

The Spermatic cord

★ Definition:

- It is a cord like structure which extends from the internal inguinal ring to the posterior border of the testis .

★ Contents:

1. Three arteries:

- Testicular artery (branch of abdominal aorta).
- Artery of the vas deferens (branch of the inferior vesical artery).
- Cremasteric artery (branch of the inferior epigastric artery).

2. Three nerves:

- Cremasteric nerve (genital branch of genitofemoral nerve , L1).
- Ilioinguinal nerve (L1).
- Testiculat sympathetic plexus (T₁₀ segment).

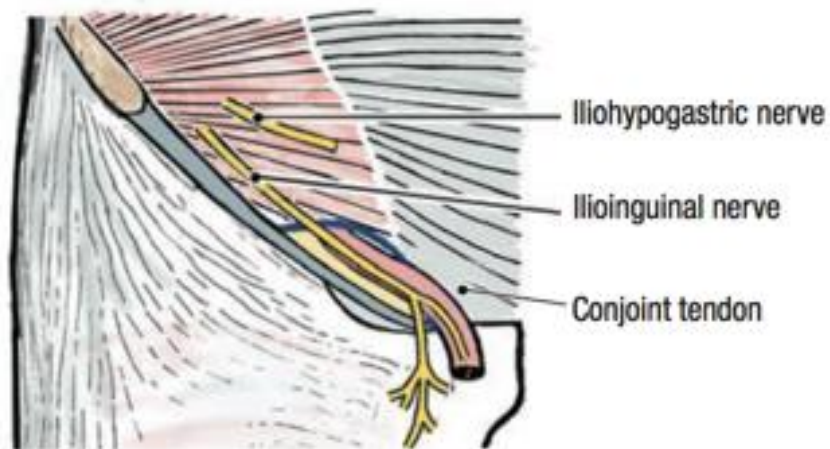
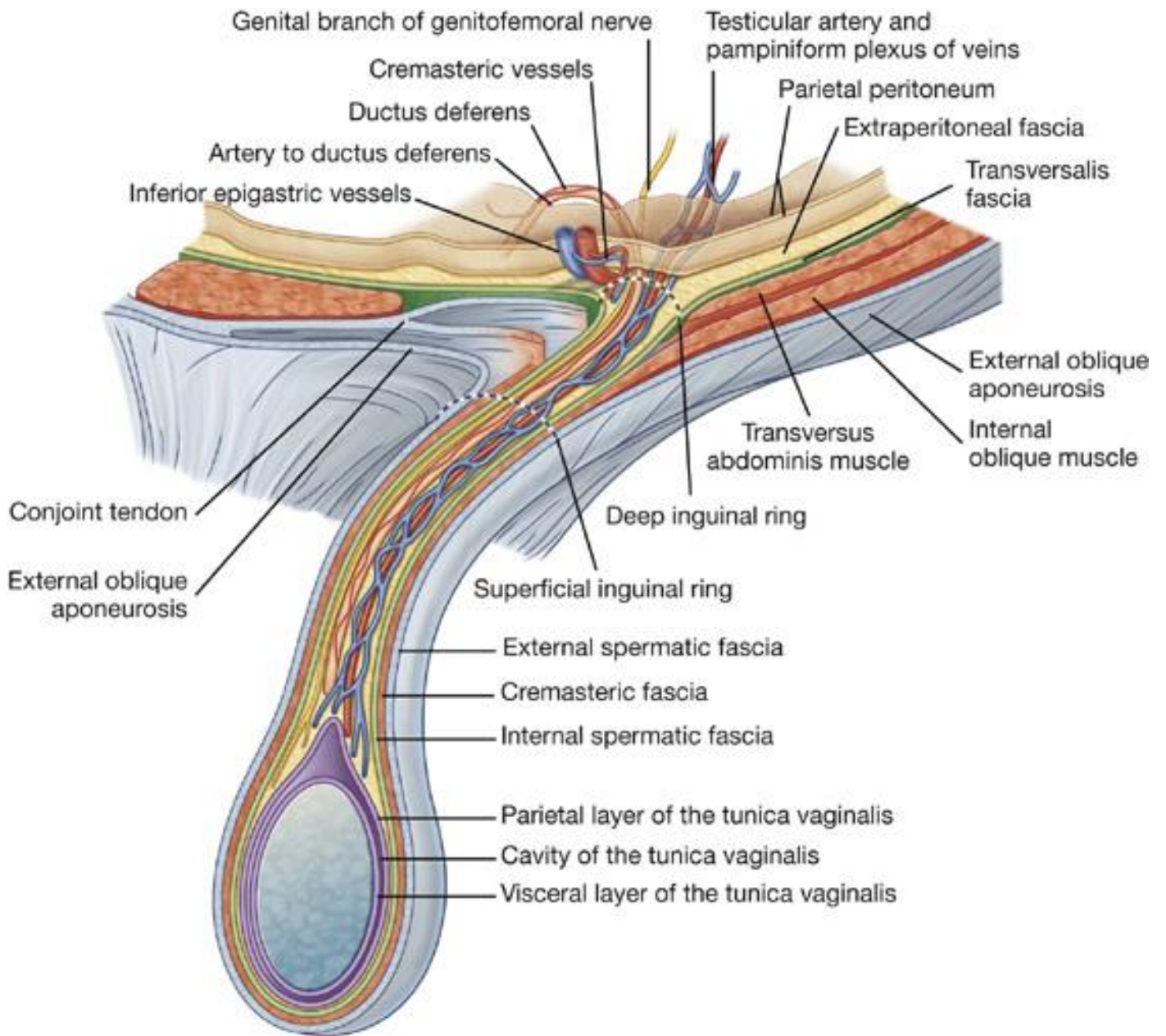
3. Three structures:

- Vas deferens
- Pampiniform plexus of veins.
- Lymphatics which drain the testis.

4. Vestigial of the processus vaginalis.

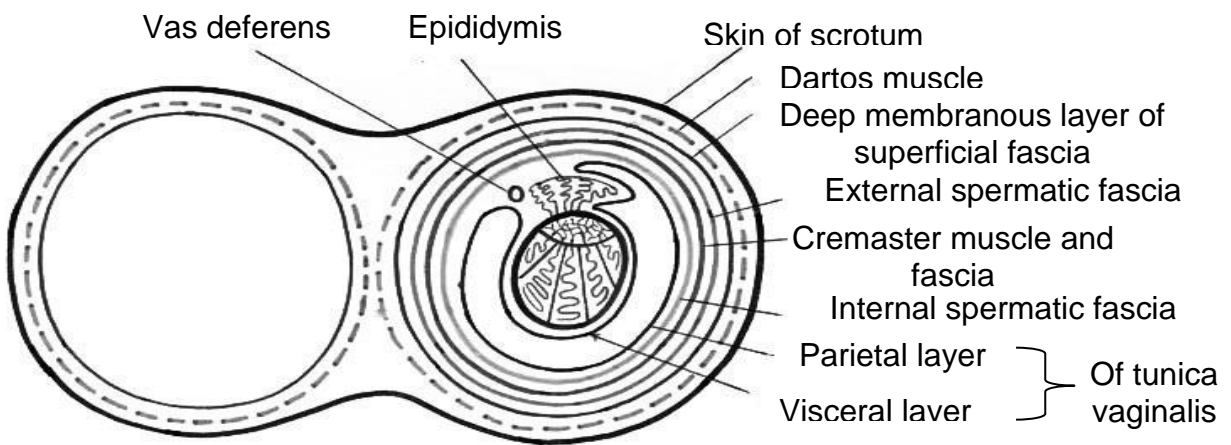
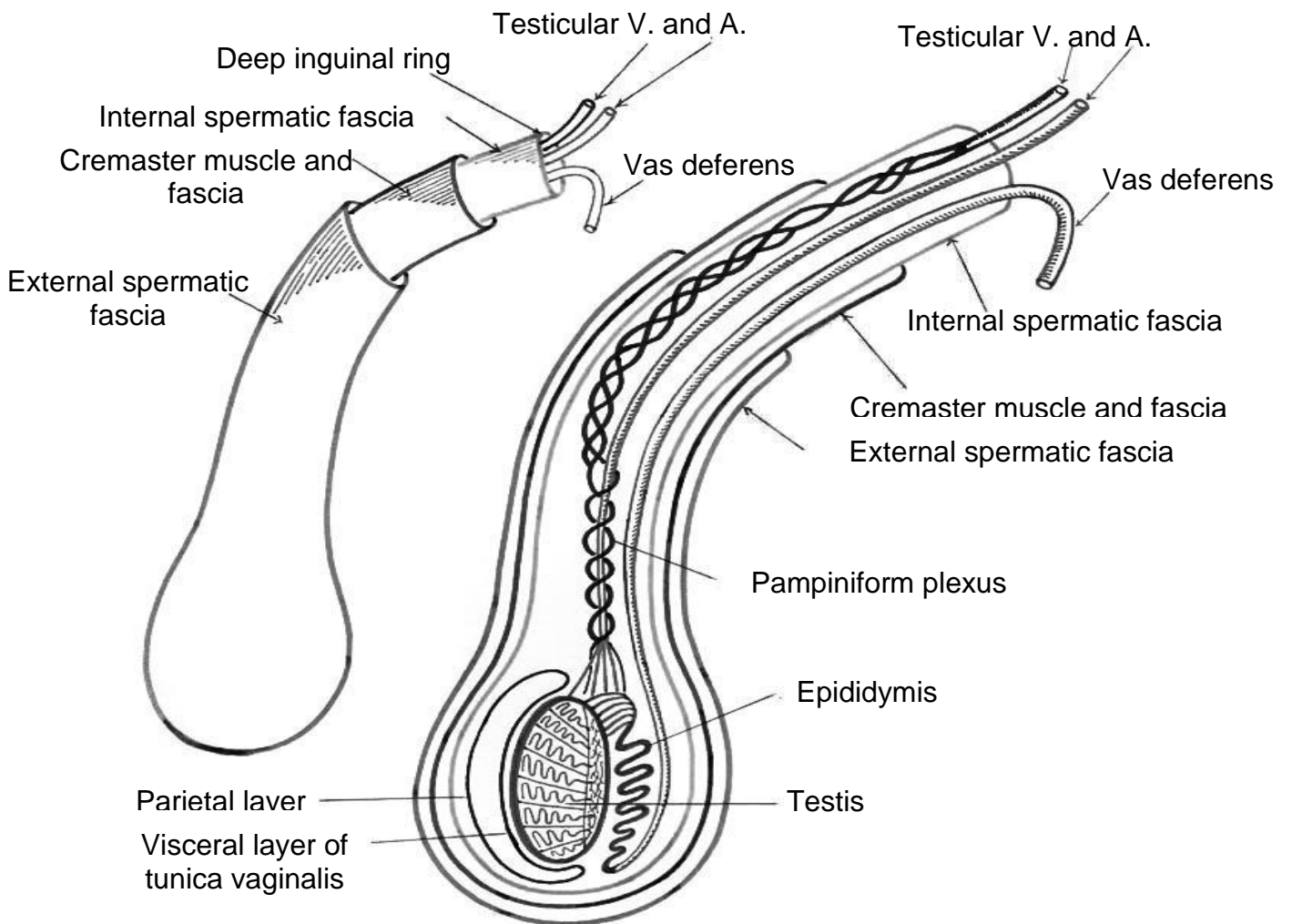
★ Coverings of the spermatic cord: Three layers:

1. **Internal spermatic fascia** which is derived from the **fascia transversalis** at the deep inguinal ring. It is the inner layer.
2. **Cremasteric fascia and muscle** which arise from the **internal oblique** muscle and form the middle layer.
3. **External spermatic fascia**, which starts at the superficial inguinal ring as an extension from the external oblique aponeurosis. It is the outer layer.



B Internal oblique m.

*** Spermatic cord ***



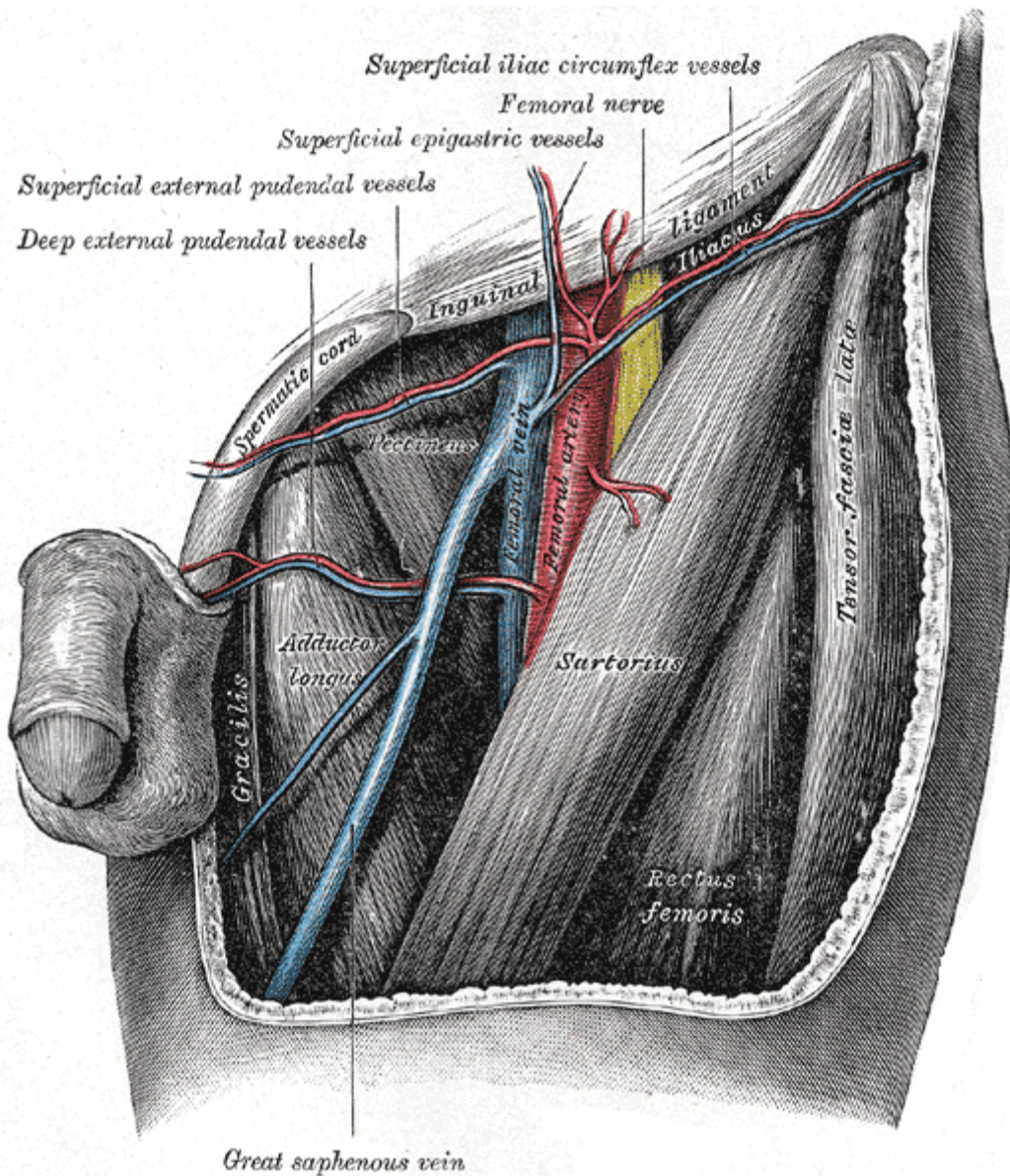
*** Section of scrotum showing its wall and layers ***

★ **Relations:**

I. In the inguinal canal: ilioinguinal nerve is anterior then inferior to the cord .

II. Just below the inguinal canal:

- a) *Anteriorly:* superficial external pudendal vessels.
- b) *Posteriorly:*
 - Deep external pudendal vessels.
 - Tendon of adductor longus.



★ **Applied anatomy :**

- 1- **Normally** the spermatic cord can be **felt** in the neck of the scrotum and the vas deferens is detected inside it as tube like structure .
- 2- **Torsion of spermatic cord** just above the upper pole of testis is a surgical emergency due to occlusion of blood vessels inside the cord → rapid gangrene of the testis .
- 3- **Oblique inguinal hernia** descend inside the coverings of the spermatic cord .
- 4- **Hydrocele** may occur in the spermatic cord due to persistent patency of the central part of tunica vaginalis .

