

Male Reproductive System

Male reproductive system terms

Orchid/o, test/o	Testes (male gonad) *	Orchiditis, orchidectomy, testicular artery, testosterone (male sex hormone)
Balan/o	Head of the penis	Balanitis
Andr/o	Male	Androgenic (stimulating maleness), androgynous (characteristics of male and female appearance)
Prostat/o	Prostate	Prostatitis, prostatectomy
Vas/o	Vessel, duct	Vas deferens, vasectomy (duct carrying semen from testes, cutting the duct)
-rrhaphy	To suture	Herniorrhaphy (surgical correction of inguinal hernia)

Testis* – Did you know that testis, testify, testimonial and testament all share a **common root meaning? Testis means “witness” in Latin. As the testis witnesses to manhood, you may witness to the truth at trial, proclaim your favorite brand of corn flakes or witness to your final wishes in your will. If you die without a will, **you die “intestate,” without having witnessed.**

Male Reproductive System Diseases

Hypospadias – **literally “below the fleshy spike.”** A condition in which the external urinary meatus (opening) opens anywhere below the tip of the penis rather than at the tip.

Hydrocele – a fluid filled sac partially surrounding the testis. Manifests itself as a swelling on the side of the scrotum. May cause discomfort. Can be surgically corrected. And, who would most likely be doing the surgery? A urologist!

Varicocele – **dilated and twisted veins of the testis, sort of “hemorrhoids” of the scrotum!** Manifests itself as a swelling on the side of the scrotum which may look **and feel like a “bag of worms.”** **May be surgically corrected if causing discomfort.** This condition may also cause reduced sperm count and male sterility due to sluggish blood flow elevating testicular temperature.

Cryptorchidism – **literally “hidden testicle.”** **A condition of lack of descent of one or both testes into the scrotum.** If not corrected, usually by surgery, before puberty, can lead to sterility and increased risk of testicular cancer.

Benign prostatic hypertrophy (BPH) – swelling of the prostate gland which surrounds the base of the male bladder and urethra causing difficulty urinating, dribbling, and nocturia (remember that word? See urinary system). The bane of old men! BPH becomes more common as men age.

Transurethral resection of the prostate (TURP) – the surgical cure for BPH. An instrument inserted through the penile urethra is used to partially cut away the prostate to relieve obstruction of the urinary tract.

Prostate Specific Antigen (PSA) – PSA is a marker protein for prostate cell secretions which can be detected with a lab test. A rising PSA may be an early sign of prostate cancer, although there may be other causes including false positive tests. How often should men get a PSA test? Check in with [The Prostate Cancer Foundation](#).

Male Reproductive System

Medical Record

Following is an abstract of a simulated patient's medical record. Read the record and define each term in italics. If you can't think of the meaning, hover your cursor over the word for a tip.

A 55 year old male complains of *nocturia*, three to four times a night. He also states that he has difficulty getting urination started, has a small stream, and dribbles after he finishes. Sometimes he has feelings of *urgency*. A review of organ systems reveals that his *angina*, which he treats with nitroglycerine tablets, is increasing in frequency.

A rectal exam reveals *prostatic hypertrophy* without nodules, most likely *BPH*. Patient was scheduled for an *ECG* and *coronary angiography*. A referral was made to a *urologist* for evaluation for a *TURP*.

Recent medical history: *hemoptysis* two months ago. *Bronchoscopy* was unremarkable.

Past medical history: *cholelithiasis* treated with *cholelithotripsy* at age 52. *Varicocelectomy* at age 28. *Appendectomy* at age 24.

In plain English

A 55 year old male complains of having to get up at night to urinate, three to four times a night. He also states that he has difficulty getting urination started, has a small stream, and dribbles after he finishes. Sometimes he has an urgent need to urinate. A review of organ systems reveals that his cardiac related chest pain, which he treats with nitroglycerine tablets, is increasing in frequency.

A rectal exam reveals an enlarged prostate without nodules, most likely Benign Prostatic Hypertrophy (nonlife-threatening enlargement of the prostate). Patient was scheduled for an electrocardiogram (recording of the electrical activity of the heart) and X-rays of the arteries of the heart. A referral was made to a specialist in diseases of the male reproductive system and lower urinary tract for possible transurethral resection of the prostate (partial internal removal of prostatic tissue).

Recent medical history: spitting up blood from the lungs two months ago. Passing a fiberoptic instrument into the lung passageways did not determine a cause.

Past medical history: gallstones treated with high frequency sound waves smashing stones to small particles that can pass in the stool at age 52. Removal of enlarged testicular veins at age 28. Removal of appendix at age 24.

Male Reproductive System Mythology

Greek and Roman mythology is alive and well!

Term	Description	God/godess
Hymen	Membrane surrounding entrance of vagina	Hymen – the Greek god of marriage
Aphrodisiac	A chemical purported to stimulate sexual desire	Aphrodite- The Greek goddess of love
Venereal disease	A sexually transmitted infectious disease	Venus – the Roman goddess of love
Hermaphroditism	A condition where both ovarian and testicular tissue are found in the same individual	Hermaphroditus* – the offspring of Hermes and Aphrodite who looked female but had male genitalia
Priapism	A continuous, painful erection	Priapus – the Roman god of male potency

Satyriasis

A condition of compulsive sexual desire in men.

Satyr- a woodland deity part man and part goat. Most notable for chasing nymphs.

Hermaphroditus*



Hermaphroditus

In Greek mythology, Hermaphroditus was the son of Hermes, messenger of the gods, and Aphrodite, the goddess of love. He was a handsome young man. One day while swimming in a woodland pool, one of the Naiads, nymphs of wells, springs and ponds, spied him and instantly fell in love with him. She swam out to him, embraced him professing her love. He rejected her advances. Angry at being rejected, she prayed to the gods that they never be separated again. The ancient gods had a whimsical, sometimes cruel, sense of humor and bound their bodies into one, ever inseparable. Be careful what you ask for? The curse of the answered prayer?

In classic art, Hermaphroditus is portrayed as a woman with male genitalia. True hermaphrodites exist, although they are rare, but most commonly have a male-type body with ambiguous genitalia. Internally, both ovarian and testicular tissue are present either as separate organs or an ovotestis. Related sex structures are poorly developed or absent.

Female Reproductive System

Female reproductive system terms

Hyster/o, metr/	Uterus	Hysterectomy, endometritis (inflammation of the lining of uterus)
Salping/o, - salpinx	Uterine tube	Salpingitis, hematosalpinx (blood in the uterine tube)
Colp/o	Vagina	Colporrhaphy (suturing a tear), colpoplasty (surgical reconstruction), colposcopy (viewing the interior)
Oophor/o	Ovary	Oophorectomy, oophoropexy (surgery fixation, reattachment)
Men/o	Menstruation	Menarche (first), dysmenorrhea (painful menstruation)
Mamm/o, mast/o	Breast	Mammogram, mastectomy
-pareunia, coitus	Intercourse	Dyspareunia (painful intercourse), precoital, postcoital (before and after intercourse)

Female Reproductive System Diseases

Endometriosis – a condition involving colonization of the abdominal/pelvic cavity with islands of endometrial tissue. Endometrium is the lining layer of the uterus which sloughs off with each menstruation. If endometrial tissue flushes up the uterine tube and spills into the abdomen (peritoneal cavity), the clots of endometrial tissue can attach to abdominal organs such as the bladder, rectum, intestinal loops and then cycle along with the uterus in response to monthly changes in ovarian hormones. Bleeding into the abdomen irritates the lining membrane, the peritoneum, and causes abdominal pain.

Pelvic inflammatory disease (PID) – although males have a closed abdominal cavity, the female abdominal cavity has a direct anatomical path from the outside world via the female reproductive tract. Bacteria can make their way up the vagina, through the uterus, and traverse the uterine tubes which open into the abdominal cavity. Inflammation of the lining of the abdominal cavity, the peritoneum, causes abdominal pain. Although there are many potential causes of PID, gonorrheal infection is one of them. Chronic Inflammation of the uterine tubes can occlude them resulting in infertility.

Prolapsed uterus – the uterus is almost directly above the vagina. In fact, the cervix, the neck region, of the uterus extends into the upper vagina. Ligaments hold the uterus in proper position so that it does not prolapse or herniate into the vagina. Severe prolapse can result in the uterine cervix protruding from the vaginal opening. Surgical repair is typically required to restore the uterus to its proper anatomical position.

Female Reproductive System Procedures



Obstetrician – **literally “midwife” in Latin.** A physician specializing in the diagnosis and management of pregnancy and delivering babies.

Gynecologist – a physician specializing in diseases of the female reproductive system and surgery of this area. Most physicians currently specialize in combined practice of OB/GYN.

Episiotomy – a surgical procedure cutting into the perineal area, the area between the vagina and anus in order to prevent tearing of tissues when the **baby’s head traverses the vaginal opening.**

Hysterosalpingogram – special X-rays of the uterus and uterine tubes involving passing an opaque dye backwards up through the uterus to determine if the tubes are patent. Since the tubes are open into the abdominal (peritoneal) cavity, if patent, dye should spill out of the end of the tubes and be manifest on the X-ray.

Colposcopy – using a magnifying instrument to inspect the interior of the vagina and cervix, the entrance to the uterus.

Dilation and curettage (D & C) – dilating the cervix, the entrance into the uterus, and passing instruments that enable scraping off superficial layers of the endometrium. May be done as an early therapeutic abortion, or following a normal pregnancy to remove residual tissue remaining in the uterus, or may be done as a diagnostic procedure to examine lining tissue of the uterus.

Mammoplasty – Surgical reconstruction of the breast may involve breast enlargement or reduction or cosmetic reconstruction after mastectomy. What are the risk factors of developing breast cancer? Check out this [women’s health](#) link for answers.

Pudendal block – An anesthetic administered to block sensation around the lower vagina and perineum. This facilitates performing an episiotomy (see above) **allowing passage of the baby’s head while avoiding uncontrolled tearing of tissues.** By the way, pudendal, an ancient name for external genitalia, means “that which we should be ashamed of” in Latin. Even Adam and Eve wore fig leaves!

Female Reproductive System

Terms of Pregnancy

-gravida	Pregnancy	Nulligravida (never pregnant), primigravida (first-time pregnant), multigravida (many pregnancies)
-para	Live birth	Nullipara (no live births), multipara (many live births)
Part/o, toc/o	Labor/birth/delivery	Prepartum, postpartum (before and after delivery), dystocia (difficult delivery)

EXAMPLE: On an OB patient’s chart you may see the abbreviations: gravida 3, para 2. This means three pregnancies, two live births. The OB patient, currently pregnant with her third baby, will become a Gravida 3, Para 3 after giving birth.

Complications of pregnancy

Abruptio placentae– (Latin, “breaking off”). **Premature separation of a normally implanted placenta before full term.** Occurs in only about 1% of pregnancies. However, it has a 20-40% fetal mortality rate and is a significant contributor to maternal mortality.

Placenta previa– (Latin, “leading the way”). **A placenta implanted over the cervical region of the uterus blocking the entrance to the birth canal.** Occurs in less than one percent of pregnancies, but can cause significant bleeding and require a complicated delivery.

Eclampsia (toxemia of pregnancy)- a serious and life-threatening condition that may develop during pregnancy involving hypertension, convulsions and coma. A

less severe form, preeclampsia, may develop but can be managed if identified and treated early.

Ectopic pregnancy– (**Greek, “out of place”**). **A pregnancy implanted anywhere outside of the uterus. The uterine tube (Fallopian tube) is the most common location, also called a “tubal pregnancy”. The abdominal cavity is the least common location.** Occurs in about 2% of pregnancies. When it occurs, it is a surgical emergency, because the uterine tube cannot sustain tremendous expansion like the uterus. Eventually, the uterine tube will rupture with severe, possibly fatal, hemorrhaging.

Master of Public Health – Maternal and child health is one of many career paths available to MPH graduates after completion of a program designed for working professionals. Full-time, part-time, on-campus, 100% online options are available to satisfy program requirements. The [Master of Public Health program](#) can be completed in two years full-time or three years part-time.

A dual degree option is available to eligible clinical students (D.O., D.P.M.,