



Medical terminology Lecture 5

Genitourinary system

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Genitourinary system

The **genitourinary system** or **urogenital system** is the organ system of the reproductive and urinary systems. They are grouped together because of their proximity to each other, their common embryologic origin and the use of common pathways, like urethra in male.

Term	Meaning
Anatomical and physiological terms of reproductive system	
Gonads	Organs that produce gametes (sperm and ovum). These organs are testes in male and ovaries in female.
Internal genitalia	accessory glands and ducts that connect the gonads with the outside environment.
External genitalia	all external reproductive structures.
Offspring	A person's child or children.
Fertilised egg (zygote)	In human, it is the union of the egg and sperm.
Menopause	The ceasing of menstruation.
Gametogenesis	the process in which cells undergo meiosis to form gametes.
Ovulation	The release of the mature eggs from the ovary.
Meiosis	Cell division process that forms gametes with half number of chromosomes.
Mitosis	A cell division that results in two daughter cells each having the same number and kind of chromosomes as the parent nucleus, typical of ordinary tissue growth.
Puberty	the period during which adolescents reach sexual maturity and become capable of reproduction.

Infertility	is the inability of a person, animal or plant to reproduce by natural means.
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Some disorders of reproductive system

Term	Meaning
Cryptorchidism	failure of one or both testes to move into the scrotum as the male fetus develops.
Monorchism	is the state of having only one testicle within the scrotum.
Bacterial vaginosis	It is a disease of the vagina caused by excessive growth of bacteria.
Syphilis	It is a sexually transmitted infection caused by the bacterium <i>Treponema pallidum</i> affecting the skin and mucous membrane of external genital and mouth. The signs and symptoms of syphilis vary depending on which of the four stages it presents (primary, secondary, latent, and tertiary).
Gonorrhea, or Gonorrhoea	is a sexually transmitted infection (STI) caused by the bacterium <i>Neisseria gonorrhoeae</i> . Men symptoms may have burning with urination, discharge from the penis, or testicular pain. Women symptoms may have burning with urination, vaginal discharge, vaginal bleeding between periods, or pelvic pain.
Acute prostatitis	It is a serious bacterial infection of the prostate gland.

Anatomical and physiological terms of urinary system

Term	Meaning
Urinary system	Consist of kidneys, ureters, bladder, and urethra.

Nephron	is the microscopic structural and functional unit of the kidney. It is composed of a renal corpuscle and a renal tubule. The renal corpuscle consists of a tuft of capillaries called a glomerulus and an encompassing Bowman's capsule. 80% of the urinary nephrons are almost completely contained within the cortex of the kidney.
Renal artery	The blood vessel that enters kidney before flowing into smaller arteries and then into the afferent arterioles which divided into a microscopic ball like structures of capillaries called glomeruli.
Efferent arterioles	Blood leave the glomerulus flow through these arterioles then form a second set of capillaries called peritubular capillaries that surround the tubule. Finally, renal capillaries join to form venules and small veins, conducting blood out of the kidney through the renal vein.
Bowman's capsule	The beginning part of the nephron surrounding the glomerulus.
Proximal tubule	The second part of the renal nephron after bowman's capsule.
Lope of Henle	hairpin-shaped tubular segment of the nephron divided into two limbs, a thin descending limb and an ascending limb with thin and thick segments.
Distal tubule	The last tubular part of the nephron which drains into a larger tube called collecting duct. Collecting ducts pass from the cortex through the medulla and drain into the renal pelvis.
Urgency	Feeling the need to urinate immediately.
Urinalysis	analysis of urine by physical, chemical, and

	microscopical means to test for the presence of disease, drugs, etc.
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Some disorders of urinary system

Term	Meaning
Hypokalemia	Low blood potassium.
Ketonuria	Presence of ketones in urine
Nocturia	Frequent urination at night: not to be confused with bed wetting.
Nocturnal enuresis	also called bedwetting, is involuntary urination while asleep after the age at which bladder control usually occurs.
Incontinent	Loss of self-control.
Nephrolith	Medical term of kidney stone or renal calculus.
Cysto-	Urinary system or bladder.
Bacteriuria	Bacteria in the urine.
Dysuria	Painful or difficult urination.
Anuria	Absence of urine.
Dialysis	a procedure to remove waste products from the blood of patients whose kidneys no longer function.
Hemodialysis	removal of unwanted substances from the blood by passage through a semipermeable membrane of the dialysis machine.