberrantly in various locations in the pelvic cavity. [NIH]

Endometrium: The layer of tissue that lines the uterus. [NIH]

End-stage renal: Total chronic kidney failure. When the kidneys fail, the body retains fluid and harmful wastes build up. A person with ESRD needs treatment to replace the work of the failed kidneys. [NIH]

Enuresis: Involuntary discharge of urine after the age at which urinary control should have been achieved; often used alone with specific reference to involuntary discharge of urine occurring during sleep at night (bed-wetting, nocturnal enuresis). [EU]

Environmental Health: The science of controlling or modifying those conditions, influences, or forces surrounding man which relate to promoting, establishing, and maintaining health. [NIH]

Enzyme: A protein that speeds up chemical reactions in the body. [NIH]

Epidermis: Nonvascular layer of the skin. It is made up, from within outward, of five layers: 1) basal layer (stratum basale epidermidis); 2) spinous layer (stratum spinosum epidermidis); 3) granular layer (stratum granulosum epidermidis); 4) clear layer (stratum lucidum epidermidis); and 5) horny layer (stratum corneum epidermidis). [NIH]

Epithelial: Refers to the cells that line the internal and external surfaces of the body. [NIH]

Epithelial Cells: Cells that line the inner and outer surfaces of the body. [NIH]

Epithelium: One or more layers of epithelial cells, supported by the basal lamina, which covers the inner or outer surfaces of the body. [NIH]

Erectile: The inability to get or maintain an erection for satisfactory sexual intercourse. Also called impotence. [NIH]

Erection: The condition of being made rigid and elevated; as erectile tissue when filled with blood. [EU]

Erythrocytes: Red blood cells. Mature erythrocytes are non-nucleated, biconcave disks containing hemoglobin whose function is to transport oxygen. [NIH]

Esophageal: Having to do with the esophagus, the muscular tube through which food passes from the throat to the stomach. [NIH]

Esophageal Atresia: Congenital failure of the full esophageal lumen to develop that commonly occurs with tracheoesophageal fistula. Symptoms include excessive salivation, gagging, cyanosis, and dyspnea. [NIH]

Esophagus: The muscular tube through which food passes from the throat to the stomach. [NIH]

Estrogen: One of the two female sex hormones. [NIH]

Extracellular: Outside a cell or cells. [EU]

Extraction: The process or act of pulling or drawing out. [EU]

Fallopian tube: The oviduct, a muscular tube about 10 cm long, lying in the upper border of the broad ligament. [NIH]

Family Planning: Programs or services designed to assist the family in controlling reproduction by either improving or diminishing fertility. [NIH]

Fetus: The developing offspring from 7 to 8 weeks after conception until birth. [NIH]

Fibrin: A protein derived from fibrinogen in the presence of thrombin, which forms part of the blood clot. [NIH]

Fissure: Any cleft or groove, normal or otherwise; especially a deep fold in the cerebral cortex which involves the entire thickness of the brain wall. [EU]

Flutamide: An antiandrogen with about the same potency as cyproterone in rodent and canine species. [NIH]

Follicles: Shafts through which hair grows. [NIH]

Gallbladder: The pear-shaped organ that sits below the liver. Bile is concentrated and stored in the gallbladder. [NIH]

Gas: Air that comes from normal breakdown of food. The gases are passed out of the body through the rectum (flatus) or the mouth (burp). [NIH]

Gastrin: A hormone released after eating. Gastrin causes the stomach to produce more acid. [NIH]

Gene: The functional and physical unit of heredity passed from parent to offspring. Genes are pieces of DNA, and most genes contain the information for making a specific protein. [NIH]

Genetics: The biological science that deals with the phenomena and mechanisms of heredity. [NIH]

Genital: Pertaining to the genitalia. [EU]

Genitourinary: Pertaining to the genital and urinary organs; urogenital; urinosexual. [EU]

Genotype: The genetic constitution of the individual; the characterization of the genes. [NIH]

Geriatric: Pertaining to the treatment of the aged. [EU]

Germ Cells: The reproductive cells in multicellular organisms. [NIH]

Gestation: The period of development of the young in viviparous animals, from the time of fertilization of the ovum until birth. [EU]

Gestational: Psychosis attributable to or occurring during pregnancy. [NIH]

Gestational Age: Age of the conceptus. In humans, this may be assessed by medical history, physical examination, early immunologic pregnancy tests, radiography, ultrasonography, and amniotic fluid analysis. [NIH]

Gland: An organ that produces and releases one or more substances for use in the body. Some glands produce fluids that affect tissues or organs. Others produce hormones or participate in blood production. [NIH]

Glomerular: Pertaining to or of the nature of a glomerulus, especially a renal glomerulus. [EU]

Glucose: D-Glucose. A primary source of energy for living organisms. It is naturally occurring and is found in fruits and other parts of plants in its free state. It is used therapeutically in fluid and nutrient replacement. [NIH]

Glycoside: Any compound that contains a carbohydrate molecule (sugar), particularly any such natural product in plants, convertible, by hydrolytic cleavage, into sugar and a nonsugar component (aglycone), and named specifically for the sugar contained, as glucoside (glucose), pentoside (pentose), fructoside (fructose) etc. [EU]

Gonad: A sex organ, such as an ovary or a testicle, which produces the gametes in most multicellular animals. [NIH]

Gonadal: Pertaining to a gonad. [EU]

Gonadotropic: Stimulating the gonads; applied to hormones of the anterior pituitary which influence the gonads. [EU]

Gonadotropin: The water-soluble follicle stimulating substance, by some believed to originate in chorionic tissue, obtained from the serum of pregnant mares. It is used to supplement the action of estrogens. [NIH]

Governing Board: The group in which legal authority is vested for the control of health-related institutions and organizations. [NIH]

Granulosa Cells: Cells of the membrana granulosa lining the vesicular ovarian follicle which become luteal cells after ovulation. [NIH]

Groin: The external junctural region between the lower part of the abdomen and the thigh. [NIH]

Growth factors: Substances made by the body that function to regulate cell division and cell survival. Some growth factors are also produced in the laboratory and used in biological therapy. [NIH]

Hematuria: Presence of blood in the urine. [NIH]

Hereditary: Of, relating to, or denoting factors that can be transmitted genetically from one generation to another. [NIH]

Heredity: 1. The genetic transmission of a particular quality or trait from parent to offspring. 2. The genetic constitution of an individual. [EU]

Hernia: Protrusion of a loop or knuckle of an organ or tissue through an abnormal opening. [NIH]

Herniorrhaphy: An operation to repair a hernia. [NIH]

Histology: The study of tissues and cells under a microscope. [NIH]

Homeobox: Distinctive sequence of DNA bases. [NIH]

Homologous: Corresponding in structure, position, origin, etc., as (a) the feathers of a bird and the scales of a fish, (b) antigen and its specific antibody, (c) allelic chromosomes. [EU]

Hormonal: Pertaining to or of the nature of a hormone. [EU]

Hormonal therapy: Treatment of cancer by removing, blocking, or adding hormones. Also called hormone therapy or endocrine therapy. [NIH]

Hormone: A substance in the body that regulates certain organs. Hormones such as gastrin help in breaking down food. Some hormones come from cells in the stomach and small intestine. [NIH]

Hormone therapy: Treatment of cancer by removing, blocking, or adding hormones. Also called endocrine therapy. [NIH]

Human papillomavirus: HPV. A virus that causes abnormal tissue growth (warts) and is often associated with some types of cancer. [NIH]

Hydrogen: The first chemical element in the periodic table. It has the atomic symbol H, atomic number 1, and atomic weight 1. It exists, under normal conditions, as a colorless, odorless, tasteless, diatomic gas. Hydrogen ions are protons. Besides the common H1 isotope, hydrogen exists as the stable isotope deuterium and the unstable, radioactive isotope tritium. [NIH]

Hydrolases: Any member of the class of enzymes that catalyze the cleavage of the substrate and the addition of water to the resulting molecules, e.g., esterases, glycosidases (glycoside hydrolases), lipases, nucleotidases, peptidases (peptide hydrolases), and phosphatases (phosphoric monoester hydrolases). EC 3. [NIH]

Hydronephrosis: Abnormal enlargement of a kidney, which may be caused by blockage of the ureter (such as by a kidney stone) or chronic kidney disease that prevents urine from draining into the bladder. [NIH]

Hyperthermia: A type of treatment in which body tissue is exposed to high temperatures to damage and kill cancer cells or to make cancer cells more sensitive to the effects of radiation and certain anticancer drugs. [NIH]

Hypertrophy: General increase in bulk of a part or organ, not due to tumor formation, nor to an increase in the number of cells. [NIH]

Hypoplasia: Incomplete development or underdevelopment of an organ or tissue. [EU]

Hypospadias: A developmental anomaly in the male in which the urethra opens on the underside of the penis or on the perineum. [NIH]

Hypothalamic: Of or involving the hypothalamus. [EU]

Hypothalamus: Ventral part of the diencephalon extending from the region of the optic chiasm to the caudal border of the mammillary bodies and forming the inferior and lateral walls of the third ventricle. [NIH]

Ichthyosis: Any of several generalized skin disorders characterized by dryness, roughness, and scaliness, due to hypertrophy of the stratum corneum epidermis. Most are genetic, but some are acquired, developing in association with other systemic disease or genetic syndrome. [NIH]

Idiopathic: Describes a disease of unknown cause. [NIH]

Immune response: The activity of the immune system against foreign substances (antigens). [NIH]

Immunologic: The ability of the antibody-forming system to recall a previous experience with an antigen and to respond to a second exposure with the prompt production of large amounts of antibody. [NIH]

Immunology: The study of the body's immune system. [NIH]

Impairment: In the context of health experience, an impairment is any loss or abnormality of psychological, physiological, or anatomical structure or function. [NIH]

Imperforate Anus: A birth defect in which the anal canal fails to develop. The condition is treated with an operation. [NIH]

Implantation: The insertion or grafting into the body of biological, living, inert, or radioactive material. [EU]

Impotence: The inability to perform sexual intercourse. [NIH]

In vitro: In the laboratory (outside the body). The opposite of in vivo (in the body). [NIH]

In vivo: In the body. The opposite of in vitro (outside the body or in the laboratory). [NIH]

Incision: A cut made in the body during surgery. [NIH]

Incontinence: Inability to control the flow of urine from the bladder (urinary incontinence) or the escape of stool from the rectum (fecal incontinence). [NIH]

Induction: The act or process of inducing or causing to occur, especially the production of a specific morphogenetic effect in the developing embryo through the influence of evocators or organizers, or the production of anaesthesia or unconsciousness by use of appropriate agents. [EU]

Infancy: The period of complete dependency prior to the acquisition of competence in walking, talking, and self-feeding. [NIH]

Infection: 1. Invasion and multiplication of microorganisms in body tissues, which may be clinically unapparent or result in local cellular injury due to competitive metabolism, toxins, intracellular replication, or antigen-antibody response. The infection may remain localized, subclinical, and temporary if the body's defensive mechanisms are effective. A local infection may persist and spread by extension to become an acute, subacute, or chronic clinical infection or disease state. A local infection may also become systemic when the microorganisms gain access to the lymphatic or vascular system. 2. An infectious disease. [EU]

Infertility: The diminished or absent ability to conceive or produce an offspring while sterility is the complete inability to conceive or produce an offspring. [NIH]

Inguinal: Pertaining to the inguen, or groin. [EU]

Inguinal Hernia: A small part of the large or small intestine or bladder that pushes into the groin. May cause pain and feelings of pressure or burning in the groin. Often requires surgery. [NIH]

Inhibin: Glyceroprotein hormone produced in the seminiferous tubules by the Sertoli cells in the male and by the granulosa cells in the female follicles. The hormone inhibits FSH and LH synthesis and secretion by the pituitary cells thereby affecting sexual maturation and fertility. [NIH]

Insecticides: Pesticides designed to control insects that are harmful to man. The insects may be directly harmful, as those acting as disease vectors, or indirectly harmful, as destroyers of crops, food products, or textile fabrics. [NIH]

Insufflation: The act of blowing a powder, vapor, or gas into any body cavity for experimental, diagnostic, or therapeutic purposes. [NIH]

Insulin: A protein hormone secreted by beta cells of the pancreas. Insulin plays a major role in the regulation of glucose metabolism, generally promoting the cellular utilization of glucose. It is also an important regulator of protein and lipid metabolism. Insulin is used as a drug to control insulin-dependent diabetes mellitus. [NIH]

Insulin-dependent diabetes mellitus: A disease characterized by high levels of blood glucose resulting from defects in insulin secretion, insulin action, or both. Autoimmune, genetic, and environmental factors are involved in the development of type I diabetes. [NIH]

Insulin-like: Muscular growth factor. [NIH]

Internal Medicine: A medical specialty concerned with the diagnosis and treatment of diseases of the internal organ systems of adults. [NIH]

Interstitial: Pertaining to or situated between parts or in the interspaces of a tissue. [EU]

Intestinal: Having to do with the intestines. [NIH]

Intestines: The section of the alimentary canal from the stomach to the anus. It includes the large intestine and small intestine. [NIH]

Intracellular: Inside a cell. [NIH]

Intravenous: IV. Into a vein. [NIH]

Intravenous pyelography: IVP. X-ray study of the kidneys, ureters, and bladder. The x-rays are taken after a dye is injected into a blood vessel. The dye is concentrated in the urine, which outlines the kidneys, ureters, and bladder on the x-rays. [NIH]

Intussusception: A rare disorder. A part of the intestines folds into another part of the intestines, causing blockage. Most common in infants. Can be treated with an operation. [NIH]

Invasive: 1. Having the quality of invasiveness. 2. Involving puncture or incision of the skin or insertion of an instrument or foreign material into the body; said of diagnostic techniques. [EU]

Involuntary: Reaction occurring without intention or volition. [NIH]

Ipsilateral: Having to do with the same side of the body. [NIH]

Ischemia: Deficiency of blood in a part, due to functional constriction or actual obstruction of a blood vessel. [EU]

Karyotype: The characteristic chromosome complement of an individual, race, or species as defined by their number, size, shape, etc. [NIH]

Kb: A measure of the length of DNA fragments, 1 Kb = 1000 base pairs. The largest DNA

fragments are up to 50 kilobases long. [NIH]

Kidney Disease: Any one of several chronic conditions that are caused by damage to the cells of the kidney. People who have had diabetes for a long time may have kidney damage. Also called nephropathy. [NIH]

Kidney stone: A stone that develops from crystals that form in urine and build up on the inner surfaces of the kidney, in the renal pelvis, or in the ureters. [NIH]

Laparoscopy: Examination, therapy or surgery of the abdomen's interior by means of a laparoscope. [NIH]

Libido: The psychic drive or energy associated with sexual instinct in the broad sense (pleasure and love-object seeking). It may also connote the psychic energy associated with instincts in general that motivate behavior. [NIH]

Ligament: A band of fibrous tissue that connects bones or cartilages, serving to support and strengthen joints. [EU]

Ligands: A RNA simulation method developed by the MIT. [NIH]

Linkage: The tendency of two or more genes in the same chromosome to remain together from one generation to the next more frequently than expected according to the law of independent assortment. [NIH]

Lipid: Fat. [NIH]

Liver: A large, glandular organ located in the upper abdomen. The liver cleanses the blood and aids in digestion by secreting bile. [NIH]

Localized: Cancer which has not metastasized yet. [NIH]

Longitudinal study: Also referred to as a "cohort study" or "prospective study"; the analytic method of epidemiologic study in which subsets of a defined population can be identified who are, have been, or in the future may be exposed or not exposed, or exposed in different degrees, to a factor or factors hypothesized to influence the probability of occurrence of a given disease or other outcome. The main feature of this type of study is to observe large numbers of subjects over an extended time, with comparisons of incidence rates in groups that differ in exposure levels. [NIH]

Loop: A wire usually of platinum bent at one end into a small loop (usually 4 mm inside diameter) and used in transferring microorganisms. [NIH]

Lymphatic: The tissues and organs, including the bone marrow, spleen, thymus, and lymph nodes, that produce and store cells that fight infection and disease. [NIH]

Lymphocytes: White blood cells formed in the body's lymphoid tissue. The nucleus is round or ovoid with coarse, irregularly clumped chromatin while the cytoplasm is typically pale blue with azurophilic (if any) granules. Most lymphocytes can be classified as either T or B (with subpopulations of each); those with characteristics of neither major class are called null cells. [NIH]

Lymphoid: Referring to lymphocytes, a type of white blood cell. Also refers to tissue in which lymphocytes develop. [NIH]

Malformation: A morphologic defect resulting from an intrinsically abnormal developmental process. [EU]

Malignancy: A cancerous tumor that can invade and destroy nearby tissue and spread to other parts of the body. [NIH]

Malignant: Cancerous; a growth with a tendency to invade and destroy nearby tissue and spread to other parts of the body. [NIH]

Malignant tumor: A tumor capable of metastasizing. [NIH]

Malnutrition: A condition caused by not eating enough food or not eating a balanced diet. [NIH]

Mammary: Pertaining to the mamma, or breast. [EU]

MEDLINE: An online database of MEDLARS, the computerized bibliographic Medical Literature Analysis and Retrieval System of the National Library of Medicine. [NIH]

Membrane: A very thin layer of tissue that covers a surface. [NIH]

Menopause: Permanent cessation of menstruation. [NIH]

Menstruation: The normal physiologic discharge through the vagina of blood and mucosal tissues from the nonpregnant uterus. [NIH]

Mental: Pertaining to the mind; psychic. 2. (L. mentum chin) pertaining to the chin. [EU]

Mental Retardation: Refers to sub-average general intellectual functioning which originated during the developmental period and is associated with impairment in adaptive behavior. [NIH]

Mesentery: A layer of the peritoneum which attaches the abdominal viscera to the abdominal wall and conveys their blood vessels and nerves. [NIH]

Meta-Analysis: A quantitative method of combining the results of independent studies (usually drawn from the published literature) and synthesizing summaries and conclusions which may be used to evaluate therapeutic effectiveness, plan new studies, etc., with application chiefly in the areas of research and medicine. [NIH]

Micturition: The passage of urine; urination. [EU]

Milliliter: A measure of volume for a liquid. A milliliter is approximately 950-times smaller than a quart and 30-times smaller than a fluid ounce. A milliliter of liquid and a cubic centimeter (cc) of liquid are the same. [NIH]

Mitochondrial Swelling: Increase in volume of mitochondria due to an influx of fluid; it occurs in hypotonic solutions due to osmotic pressure and in isotonic solutions as a result of altered permeability of the membranes of respiring mitochondria. [NIH]

Mitosis: A method of indirect cell division by means of which the two daughter nuclei normally receive identical complements of the number of chromosomes of the somatic cells of the species. [NIH]

Mobilization: The process of making a fixed part or stored substance mobile, as by separating a part from surrounding structures to make it accessible for an operative procedure or by causing release into the circulation for body use of a substance stored in the body. [EU]

Modeling: A treatment procedure whereby the therapist presents the target behavior which the learner is to imitate and make part of his repertoire. [NIH]

Molecular: Of, pertaining to, or composed of molecules : a very small mass of matter. [EU]

Molecule: A chemical made up of two or more atoms. The atoms in a molecule can be the same (an oxygen molecule has two oxygen atoms) or different (a water molecule has two hydrogen atoms and one oxygen atom). Biological molecules, such as proteins and DNA, can be made up of many thousands of atoms. [NIH]

Necrosis: A pathological process caused by the progressive degradative action of enzymes that is generally associated with severe cellular trauma. It is characterized by mitochondrial swelling, nuclear flocculation, uncontrolled cell lysis, and ultimately cell death. [NIH]

Neonatal: Pertaining to the first four weeks after birth. [EU]

Neoplasm: A new growth of benign or malignant tissue. [NIH]

Nervous System: The entire nerve apparatus composed of the brain, spinal cord, nerves and ganglia. [NIH]

Neuroendocrine: Having to do with the interactions between the nervous system and the endocrine system. Describes certain cells that release hormones into the blood in response to stimulation of the nervous system. [NIH]

Neurogenic: Loss of bladder control caused by damage to the nerves controlling the bladder. [NIH]

Nitrogen: An element with the atomic symbol N, atomic number 7, and atomic weight 14. Nitrogen exists as a diatomic gas and makes up about 78% of the earth's atmosphere by volume. It is a constituent of proteins and nucleic acids and found in all living cells. [NIH]

Nuclear: A test of the structure, blood flow, and function of the kidneys. The doctor injects a mildly radioactive solution into an arm vein and uses x-rays to monitor its progress through the kidneys. [NIH]

Nucleotidases: A class of enzymes that catalyze the conversion of a nucleotide and water to a nucleoside and orthophosphate. EC 3.1.3.-. [NIH]

Nucleus: A body of specialized protoplasm found in nearly all cells and containing the chromosomes. [NIH]

Occult: Obscure; concealed from observation, difficult to understand. [EU]

Oncogenes: Genes which can potentially induce neoplastic transformation. They include genes for growth factors, growth factor receptors, protein kinases, signal transducers, nuclear phosphoproteins, and transcription factors. When these genes are constitutively expressed after structural and/or regulatory changes, uncontrolled cell proliferation may result. Viral oncogenes have prefix "v-" before the gene symbol; cellular oncogenes (proto-oncogenes) have the prefix "c-" before the gene symbol. [NIH]

Oncology: The study of cancer. [NIH]

Optic cup: The white, cup-like area in the center of the optic disc. [NIH]

Orchiectomy: The surgical removal of one or both testicles. [NIH]

Ovaries: The pair of female reproductive glands in which the ova, or eggs, are formed. The ovaries are located in the pelvis, one on each side of the uterus. [NIH]

Ovary: Either of the paired glands in the female that produce the female germ cells and secrete some of the female sex hormones. [NIH]

Oxalate: A chemical that combines with calcium in urine to form the most common type of kidney stone (calcium oxalate stone). [NIH]

Paediatric: Of or relating to the care and medical treatment of children; belonging to or concerned with paediatrics. [EU]

Palate: The structure that forms the roof of the mouth. It consists of the anterior hard palate and the posterior soft palate. [NIH]

Palliative: 1. Affording relief, but not cure. 2. An alleviating medicine. [EU]

Pancreas: A mixed exocrine and endocrine gland situated transversely across the posterior abdominal wall in the epigastric and hypochondriac regions. The endocrine portion is comprised of the Islets of Langerhans, while the exocrine portion is a compound acinar gland that secretes digestive enzymes. [NIH]

Papillomavirus: A genus of Papovaviridae causing proliferation of the epithelium, which may lead to malignancy. A wide range of animals are infected including humans, chimpanzees, cattle, rabbits, dogs, and horses. [NIH]

Paralysis: Loss of ability to move all or part of the body. [NIH]

Parietal: 1. Of or pertaining to the walls of a cavity. 2. Pertaining to or located near the parietal bone, as the parietal lobe. [EU]

Parturition: The act or process of given birth to a child. [EU]

Paternity: Establishing the father relationship of a man and a child. [NIH]

Pathologic: 1. Indicative of or caused by a morbid condition. 2. Pertaining to pathology (= branch of medicine that treats the essential nature of the disease, especially the structural and functional changes in tissues and organs of the body caused by the disease). [EU]

Pathologic Processes: The abnormal mechanisms and forms involved in the dysfunctions of tissues and organs. [NIH]

Pathophysiology: Altered functions in an individual or an organ due to disease. [NIH]

Patient Selection: Criteria and standards used for the determination of the appropriateness of the inclusion of patients with specific conditions in proposed treatment plans and the criteria used for the inclusion of subjects in various clinical trials and other research protocols. [NIH]

Pelvic: Pertaining to the pelvis. [EU]

Pelvis: The lower part of the abdomen, located between the hip bones. [NIH]

Penis: The external reproductive organ of males. It is composed of a mass of erectile tissue enclosed in three cylindrical fibrous compartments. Two of the three compartments, the corpus cavernosa, are placed side-by-side along the upper part of the organ. The third compartment below, the corpus spongiosum, houses the urethra. [NIH]

Peptide: Any compound consisting of two or more amino acids, the building blocks of proteins. Peptides are combined to make proteins. [NIH]

Peptide Hydrolases: A subclass of enzymes from the hydrolase class that catalyze the hydrolysis of peptide bonds. Exopeptidases and endopeptidases make up the sub-subclasses for this group. EC 3.4. [NIH]

Perinatal: Pertaining to or occurring in the period shortly before and after birth; variously defined as beginning with completion of the twentieth to twenty-eighth week of gestation and ending 7 to 28 days after birth. [EU]

Perineum: The area between the anus and the sex organs. [NIH]

Peritoneum: Endothelial lining of the abdominal cavity, the parietal peritoneum covering the inside of the abdominal wall and the visceral peritoneum covering the bowel, the mesentery, and certain of the organs. The portion that covers the bowel becomes the serosal layer of the bowel wall. [NIH]

Pesticides: Chemicals used to destroy pests of any sort. The concept includes fungicides (industrial fungicides), insecticides, rodenticides, etc. [NIH]

Pharmacokinetics: Dynamic and kinetic mechanisms of exogenous chemical and drug absorption, biotransformation, distribution, release, transport, uptake, and elimination as a function of dosage, and extent and rate of metabolic processes. It includes toxicokinetics, the pharmacokinetic mechanism of the toxic effects of a substance. [NIH]

Pharmacologic: Pertaining to pharmacology or to the properties and reactions of drugs. [EU]

Phenotype: The outward appearance of the individual. It is the product of interactions between genes and between the genotype and the environment. This includes the killer phenotype, characteristic of yeasts. [NIH]

Phosphoric Monoester Hydrolases: A group of hydrolases which catalyze the hydrolysis of

monophosphoric esters with the production of one mole of orthophosphate. EC 3.1.3. [NIH]

Physical Examination: Systematic and thorough inspection of the patient for physical signs of disease or abnormality. [NIH]

Physiologic: Having to do with the functions of the body. When used in the phrase "physiologic age," it refers to an age assigned by general health, as opposed to calendar age. [NIH]

Physiology: The science that deals with the life processes and functions of organismus, their cells, tissues, and organs. [NIH]

Plasma: The clear, yellowish, fluid part of the blood that carries the blood cells. The proteins that form blood clots are in plasma. [NIH]

Plasma cells: A type of white blood cell that produces antibodies. [NIH]

Pleural: A circumscribed area of hyaline whorled fibrous tissue which appears on the surface of the parietal pleura, on the fibrous part of the diaphragm or on the pleura in the interlobar fissures. [NIH]

Pleural cavity: A space enclosed by the pleura (thin tissue covering the lungs and lining the interior wall of the chest cavity). It is bound by thin membranes. [NIH]

Pneumonia: Inflammation of the lungs. [NIH]

Polycystic: An inherited disorder characterized by many grape-like clusters of fluid-filled cysts that make both kidneys larger over time. These cysts take over and destroy working kidney tissue. PKD may cause chronic renal failure and end-stage renal disease. [NIH]

Polymers: Compounds formed by the joining of smaller, usually repeating, units linked by covalent bonds. These compounds often form large macromolecules (e.g., polypeptides, proteins, plastics). [NIH]

Polymorphism: The occurrence together of two or more distinct forms in the same population. [NIH]

Polysaccharide: A type of carbohydrate. It contains sugar molecules that are linked together chemically. [NIH]

Posterior: Situated in back of, or in the back part of, or affecting the back or dorsal surface of the body. In lower animals, it refers to the caudal end of the body. [EU]

Postnatal: Occurring after birth, with reference to the newborn. [EU]

Postoperative: After surgery. [NIH]

Practice Guidelines: Directions or principles presenting current or future rules of policy for the health care practitioner to assist him in patient care decisions regarding diagnosis, therapy, or related clinical circumstances. The guidelines may be developed by government agencies at any level, institutions, professional societies, governing boards, or by the convening of expert panels. The guidelines form a basis for the evaluation of all aspects of health care and delivery. [NIH]

Pregnancy Tests: Tests to determine whether or not an individual is pregnant. [NIH]

Prenatal: Existing or occurring before birth, with reference to the fetus. [EU]

Prenatal Diagnosis: Determination of the nature of a pathological condition or disease in the postimplantation embryo, fetus, or pregnant female before birth. [NIH]

Preoperative: Preceding an operation. [EU]

Prepuce: A covering fold of skin; often used alone to designate the preputium penis. [EU]

Prevalence: The total number of cases of a given disease in a specified population at a designated time. It is differentiated from incidence, which refers to the number of new cases

in the population at a given time. [NIH]

Progesterone: Pregn-4-ene-3,20-dione. The principal progestational hormone of the body, secreted by the corpus luteum, adrenal cortex, and placenta. Its chief function is to prepare the uterus for the reception and development of the fertilized ovum. It acts as an antiovulatory agent when administered on days 5-25 of the menstrual cycle. [NIH]

Progressive: Advancing; going forward; going from bad to worse; increasing in scope or severity. [EU]

Prospective study: An epidemiologic study in which a group of individuals (a cohort), all free of a particular disease and varying in their exposure to a possible risk factor, is followed over a specific amount of time to determine the incidence rates of the disease in the exposed and unexposed groups. [NIH]

Prostate: A gland in males that surrounds the neck of the bladder and the urethra. It secretes a substance that liquifies coagulated semen. It is situated in the pelvic cavity behind the lower part of the pubic symphysis, above the deep layer of the triangular ligament, and rests upon the rectum. [NIH]

Prostatic Hyperplasia: Enlargement or overgrowth of the prostate gland as a result of an increase in the number of its constituent cells. [NIH]

Protease: Proteinase (= any enzyme that catalyses the splitting of interior peptide bonds in a protein). [EU]

Protein Kinases: A family of enzymes that catalyze the conversion of ATP and a protein to ADP and a phosphoprotein. EC 2.7.1.37. [NIH]

Protein S: The vitamin K-dependent cofactor of activated protein C. Together with protein C, it inhibits the action of factors VIIIa and Va. A deficiency in protein S can lead to recurrent venous and arterial thrombosis. [NIH]

Proteins: Polymers of amino acids linked by peptide bonds. The specific sequence of amino acids determines the shape and function of the protein. [NIH]

Proximal: Nearest; closer to any point of reference; opposed to distal. [EU]

Psychic: Pertaining to the psyche or to the mind; mental. [EU]

Puberty: The period during which the secondary sex characteristics begin to develop and the capability of sexual reproduction is attained. [EU]

Public Policy: A course or method of action selected, usually by a government, from among alternatives to guide and determine present and future decisions. [NIH]

Publishing: "The business or profession of the commercial production and issuance of literature" (Webster's 3d). It includes the publisher, publication processes, editing and editors. Production may be by conventional printing methods or by electronic publishing. [NIH]

Race: A population within a species which exhibits general similarities within itself, but is both discontinuous and distinct from other populations of that species, though not sufficiently so as to achieve the status of a taxon. [NIH]

Radiation: Emission or propagation of electromagnetic energy (waves/rays), or the waves/rays themselves; a stream of electromagnetic particles (electrons, neutrons, protons, alpha particles) or a mixture of these. The most common source is the sun. [NIH]

Radiography: Examination of any part of the body for diagnostic purposes by means of roentgen rays, recording the image on a sensitized surface (such as photographic film). [NIH]

Randomized: Describes an experiment or clinical trial in which animal or human subjects are assigned by chance to separate groups that compare different treatments. [NIH]

Receptor: A molecule inside or on the surface of a cell that binds to a specific substance and causes a specific physiologic effect in the cell. [NIH]

Rectum: The last 8 to 10 inches of the large intestine. [NIH]

Refer: To send or direct for treatment, aid, information, de decision. [NIH]

Reflex: An involuntary movement or exercise of function in a part, excited in response to a stimulus applied to the periphery and transmitted to the brain or spinal cord. [NIH]

Regimen: A treatment plan that specifies the dosage, the schedule, and the duration of treatment. [NIH]

Relapse: The return of signs and symptoms of cancer after a period of improvement. [NIH]

Relaxin: Hormone produced by the ovaries during pregnancy that loosens ligaments that hold the hip bones together. [NIH]

Renal agenesis: The absence or severe malformation of one or both kidneys. [NIH]

Renal failure: Progressive renal insufficiency and uremia, due to irreversible and progressive renal glomerular tubular or interstitial disease. [NIH]

Reproductive cells: Egg and sperm cells. Each mature reproductive cell carries a single set of 23 chromosomes. [NIH]

Reproductive system: In women, this system includes the ovaries, the fallopian tubes, the uterus (womb), the cervix, and the vagina (birth canal). The reproductive system in men includes the prostate, the testes, and the penis. [NIH]

Resection: Removal of tissue or part or all of an organ by surgery. [NIH]

Risk factor: A habit, trait, condition, or genetic alteration that increases a person's chance of developing a disease. [NIH]

Rodenticides: Substances used to destroy or inhibit the action of rats, mice, or other rodents. [NIH]

Salivation: 1. The secretion of saliva. 2. Ptyalism (= excessive flow of saliva). [EU]

Saponins: Sapogenin glycosides. A type of glycoside widely distributed in plants. Each consists of a sapogenin as the aglycon moiety, and a sugar. The sapogenin may be a steroid or a triterpene and the sugar may be glucose, galactose, a pentose, or a methylpentose. Sapogenins are poisonous towards the lower forms of life and are powerful hemolytics when injected into the blood stream able to dissolve red blood cells at even extreme dilutions. [NIH]

Screening: Checking for disease when there are no symptoms. [NIH]

Scrotum: In males, the external sac that contains the testicles. [NIH]

Secretion: 1. The process of elaborating a specific product as a result of the activity of a gland; this activity may range from separating a specific substance of the blood to the elaboration of a new chemical substance. 2. Any substance produced by secretion. [EU]

Self-Examination: The inspection of one's own body, usually for signs of disease (e.g., breast self-examination, testicular self-examination). [NIH]

Semen: The thick, yellowish-white, viscid fluid secretion of male reproductive organs discharged upon ejaculation. In addition to reproductive organ secretions, it contains spermatozoa and their nutrient plasma. [NIH]

Seminal vesicles: Glands that help produce semen. [NIH]

Seminiferous tubule: Tube used to transport sperm made in the testes. [NIH]

Seminoma: A type of cancer of the testicles. [NIH]

Serotonin: A biochemical messenger and regulator, synthesized from the essential amino acid L-tryptophan. In humans it is found primarily in the central nervous system, gastrointestinal tract, and blood platelets. Serotonin mediates several important physiological functions including neurotransmission, gastrointestinal motility, hemostasis, and cardiovascular integrity. Multiple receptor families (receptors, serotonin) explain the broad physiological actions and distribution of this biochemical mediator. [NIH]

Sertraline: A selective serotonin uptake inhibitor that is used in the treatment of depression. [NIH]

Serum: The clear liquid part of the blood that remains after blood cells and clotting proteins have been removed. [NIH]

Sex Characteristics: Those characteristics that distinguish one sex from the other. The primary sex characteristics are the ovaries and testes and their related hormones. Secondary sex characteristics are those which are masculine or feminine but not directly related to reproduction. [NIH]

Side effect: A consequence other than the one(s) for which an agent or measure is used, as the adverse effects produced by a drug, especially on a tissue or organ system other than the one sought to be benefited by its administration. [EU]

Sigmoid: 1. Shaped like the letter S or the letter C. 2. The sigmoid colon. [EU]

Sigmoid Colon: The lower part of the colon that empties into the rectum. [NIH]

Signs and Symptoms: Clinical manifestations that can be either objective when observed by a physician, or subjective when perceived by the patient. [NIH]

Skeletal: Having to do with the skeleton (boney part of the body). [NIH]

Skeleton: The framework that supports the soft tissues of vertebrate animals and protects many of their internal organs. The skeletons of vertebrates are made of bone and/or cartilage. [NIH]

Small intestine: The part of the digestive tract that is located between the stomach and the large intestine. [NIH]

Spastic: 1. Of the nature of or characterized by spasms. 2. Hypertonic, so that the muscles are stiff and the movements awkward. 3. A person exhibiting spasticity, such as occurs in spastic paralysis or in cerebral palsy. [EU]

Spasticity: A state of hypertonicity, or increase over the normal tone of a muscle, with heightened deep tendon reflexes. [EU]

Specialist: In medicine, one who concentrates on 1 special branch of medical science. [NIH]

Species: A taxonomic category subordinate to a genus (or subgenus) and superior to a subspecies or variety, composed of individuals possessing common characters distinguishing them from other categories of individuals of the same taxonomic level. In taxonomic nomenclature, species are designated by the genus name followed by a Latin or Latinized adjective or noun. [EU]

Specificity: Degree of selectivity shown by an antibody with respect to the number and types of antigens with which the antibody combines, as well as with respect to the rates and the extents of these reactions. [NIH]

Sperm: The fecundating fluid of the male. [NIH]

Spermatogenesis: Process of formation and development of spermatozoa, including spermatocytogenesis and spermiogenesis. [NIH]

Spermatozoa: Mature male germ cells that develop in the seminiferous tubules of the testes. Each consists of a head, a body, and a tail that provides propulsion. The head consists

mainly of chromatin. [NIH]

Spinal cord: The main trunk or bundle of nerves running down the spine through holes in the spinal bone (the vertebrae) from the brain to the level of the lower back. [NIH]

Spleen: An organ that is part of the lymphatic system. The spleen produces lymphocytes, filters the blood, stores blood cells, and destroys old blood cells. It is located on the left side of the abdomen near the stomach. [NIH]

Splenectomy: An operation to remove the spleen. [NIH]

Spotting: A slight discharge of blood via the vagina, especially as a side-effect of oral contraceptives. [EU]

Stenosis: Narrowing or stricture of a duct or canal. [EU]

Sterility: 1. The inability to produce offspring, i.e., the inability to conceive (female s.) or to induce conception (male s.). 2. The state of being aseptic, or free from microorganisms. [EU]

Steroid: A group name for lipids that contain a hydrogenated cyclopentanoperhydrophenanthrene ring system. Some of the substances included in this group are progesterone, adrenocortical hormones, the gonadal hormones, cardiac aglycones, bile acids, sterols (such as cholesterol), toad poisons, saponins, and some of the carcinogenic hydrocarbons. [EU]

Stimulus: That which can elicit or evoke action (response) in a muscle, nerve, gland or other excitable issue, or cause an augmenting action upon any function or metabolic process. [NIH]

Stomach: An organ of digestion situated in the left upper quadrant of the abdomen between the termination of the esophagus and the beginning of the duodenum. [NIH]

Stool: The waste matter discharged in a bowel movement; feces. [NIH]

Stress: Forcibly exerted influence; pressure. Any condition or situation that causes strain or tension. Stress may be either physical or psychologic, or both. [NIH]

Stricture: The abnormal narrowing of a body opening. Also called stenosis. [NIH]

Stromal: Large, veil-like cell in the bone marrow. [NIH]

Struvite: A type of kidney stone caused by infection. [NIH]

Subacute: Somewhat acute; between acute and chronic. [EU]

Subclinical: Without clinical manifestations; said of the early stage(s) of an infection or other disease or abnormality before symptoms and signs become apparent or detectable by clinical examination or laboratory tests, or of a very mild form of an infection or other disease or abnormality. [EU]

Subspecies: A category intermediate in rank between species and variety, based on a smaller number of correlated characters than are used to differentiate species and generally conditioned by geographical and/or ecological occurrence. [NIH]

Substance P: An eleven-amino acid neurotransmitter that appears in both the central and peripheral nervous systems. It is involved in transmission of pain, causes rapid contractions of the gastrointestinal smooth muscle, and modulates inflammatory and immune responses. [NIH]

Substrate: A substance upon which an enzyme acts. [EU]

Suprarenal: Above a kidney. [NIH]

Symphysis: A secondary cartilaginous joint. [NIH]

Systemic: Affecting the entire body. [NIH]

Systemic disease: Disease that affects the whole body. [NIH]

Testicle: The male gonad where, in adult life, spermatozoa develop; the testis. [NIH]

Testicular: Pertaining to a testis. [EU]

Testis: Either of the paired male reproductive glands that produce the male germ cells and the male hormones. [NIH]

Testosterone: A hormone that promotes the development and maintenance of male sex characteristics. [NIH]

Therapeutics: The branch of medicine which is concerned with the treatment of diseases, palliative or curative. [NIH]

Thigh: A leg; in anatomy, any elongated process or part of a structure more or less comparable to a leg. [NIH]

Thoracoscopy: Endoscopic examination, therapy or surgery of the pleural cavity. [NIH]

Tissue: A group or layer of cells that are alike in type and work together to perform a specific function. [NIH]

Torsion: A twisting or rotation of a bodily part or member on its axis. [NIH]

Torticollis: Wryneck; a contracted state of the cervical muscles, producing twisting of the neck and an unnatural position of the head. [EU]

Toxic: Having to do with poison or something harmful to the body. Toxic substances usually cause unwanted side effects. [NIH]

Toxicity: The quality of being poisonous, especially the degree of virulence of a toxic microbe or of a poison. [EU]

Toxicology: The science concerned with the detection, chemical composition, and pharmacologic action of toxic substances or poisons and the treatment and prevention of toxic manifestations. [NIH]

Toxins: Specific, characterizable, poisonous chemicals, often proteins, with specific biological properties, including immunogenicity, produced by microbes, higher plants, or animals. [NIH]

Tracheoesophageal Fistula: Abnormal communication between the esophagus and the trachea, acquired or congenital, often associated with esophageal atresia. [NIH]

Transcription Factors: Endogenous substances, usually proteins, which are effective in the initiation, stimulation, or termination of the genetic transcription process. [NIH]

Transfection: The uptake of naked or purified DNA into cells, usually eukaryotic. It is analogous to bacterial transformation. [NIH]

Translocation: The movement of material in solution inside the body of the plant. [NIH]

Trauma: Any injury, wound, or shock, must frequently physical or structural shock, producing a disturbance. [NIH]

Tumor suppressor gene: Genes in the body that can suppress or block the development of cancer. [NIH]

Tumour: 1. Swelling, one of the cardinal signs of inflammations; morbid enlargement. 2. A new growth of tissue in which the multiplication of cells is uncontrolled and progressive; called also neoplasm. [EU]

Ultrasonography: The visualization of deep structures of the body by recording the reflections of echoes of pulses of ultrasonic waves directed into the tissues. Use of ultrasound for imaging or diagnostic purposes employs frequencies ranging from 1.6 to 10 megahertz. [NIH]

Uremia: The illness associated with the buildup of urea in the blood because the kidneys are

not working effectively. Symptoms include nausea, vomiting, loss of appetite, weakness, and mental confusion. [NIH]

Ureters: Tubes that carry urine from the kidneys to the bladder. [NIH]

Urethra: The tube through which urine leaves the body. It empties urine from the bladder. [NIH]

Urethritis: Inflammation of the urethra. [EU]

Urinary: Having to do with urine or the organs of the body that produce and get rid of urine. [NIH]

Urinary Calculi: Calculi in any part of the urinary tract. According to their composition or pattern of chemical composition distribution, urinary calculi types may include alternating or combination, cystine, decubitus, encysted, fibrin, hemp seed, matrix, mulberry, oxalate, struvite, urostealith, and xanthic calculi. [NIH]

Urinary tract: The organs of the body that produce and discharge urine. These include the kidneys, ureters, bladder, and urethra. [NIH]

Urinary tract infection: An illness caused by harmful bacteria growing in the urinary tract. [NIH]

Urine: Fluid containing water and waste products. Urine is made by the kidneys, stored in the bladder, and leaves the body through the urethra. [NIH]

Urogenital: Pertaining to the urinary and genital apparatus; genitourinary. [EU]

Urography: Radiography of any part of the urinary tract. [NIH]

Urolithiasis: Stones in the urinary system. [NIH]

Urologist: A doctor who specializes in diseases of the urinary organs in females and the urinary and sex organs in males. [NIH]

Uterus: The small, hollow, pear-shaped organ in a woman's pelvis. This is the organ in which a fetus develops. Also called the womb. [NIH]

Vaccine: A substance or group of substances meant to cause the immune system to respond to a tumor or to microorganisms, such as bacteria or viruses. [NIH]

Vagina: The muscular canal extending from the uterus to the exterior of the body. Also called the birth canal. [NIH]

Vaginal: Of or having to do with the vagina, the birth canal. [NIH]

Valves: Flap-like structures that control the direction of blood flow through the heart. [NIH]

Varicocele: A complex of dilated veins which surround the testicle, usually on the left side. [NIH]

Vas Deferens: The excretory duct of the testes that carries spermatozoa. It rises from the scrotum and joins the seminal vesicles to form the ejaculatory duct. [NIH]

Vascular: Pertaining to blood vessels or indicative of a copious blood supply. [EU]

Vasectomy: An operation to cut or tie off the two tubes that carry sperm out of the testicles. [NIH]

VE: The total volume of gas either inspired or expired in one minute. [NIH]

Vein: Vessel-carrying blood from various parts of the body to the heart. [NIH]

Venules: The minute vessels that collect blood from the capillary plexuses and join together to form veins. [NIH]

Vesicoureteral: An abnormal condition in which urine backs up into the ureters, and occasionally into the kidneys, raising the risk of infection. [NIH]

Veterinary Medicine: The medical science concerned with the prevention, diagnosis, and treatment of diseases in animals. [NIH]

Virus: Submicroscopic organism that causes infectious disease. In cancer therapy, some viruses may be made into vaccines that help the body build an immune response to, and kill, tumor cells. [NIH]

Visceral: , from viscus a viscus) pertaining to a viscus. [EU]

Vivo: Outside of or removed from the body of a living organism. [NIH]

Warts: Benign epidermal proliferations or tumors; some are viral in origin. [NIH]

Womb: A hollow, thick-walled, muscular organ in which the impregnated ovum is developed into a child. [NIH]

X-ray: High-energy radiation used in low doses to diagnose diseases and in high doses to treat cancer. [NIH]

Yeasts: A general term for single-celled rounded fungi that reproduce by budding. Brewers' and bakers' yeasts are Saccharomyces cerevisiae; therapeutic dried yeast is dried yeast. [NIH]

Zygote: The fertilized ovum. [NIH]

INDEX


9 780497 003166