



Lecture: 20

Done By: Elaf Sameer



الجامعة الهاشمية
The Hashemite University



اللَّهُمَّ صَلِّ وَسَلِّمْ عَلَى مُحَمَّدٍ

General Anatomy

Lecture 20: Male Genital System

**Dr. Mohamed Fathi
Elrefai**

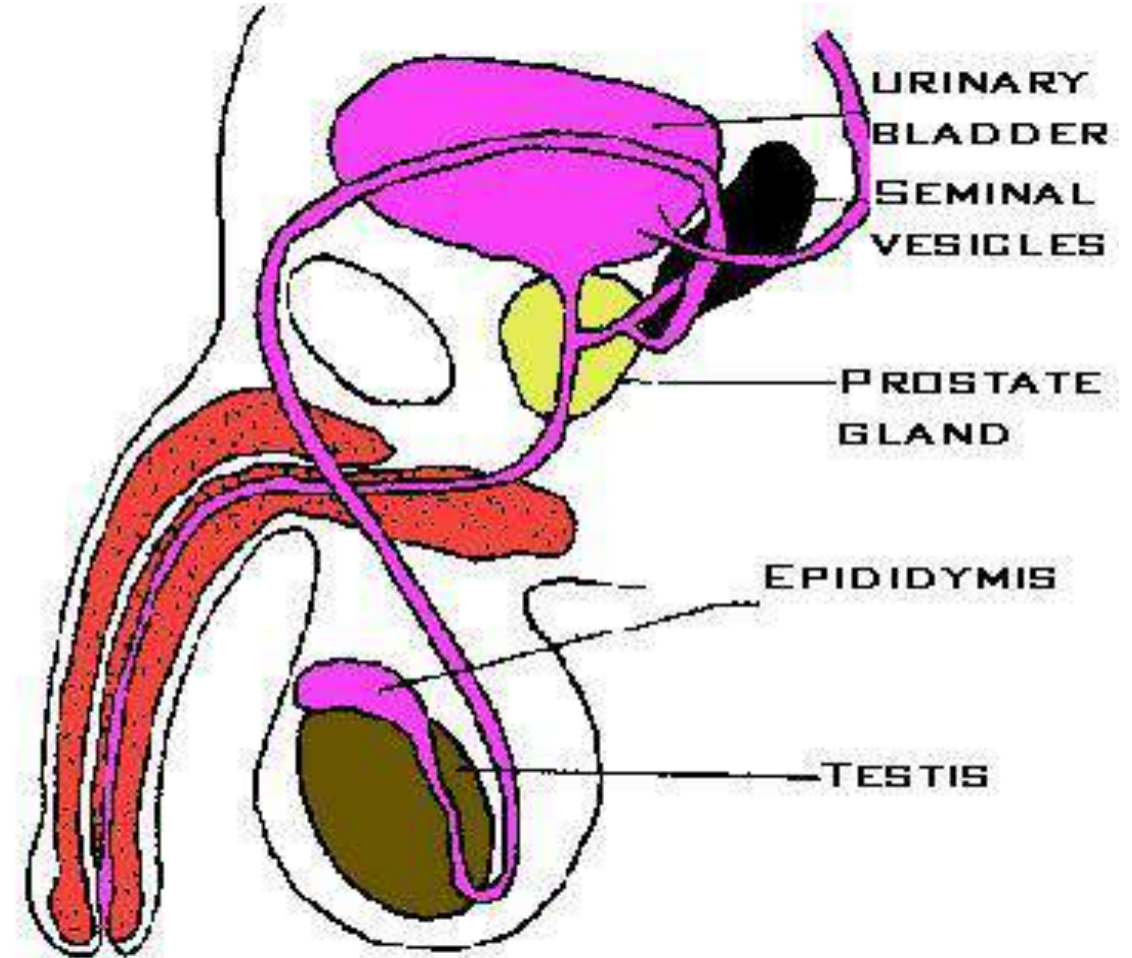
Ass. Professor of Anatomy & Embryology
mohamed@hu.edu.jo

Male Genital System



الدقيقة 22 من الريكورد 20 مهمة
جمع فيها الدكتور معلومات المحاضرة كلها بخمس دقائق

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



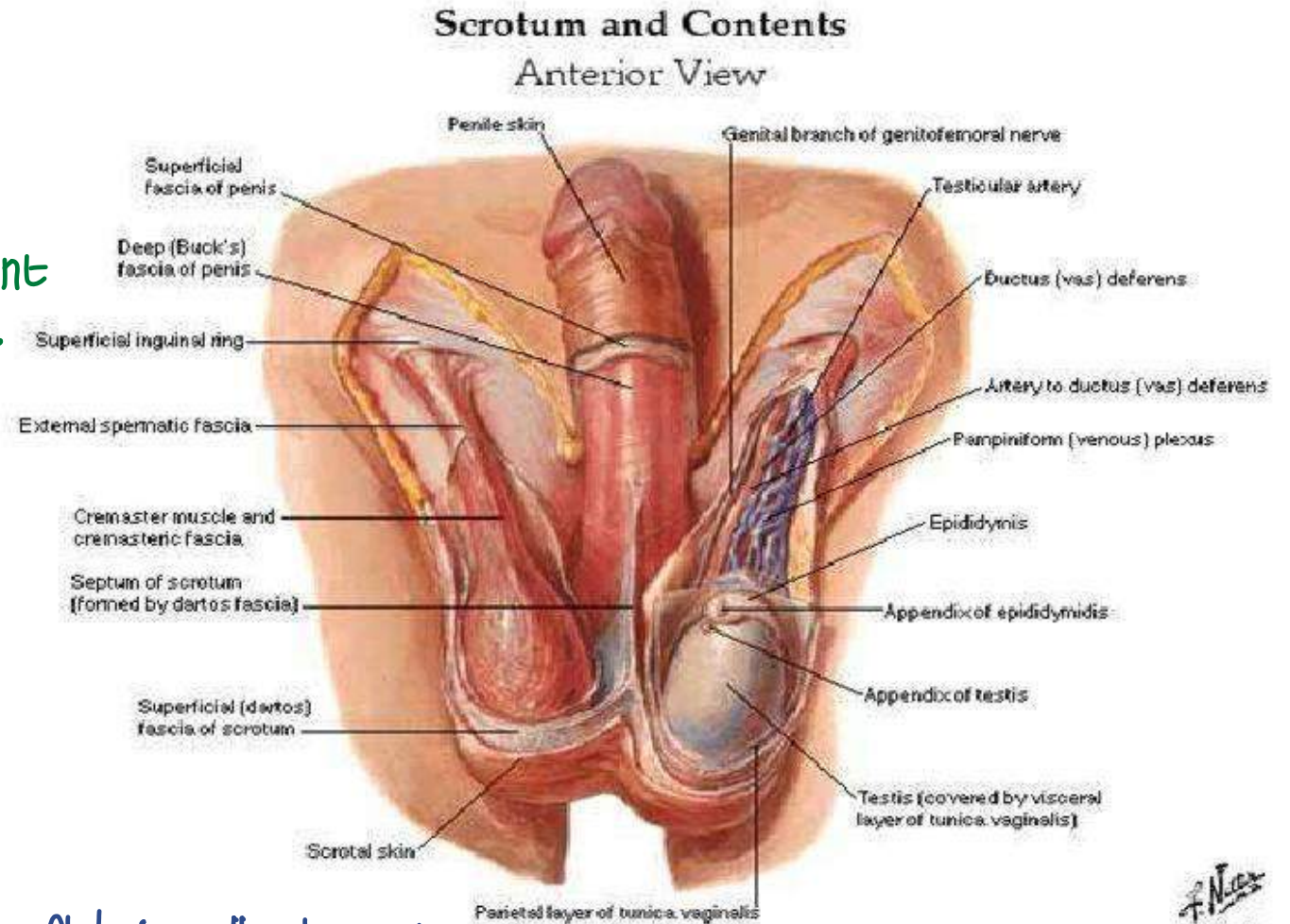
Scrotum

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* It is a sac which is divided by a median septum into 2 compartments → each compartment contains 1 testis.

* It is a downward continuation of the anterior abdominal wall.

* Each compartment contains one testis.



كيس خارج ال Abdomin ، ينتج sperm ، لأنه
انتاجها يحتاج إلى درجة حرارة أقل من الحرارة الداخلية بـ (2-3) درجة. حدود 34° .

Testes → Endocrine gland

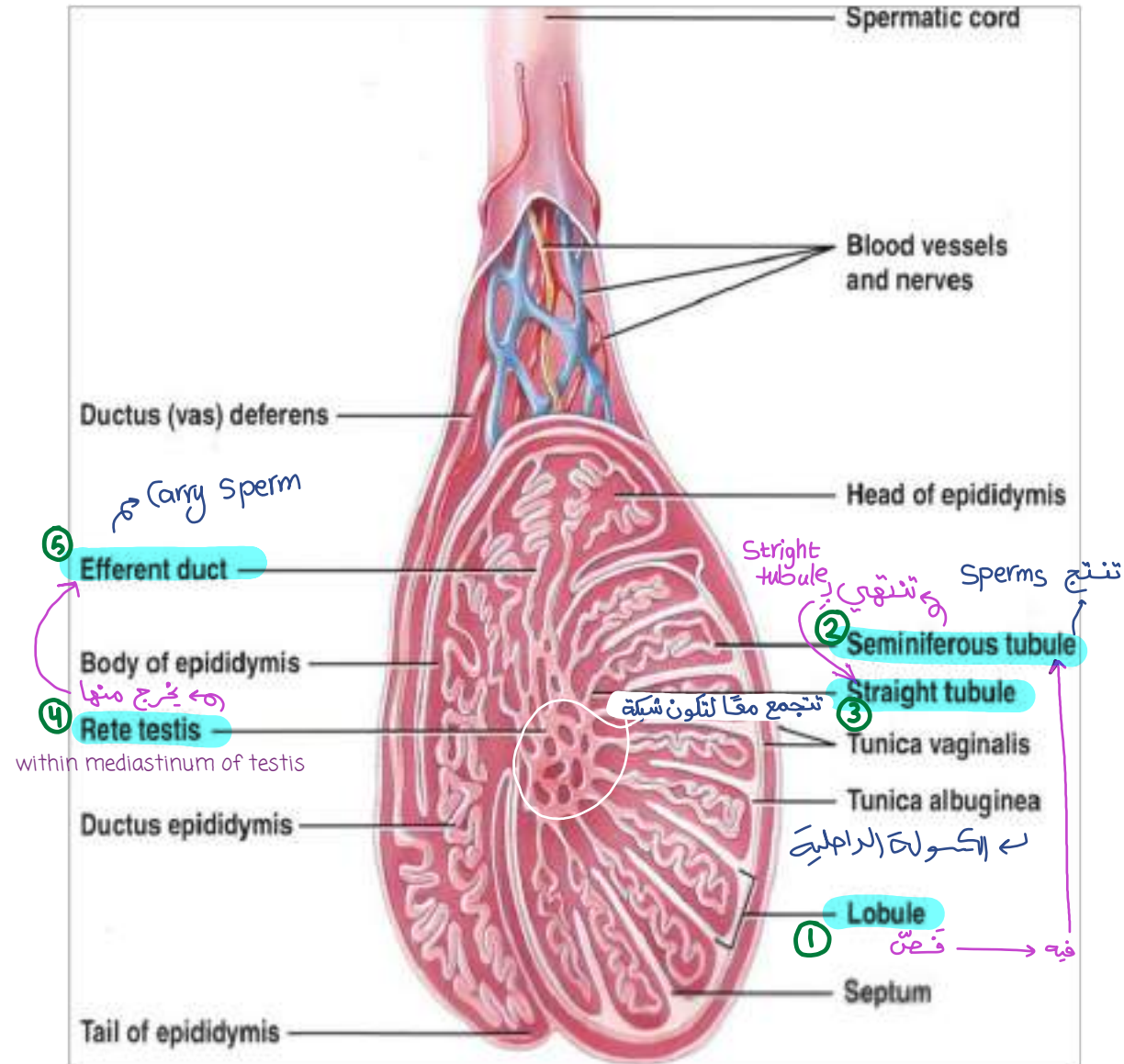
* These are two ovoid, firm and mobile organs that produce spermatozoa and hormones, principally testosterone hormone.

* 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.



Intratestitial Ducts

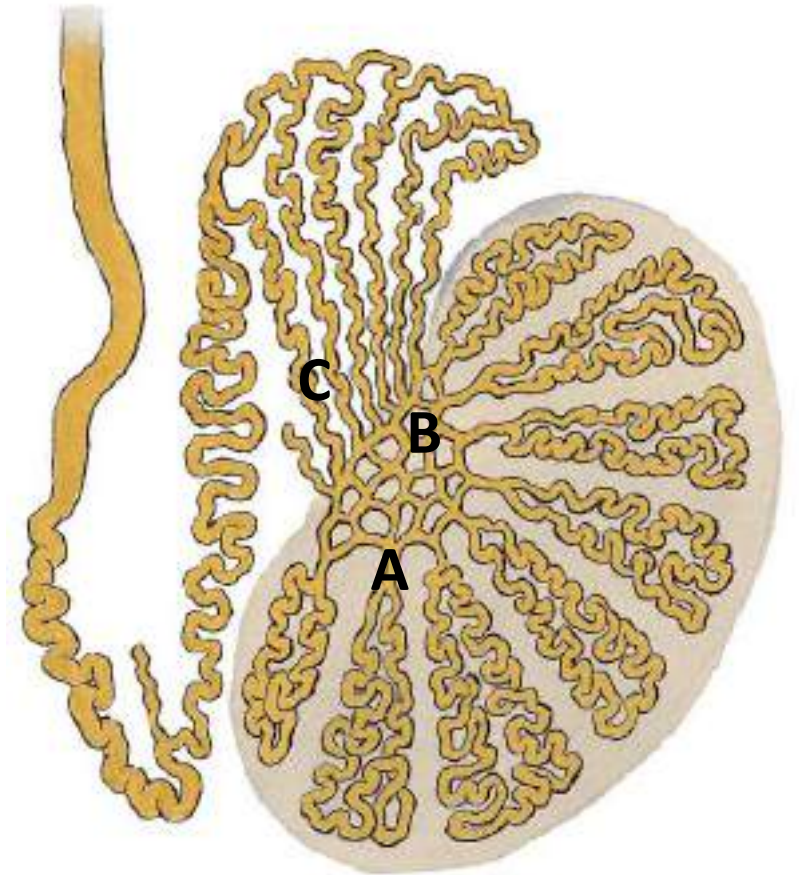
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A. Straight tubules: Connect seminiferous tubules with rete testis.

ترتیب

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.



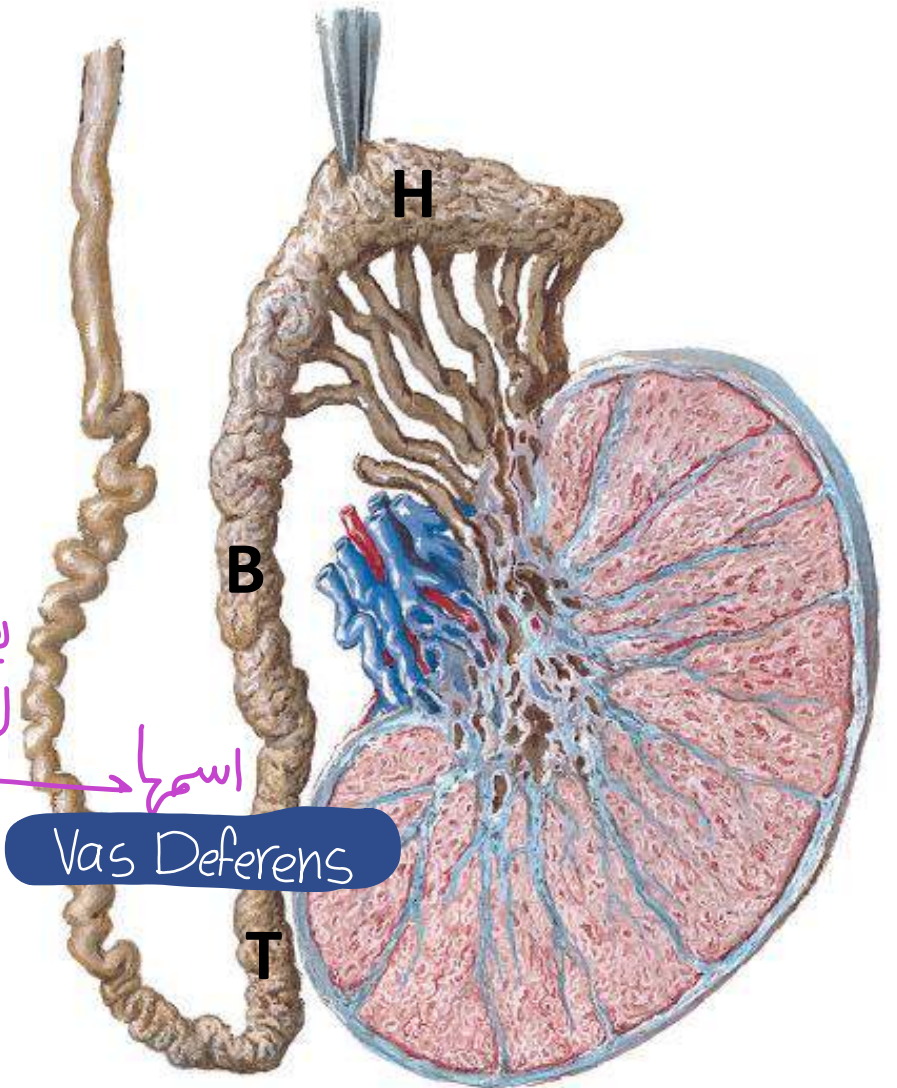
Excretory Genital Ducts

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.** → duct يععمل sperm يخرج

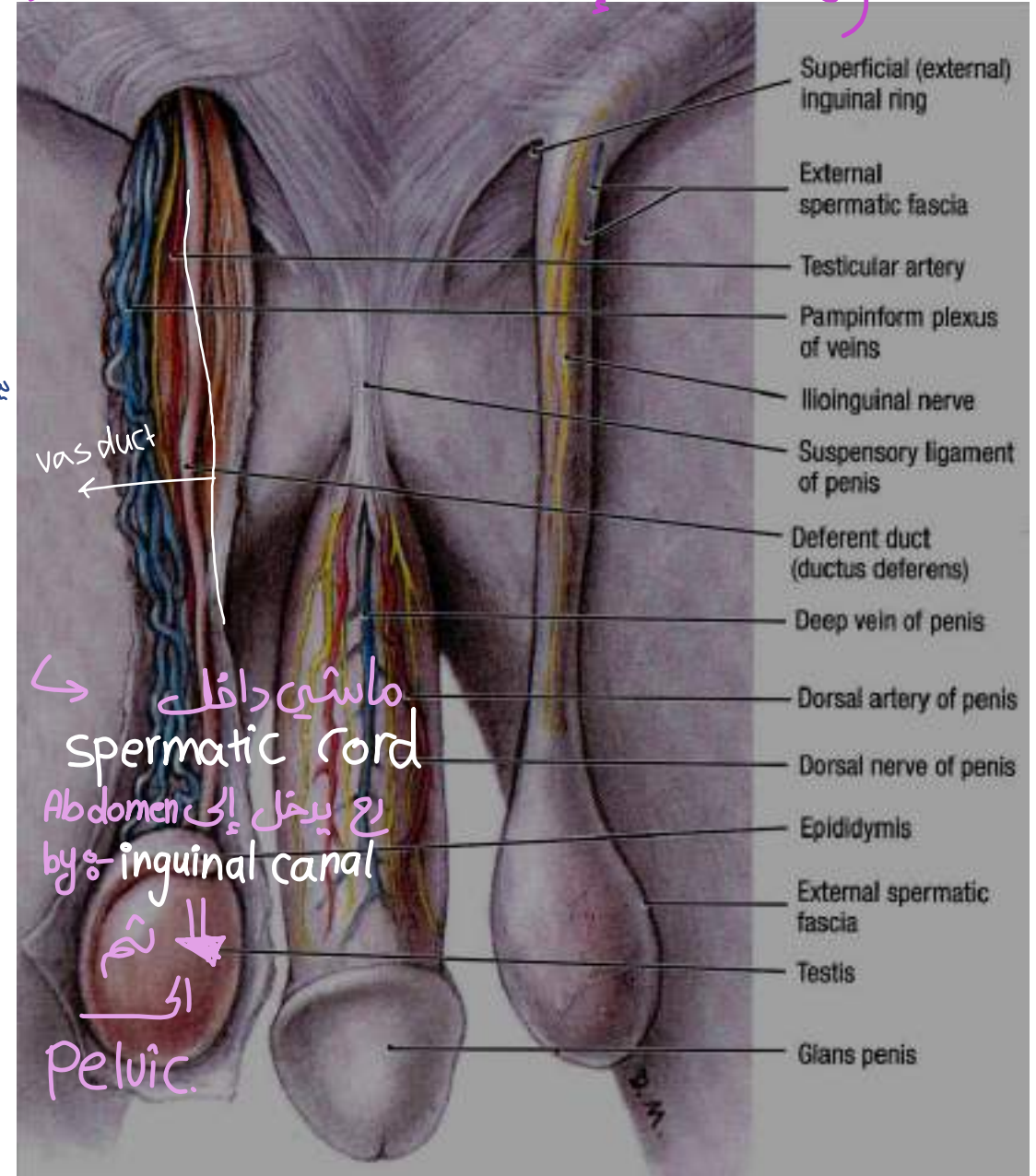
* The major function of epididymis is **storage and maturation of spermatozoa**; in epididymis spermatozoa **develop motility.**



تدخل إلى Abdomen ، ثم يخرج إلى pelvis

B. Vas Deferens:

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



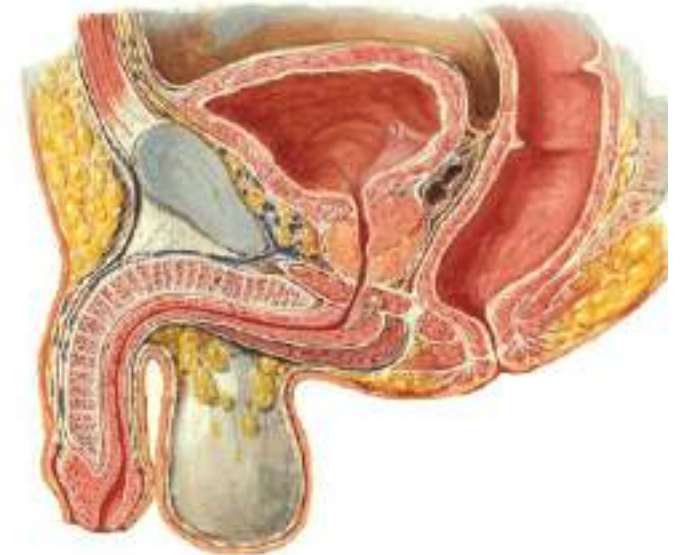
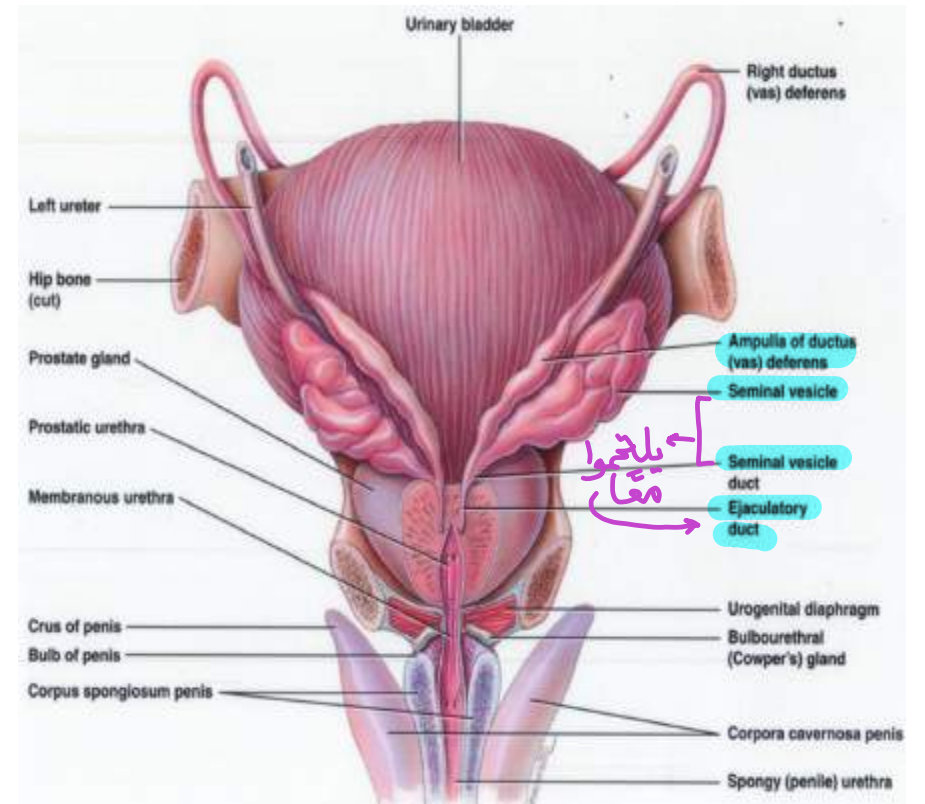
* It leaves the canal and descends to the pelvis, where it continues downwards along the lateral wall of the pelvis.

* 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**.

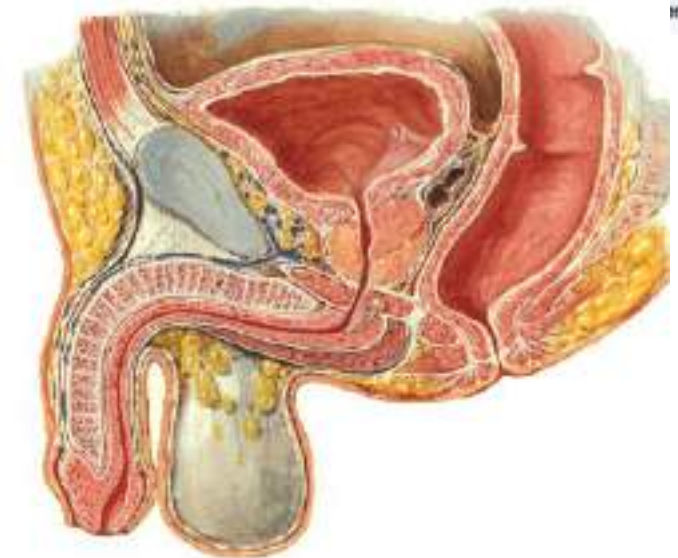
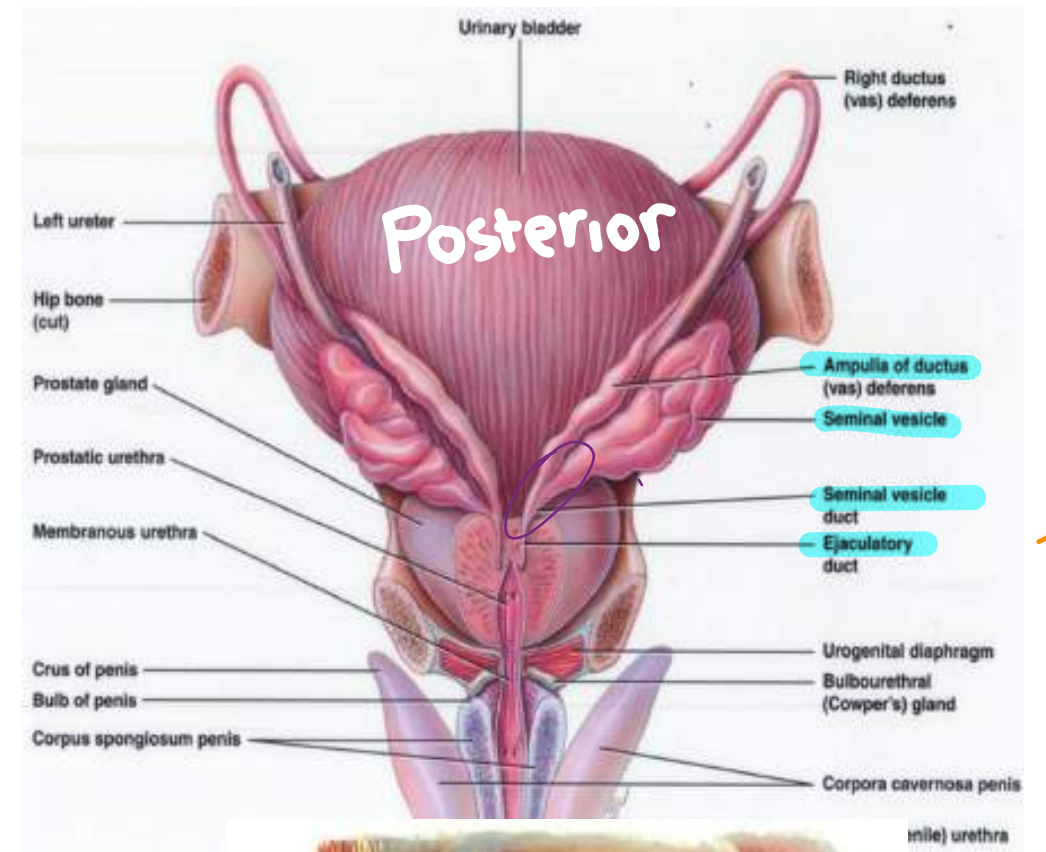
← سؤالهاة - ← تقذف Sperm ← ejaculatory duct ← مَعْمُولٌ إِزَائِيٌّ؟ ت ← الانتفاح



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**.



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Seminal vesical ^{تعمل} → Seminal fluid
← يغذي السperms

Testes → produce (Sperms) → Vas deferens ^{تعمله}

هايتين القناتين
ejaculatory duct + يفتحوان في → open in: prostatic urethra



مخرج إلى خارج الجسم

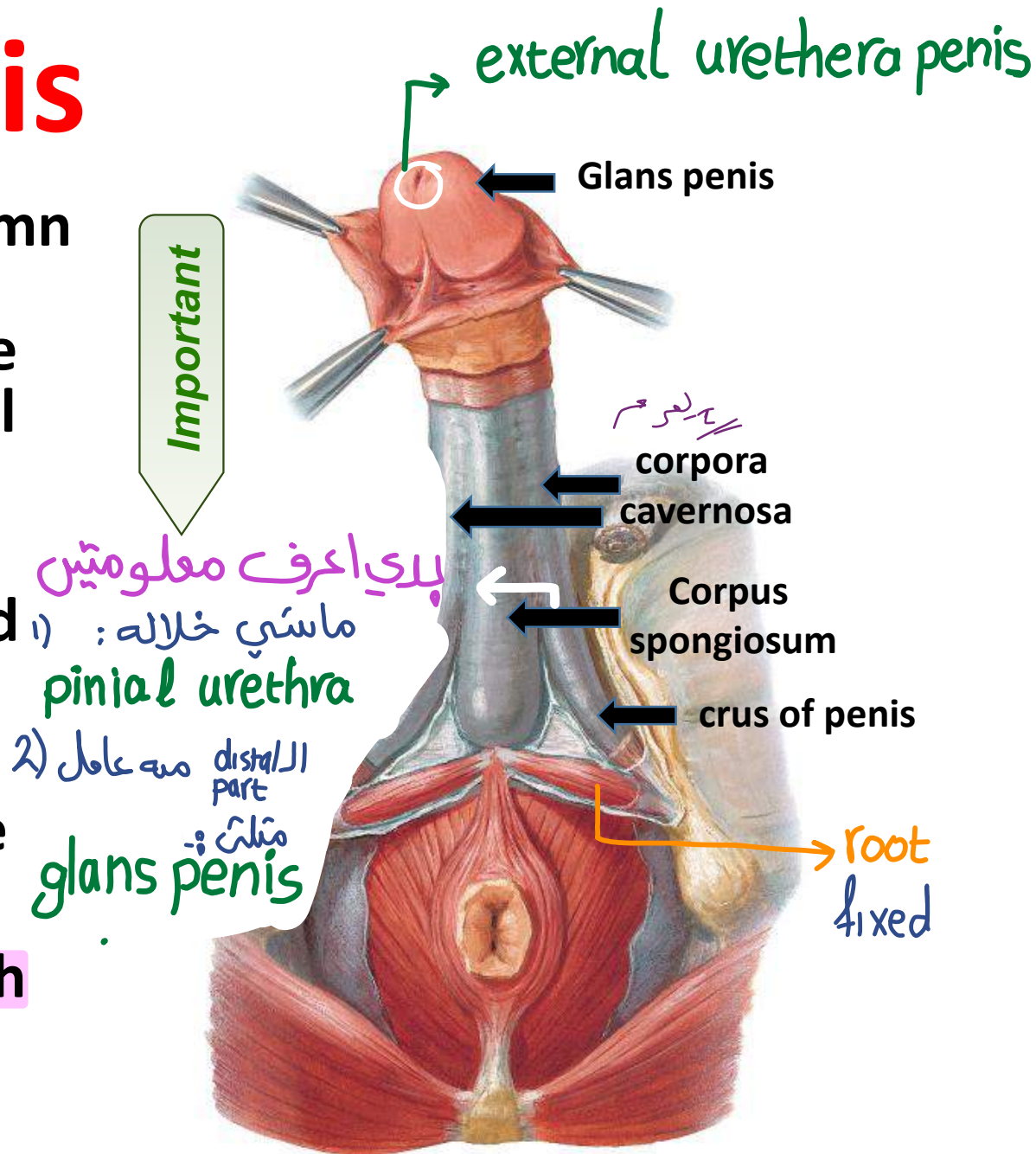
Penis

* 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.

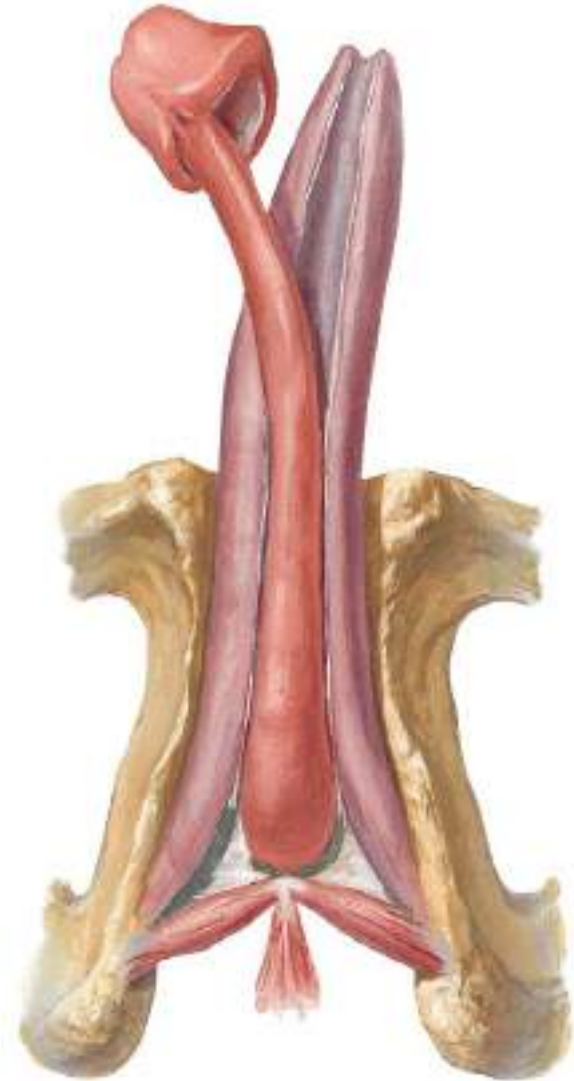
2. The body: which is the main free part.

* 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

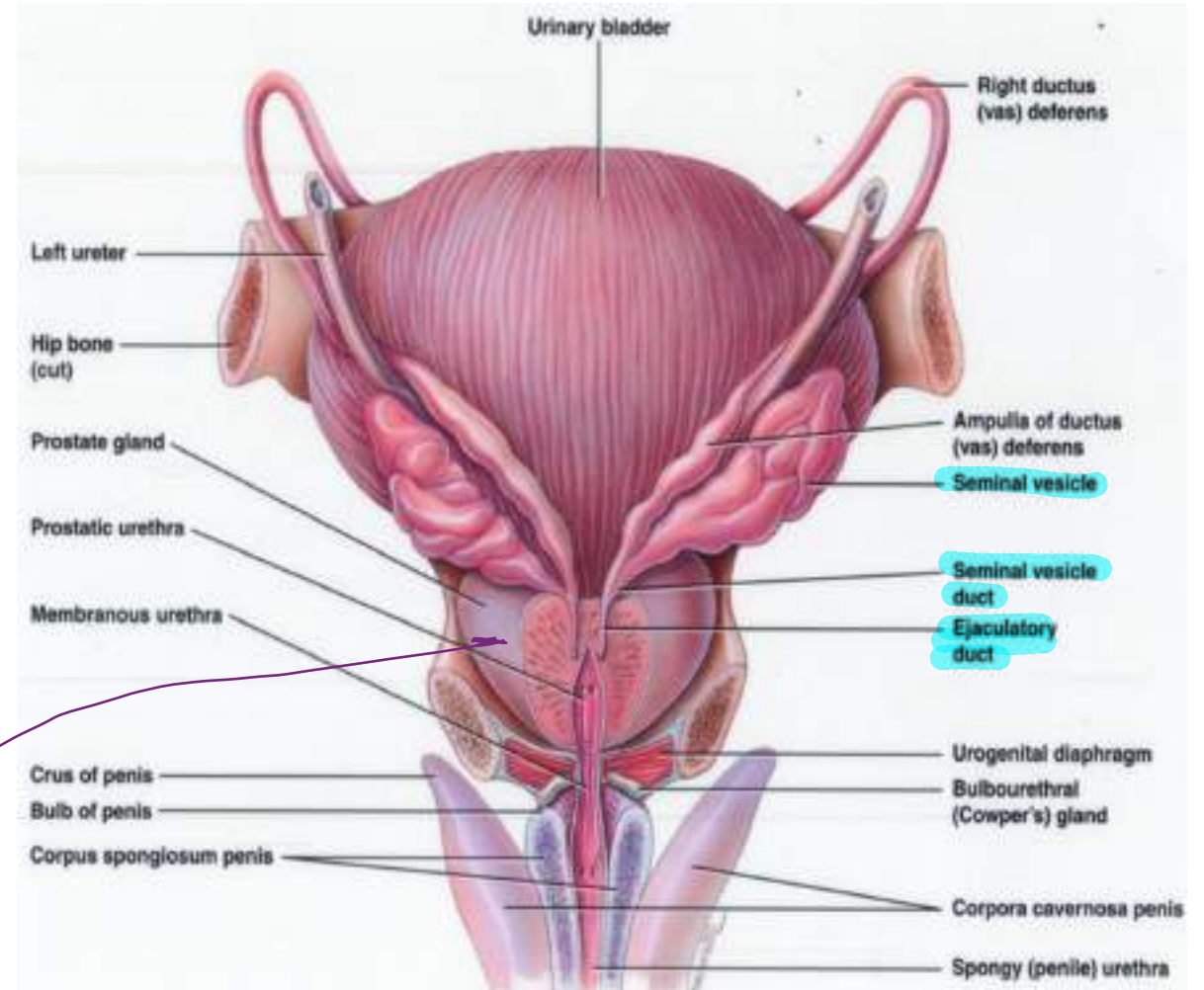
A. Seminal Vesicles:

* 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.

الذي يقضي
sperm



B. Prostate: مثل حبة الجوز

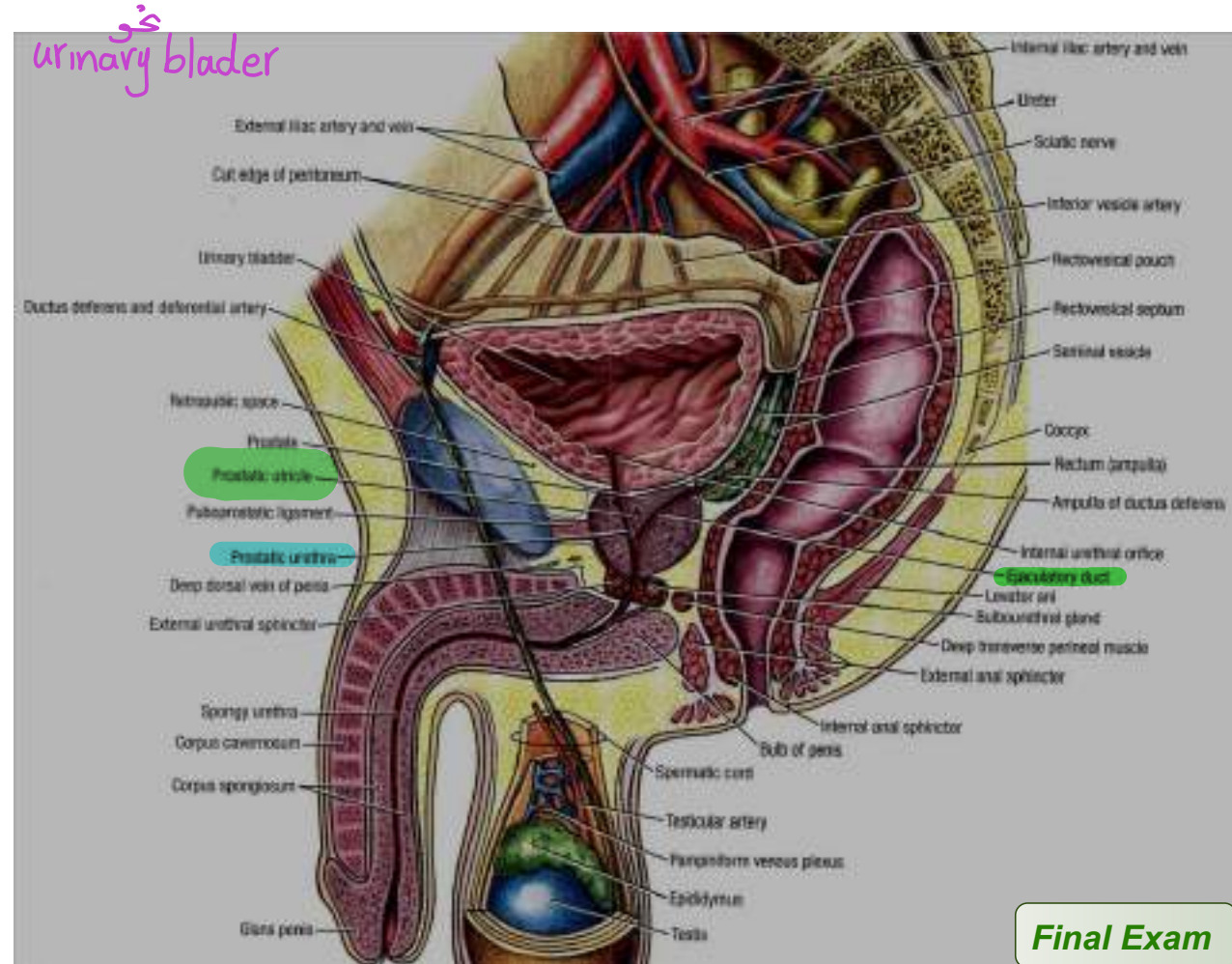
* It is a **walnut size gland** that surrounds prostatic part of urethra.

* 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.



أهم معلومة لازم نعرفها: شوهي الstructures التي تفتح في prostate ?

2 ejaculatory ducts

prostatic urethra



سُبْحَانَكَ يَا رَبُّ الْعَالَمِينَ

موسم
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