



# General Anatomy

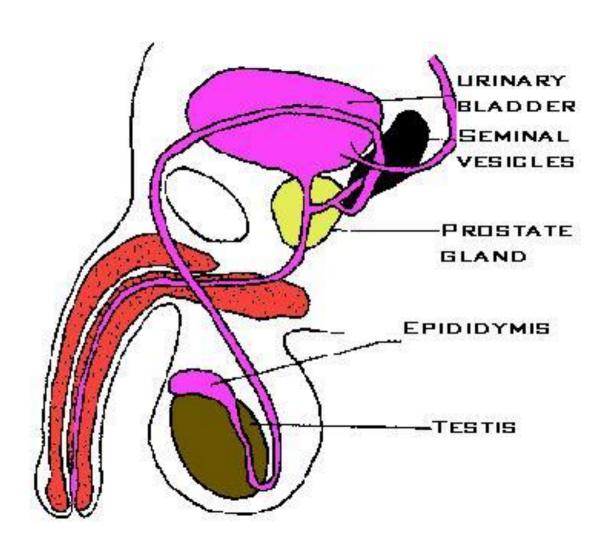
**Lecture 20: Male Genital System** 

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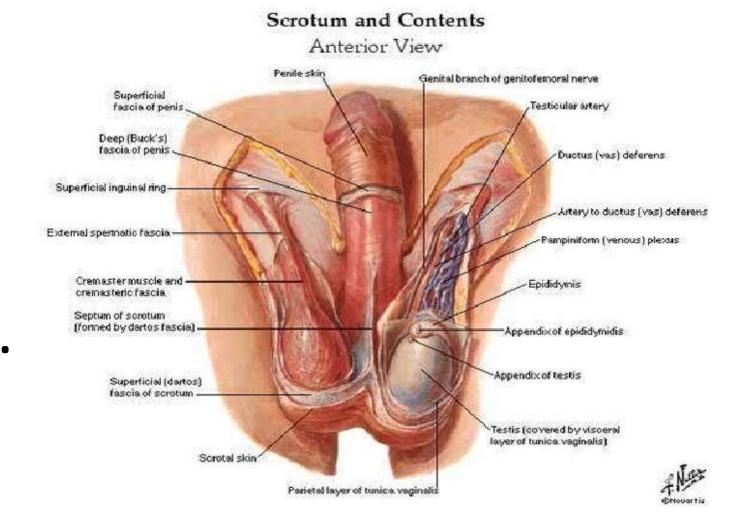
# **Male Genital System**

- 1. Scrotum.
- 2. Testes.
- 3. Intra-secretory ducts.
- 4. External genital ducts.
- 5. Penis.
- 6. Accessory genital glands: a. Seminal vesicles.
  - b. Prostate.



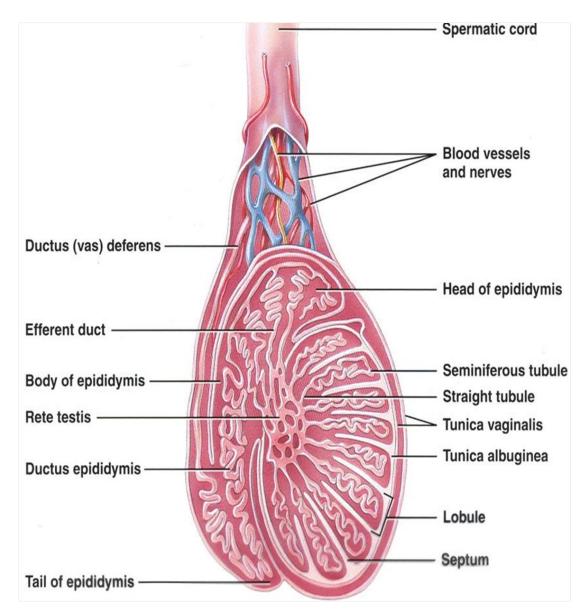
## Scrotum

- \* It is a sac which is divided by a median septum into 2 compartments
- \* It is a downward continuation of the anterior abdominal wall.
- \* Each compartment contains one testis.



### **Testes**

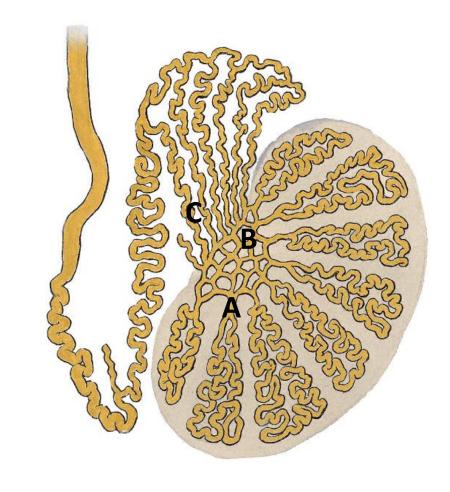
- \* These are two ovoid, firm and mobile organs that produce spermatozoa and hormones, principally testosterone hormone.
- \* Each testis is suspended within corresponding half of scrotum.
- \* The testis is surrounded by a tough fibrous capsule called the tunica albuginea.
- \* Numerous incomplete fibrous septa arise from the tunica albuginea, pass inwards through the substance of the testis, dividing it into about 250 pyramidal-shaped lobules.
- \* Each lobe is occupied by 1 3 seminiferous tubules.



### **Intratesticular Ducts**

- A. Straight tubules: Connect seminiferous tubules with rete testis.
- B. Rete testis: Is a highly anastomotic network of channels, contained within mediastinum of testis.
- C. Efferent Ducts: From rete testis extend 15 20 efferent ducts.

  These tubules carry sperm from rete testis to head of epididymis.



# **Excretory Genital Ducts**

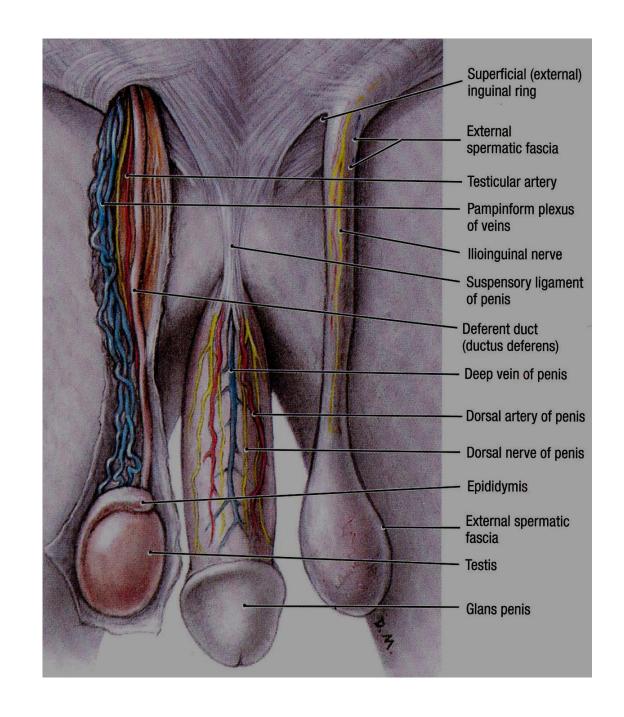
#### A. Ductus Epididymis:

- \* It is a firm coma-shaped structure, closely applied to posterior margin of testis.
- \* It has an expanded upper end, the head, a middle constricted portion, the body, and a pointed lower portion, the tail.
- \* The major function of epididymis is storage and maturation of spermatozoa; in epididymis spermatozoa develop motility.

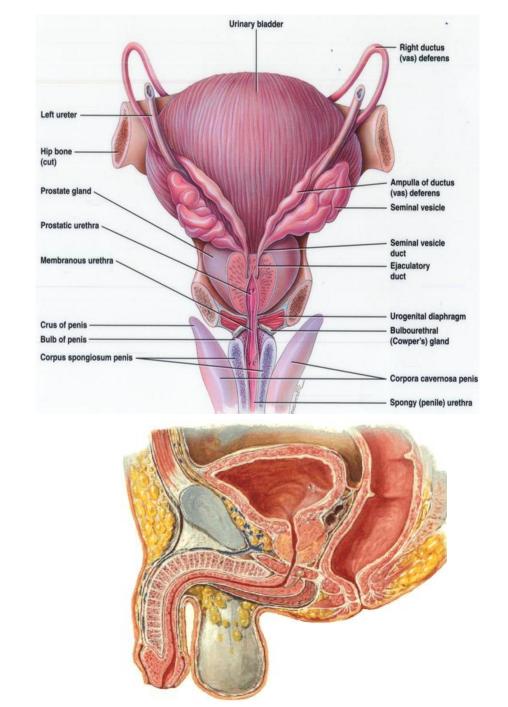


#### **B. Vas Deferens:**

- \* It is a cordlike structure.
- \* It is about 45 cm long that conveys mature sperm from epididymis to ejaculatory duct.
- \* It merges from tail of epididymis and ascends in the spermatic cord and traverses the inguinal canal to enter the pelvis.

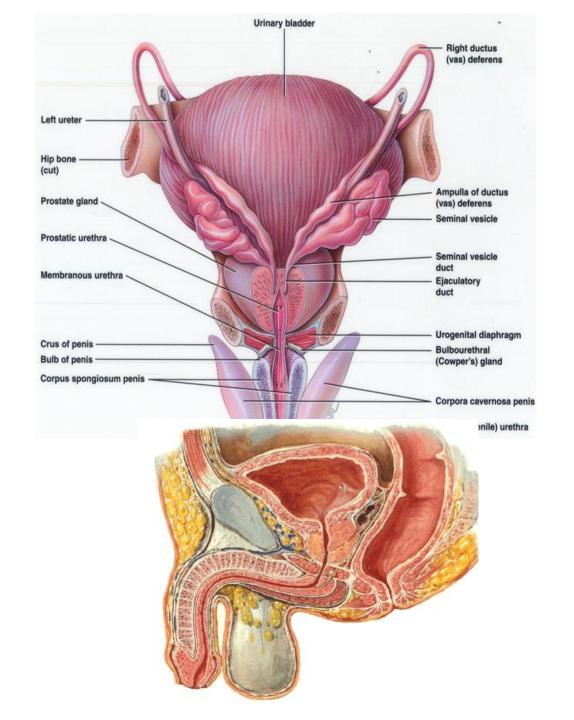


- \* It leaves the canal and descends to the pelvis, where it continues downwards along the lateral wall of the pelvis.
- \* It then passes between posterior surface of bladder and rectum, along medial side of corresponding seminal vesicle.
- \* Its terminal part is dilated and is called the ampulla of vas deferens.
- \* The inferior end of ampulla joins duct of seminal vesicle to form ejaculatory duct.



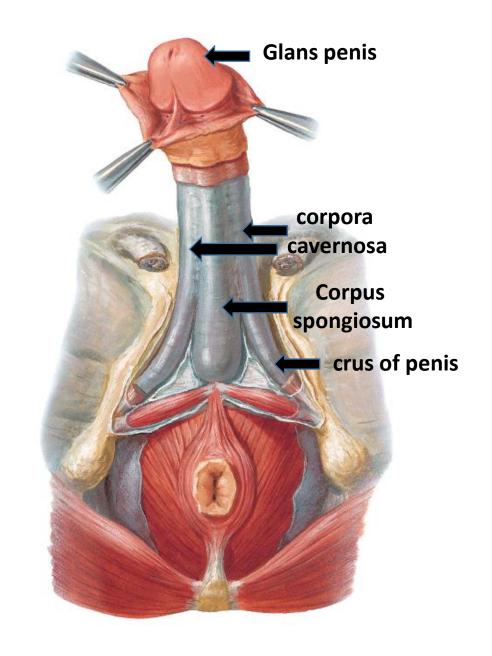
#### C. Ejaculatory Ducts:

- \* Each is about 2.5 cms long and is formed by the union of the terminal end of the vas deferens with the duct of the seminal vesicle.
- \* Each pierces the posterior surface of the prostate and opens into the upper part of the prostatic urethra.

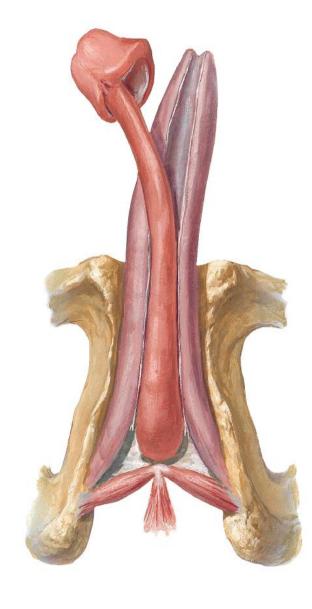


### **Penis**

- \* It is composed of three cylindrical column of erectile cavernous tissue: the paired corpora cavernosa dorsally and the single corpus spongiosum in the middle, ventral to them.
- \* The three cylindrical masses of erectile tissue are enclosed within, and separated by a dense connective tissue called the tunica albuginea.
- \* The corpus spongiosum contains penile urethra.
- \* The corpora cavernosa are close to each other except proximally where they diverge to form crura of penis.



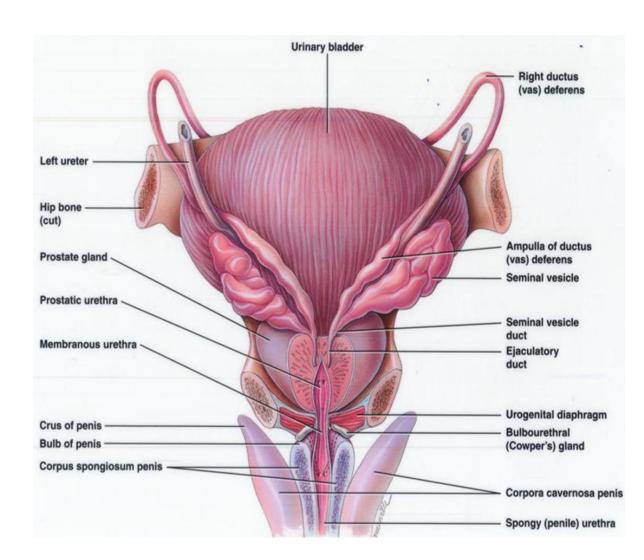
- \*\* The penis has the following parts:
- 1. The root: which is the proximal fixed part.
- 2. The body: which is the main free part.
- \* The corpora cavernosa form greater part of body and are placed in dorsal part. Proximally, each is continuous with the corresponding crus of penis.
- \* The corpus spongiosum lies in the middle ventral to the corpora cavernosa. Proximally, it is continuous with bulb of penis.
- 3. The glans penis: which is the terminal part of the corpus spongiosum.
- \*\* The penile urethra traverses bulb of penis and corpus spongiosum and opens on tip of glans penis forming external urethral meatus



# **Accessory Genital Glands**

#### A. Seminal Vesicles:

- \* The seminal vesicles are two symmetrical lobulated organs that lie at the back of the urinary bladder.
- \* The inferior end of each seminal vesicle joins the vas deferens of the same side to form the ejaculatory duct.
- \* The seminal vesicles secrete up to 85% of total volume of seminal fluid, most of rest being secreted by prostate.



#### **B. Prostate:**

- \* It is a walnut size gland that surrounds prostatic part of urethra.
- \* It is conical in shape, having an apex, a base, and four surfaces: anterior, posterior, and two inferolateral.
- \* Its posterior surface is related to rectum.
- \* At the upper border of this surface, the two ejaculatory ducts enter the prostate.
- \* The base of the gland is related to the neck of the bladder and is perforated near its center by the urethra. The urethra traverses the gland from base to apex.

