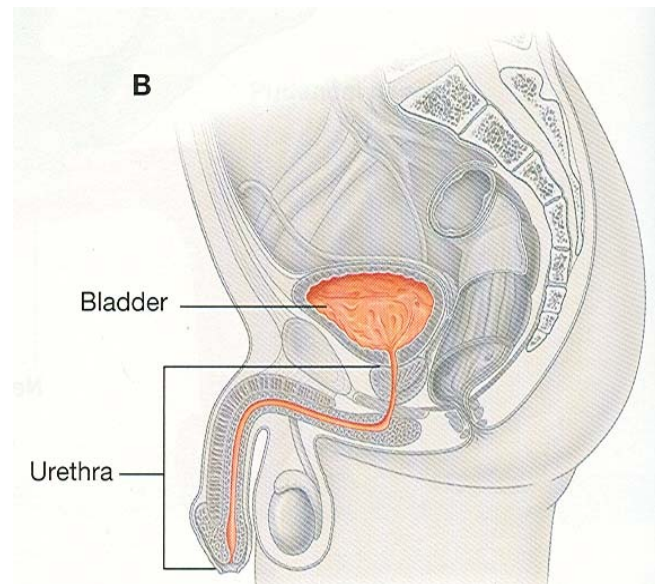


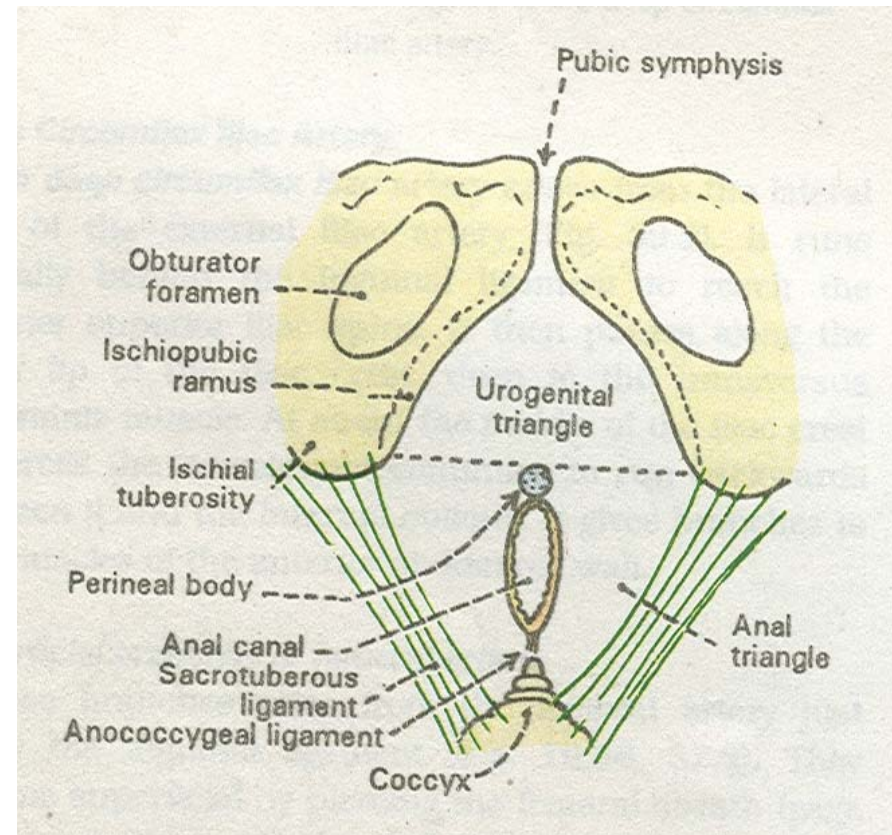
# Perineum

Rhomboid space at the lower end of abdomen which lies between two thigh



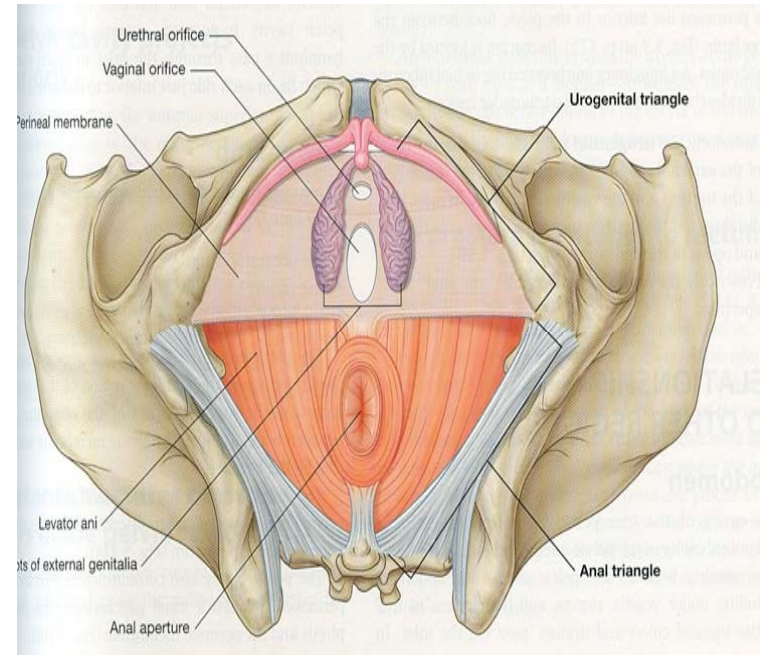
# Boundaries

- Anteriorly bounded by pubic arch and Arcuate pubic ligament
- Posteriorly the tip of coccyx
- On each side ischiopubic rami, ischial tuberosity & sacrotuberous ligament



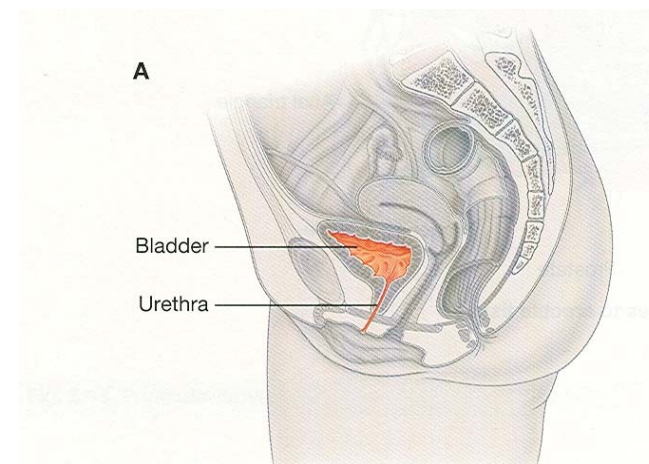
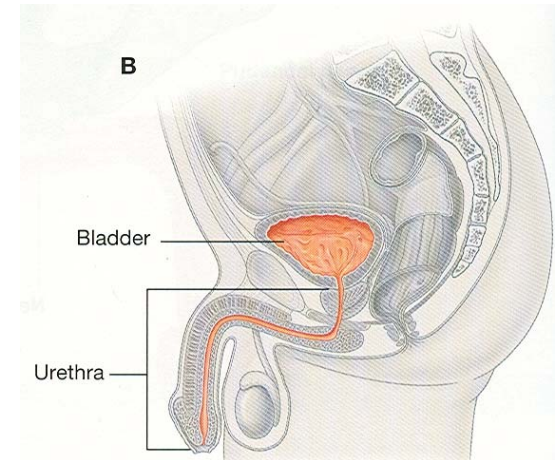
# Division

- Divided into two regions by a line joining the anterior part of ischial tuberosity
- Urogenital region
- Anal region



# Urogenital region

- Placed between two ischiopubic rami
- In male contains urethra enclosed by root of penis, scrotum
- In females contains urethral and vaginal orifice & female external genitalia
- Three membranes
- Two spaces



# Three membranes Two spaces

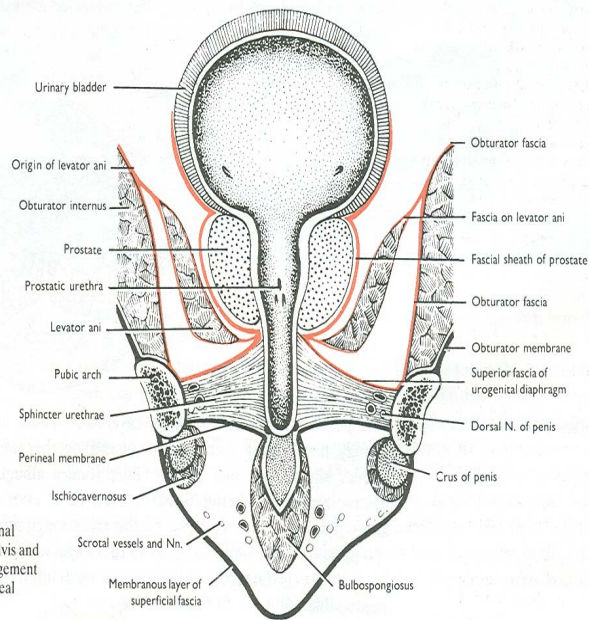


Fig. 223. A schematic coronal section through the male pelvis and perineum to show the arrangement of the pelvic (red) and perineal (black) fasciae.

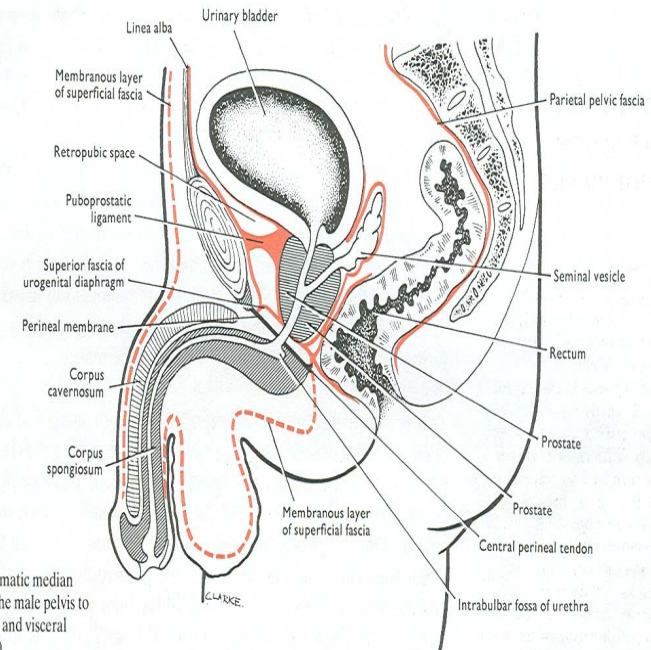
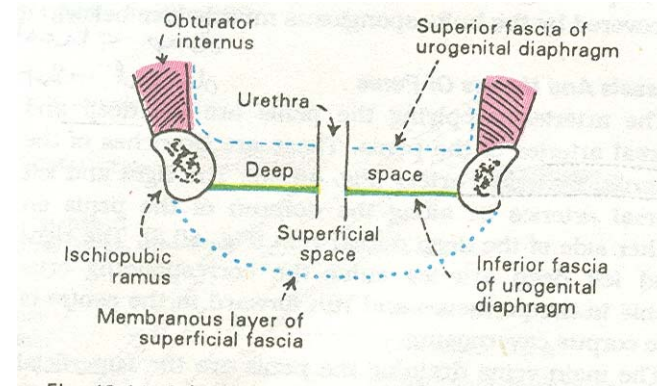
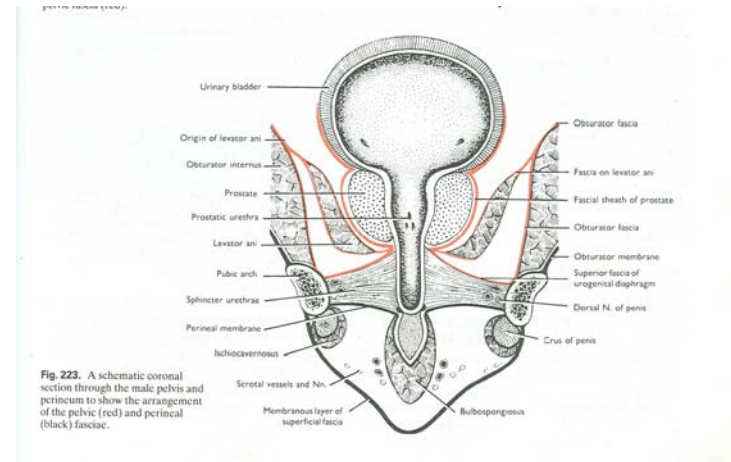


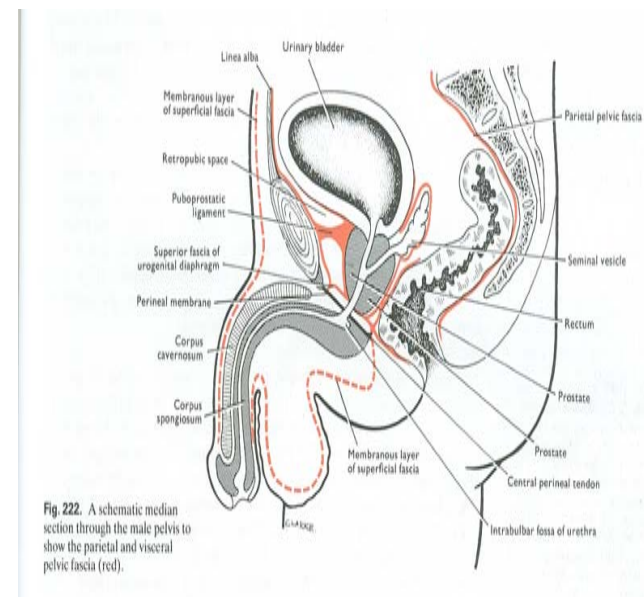
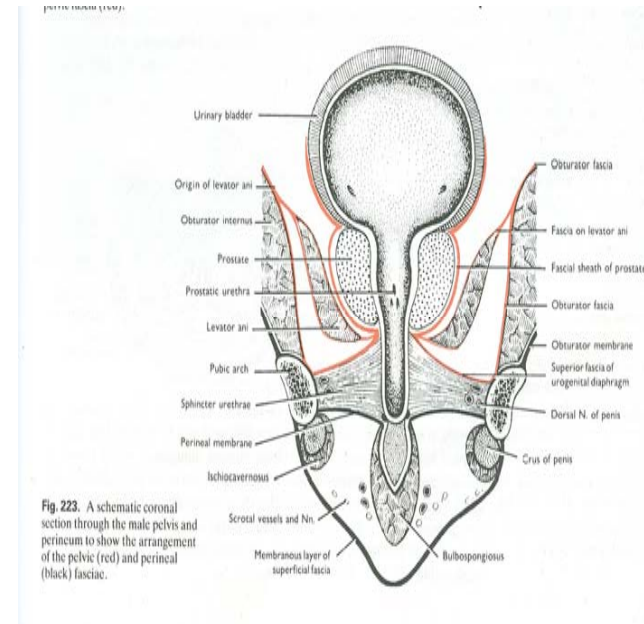
Fig. 222. A schematic median section through the male pelvis to show the parietal and visceral pelvic fascia (red).

- Part of pelvic fascia continuous laterally with the fascia over obturator internus & constitutes superior fascia of urogenital diaphragm
- Second membrane is inferior fascia of the urogenital diaphragm (Perineum)
- Most superficial membrane is membranous layer of superficial fascia

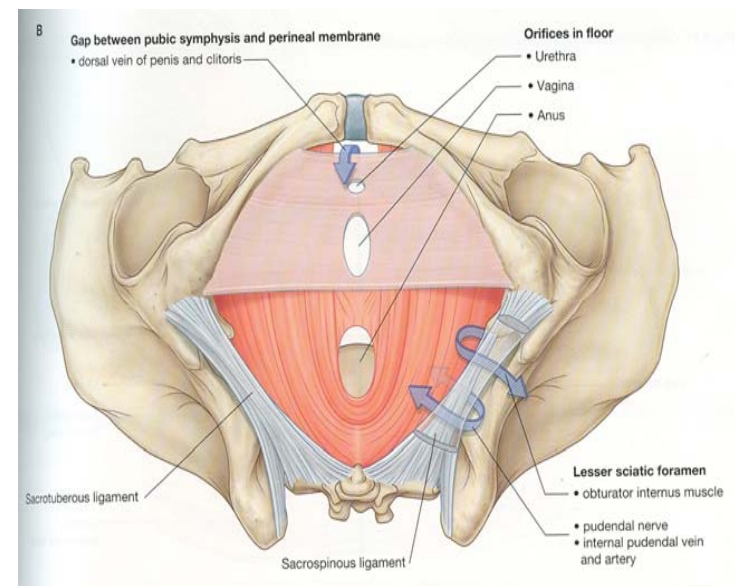
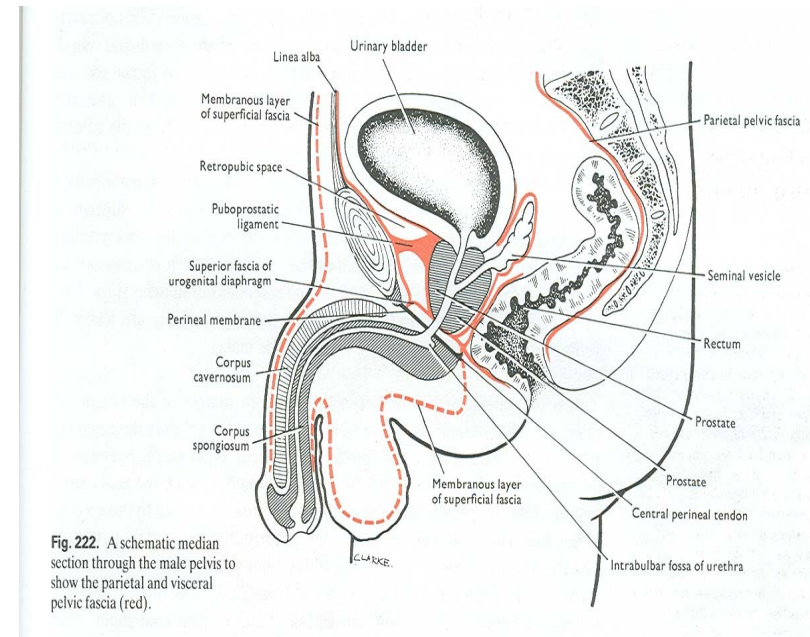


- Between upper and middle layer is deep perineal space

- Between the middle and membranous layer is superficial perineal space



- **Posteriorly all three membranes are attached to perineal body & to each other thus closing the perineal spaces behind**
- **Anteriorly the upper & middle membrane fuse a little behind the pubic symphysis & form transverse ligament of the pubis**
- **Traced Anteriorly the membranous layer is continues with the anterior abdominal wall**





# Structures piercing the perineal membrane in males

- Urethra
- Duct of bulbourethral gland
- Artery & nerve to bulb, urethral artery, deep artery & dorsal artery of penis
- Posterior scrotal nerves & vessels
- Branches of perineal nerve to superficial perineal muscles

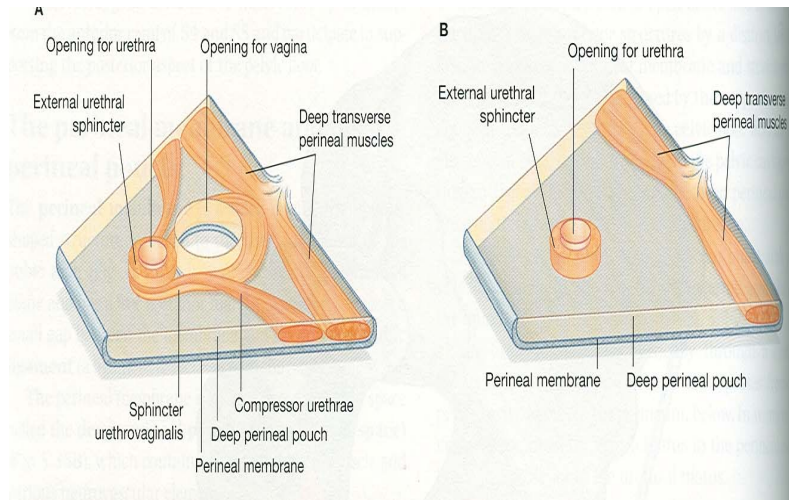
# Structures piercing the perineal membrane in females

- Urethra
- Vagina
- Artery & nerve to the bulb of the vestibule
- Deep & dorsal artery of clitoris
- Posterior labial arteries & nerves
- Branches of perineal nerve to superficial perineal muscles

# Urogenital diaphragm

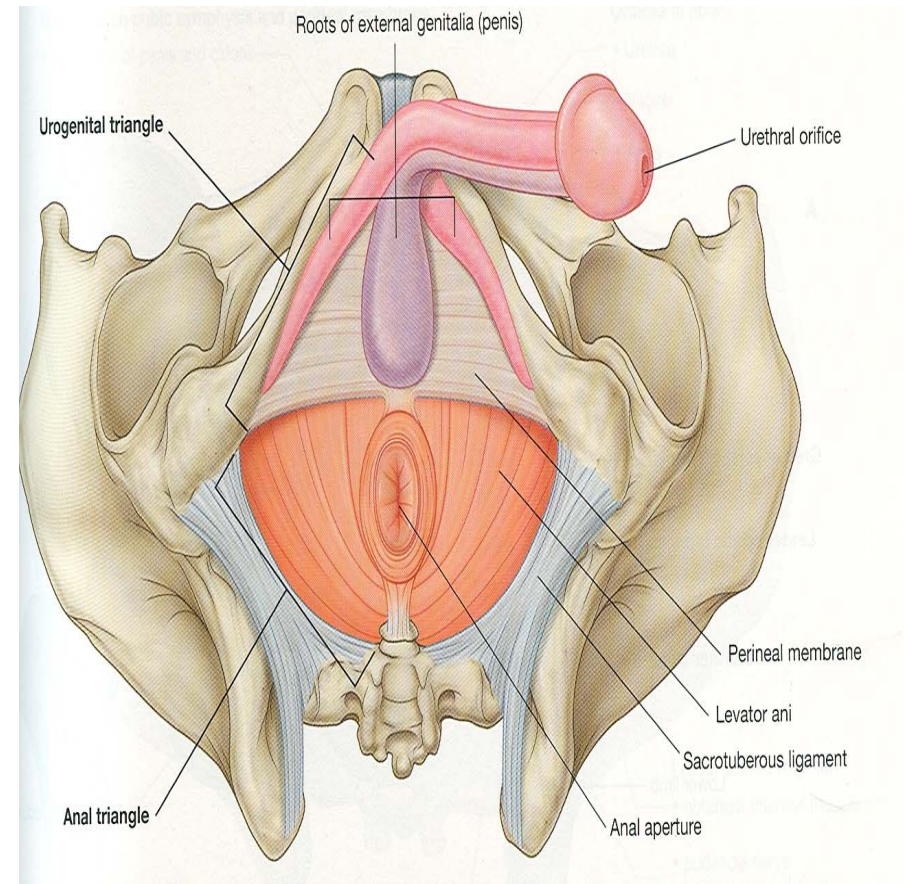
Formed by

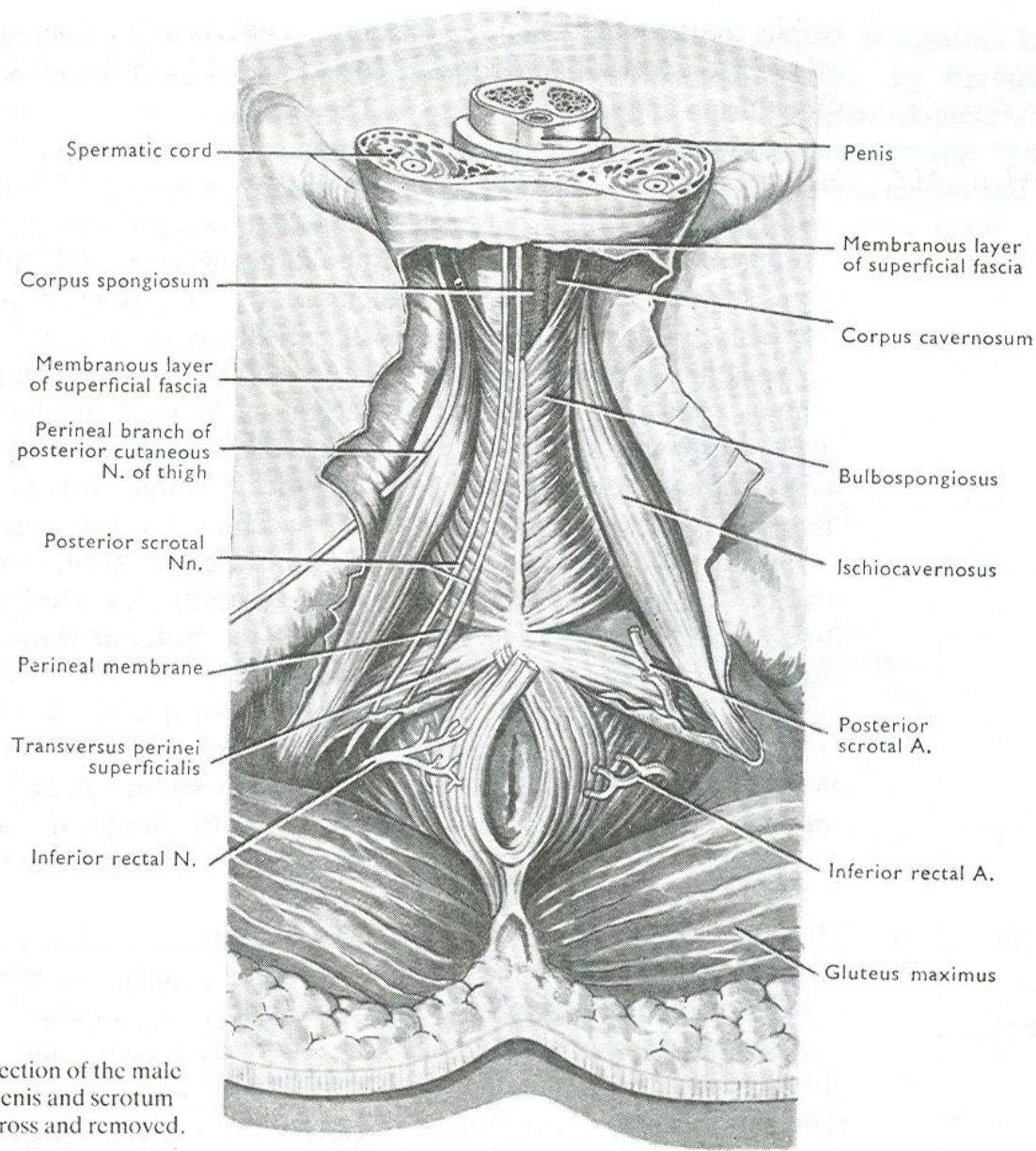
- Superficial fascia of urogenital diaphragm
- Deep perineal muscles  
Sphincter urethrae,  
Deep transverse perinei
- Inferior fascia of urogenital diaphragm  
(perineal membrane)



# Superficial perineal space in the male

- Contents
  - Root Of Penis
    - Bulb
    - Right & left crura
  - Muscles
    - Bulbospongiosus
    - Ischiocavernosus
    - Superficial transversus perinei
- All muscles are supplied by perineal branch of pudendal nerve





**Fig. 226.** A dissection of the male perineum. The penis and scrotum have been cut across and removed.

## **Nerves**

- Branches of perineal nerve- posterior scrotal, nerve to bulb & muscular
- Long perineal nerve from posterior cutaneous nerve of thigh
- Vessels- branches of perineal artery namely posterior scrotal and transverse perineal
- Branches of artery of penis namely artery to bulb, urethral artery and deep & dorsal artery of penis

# Superficial perineal space in the female

- Female external genitalia
- Muscles

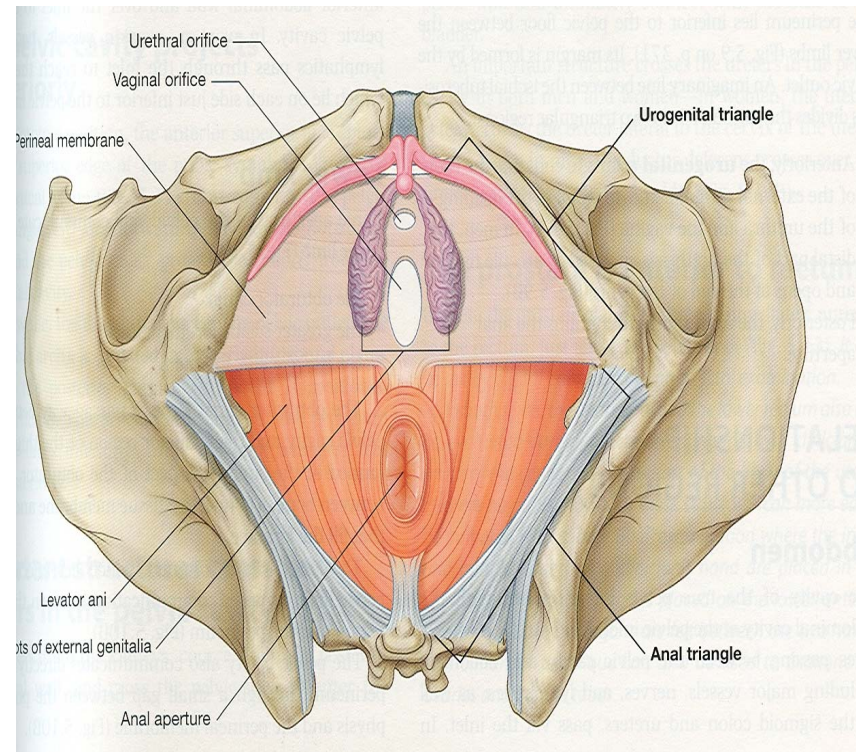
Bulbospongiosus

Ischiocavernosus

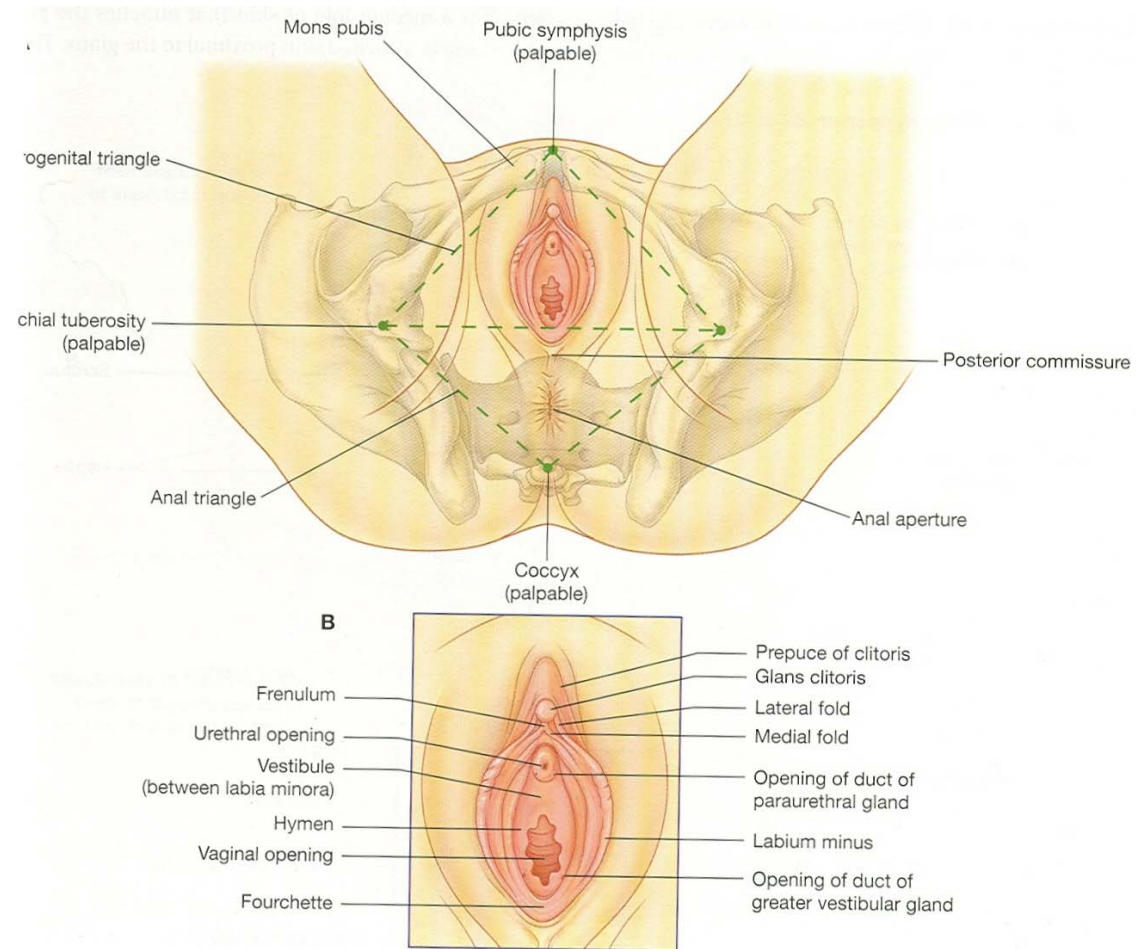
Superficial

transversus perinei

Nerve supply of muscles is  
by perineal branch of  
pudendal nerve

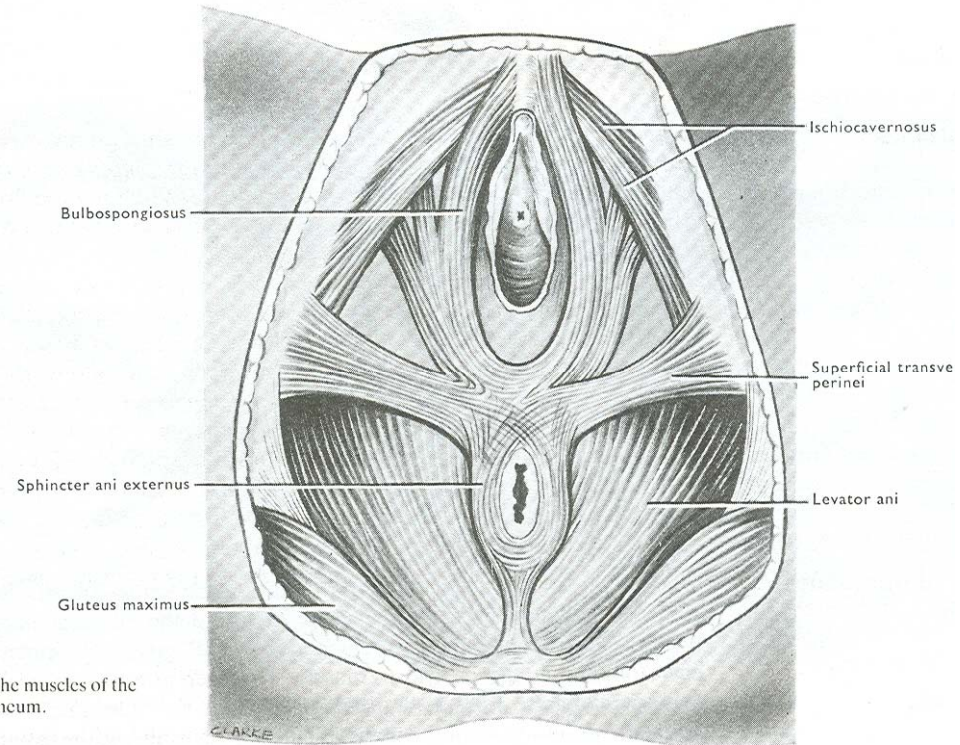


# Female external genital organs





# Muscles



**Fig. 227.** The muscles of the female perineum.

## **Nerves**

- Branches of perineal nerve- posterior labial, nerve to bulb & muscular
- Long perineal nerve from posterior cutaneous nerve of thigh

Vessels- branches of perineal artery namely labial and transverse perineal

- Branches of artery of clitoris namely artery to bulb, deep & dorsal artery of clitoris
- greater vestibular gland in females

# Deep perineal space

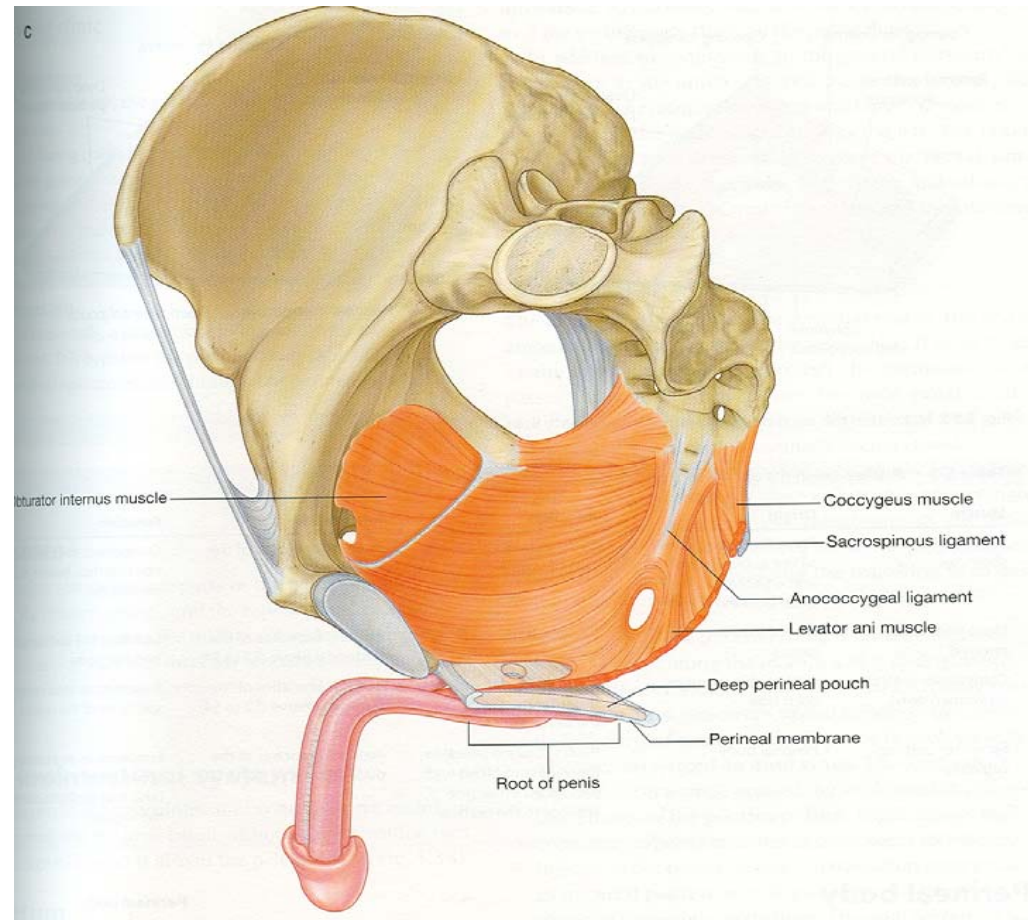
- Contents
- Membranous urethra
- Muscles- sphincter urethrae, deep transverse perinei

## Nerves-

- Dorsal nerve of penis and muscular branches from perineal nerve

## Vessels-

- Artery of penis
- Bulbourethral Gland In Males

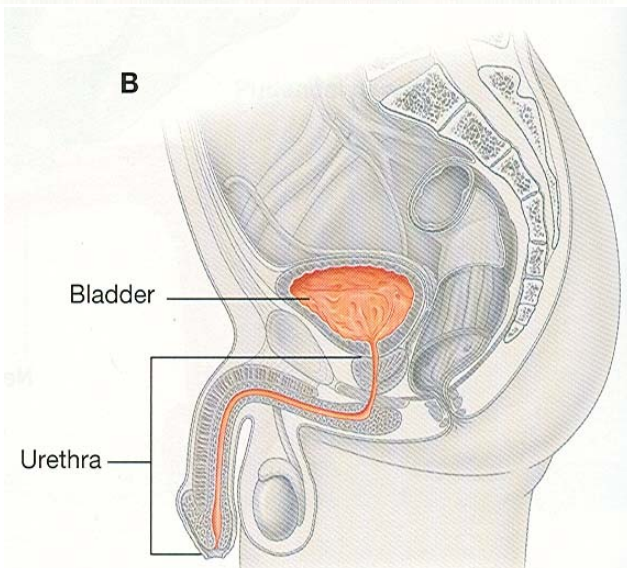
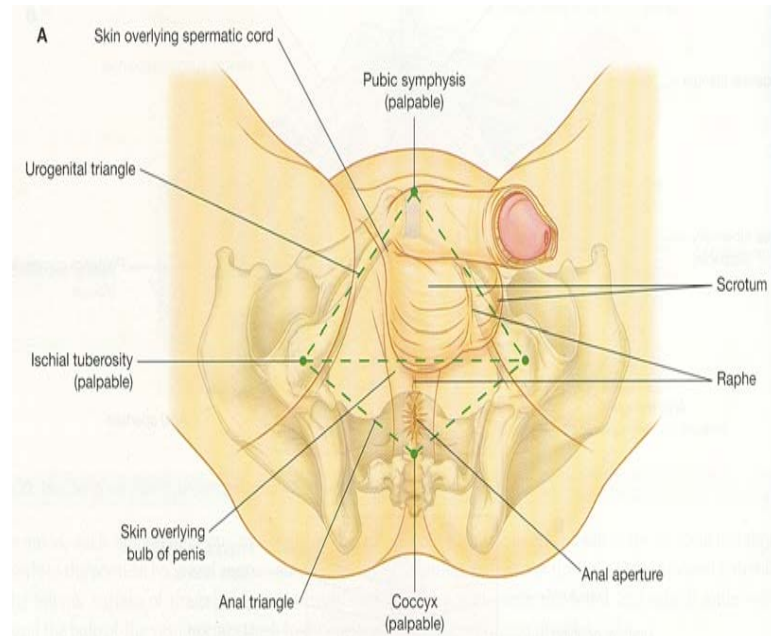


# Applied

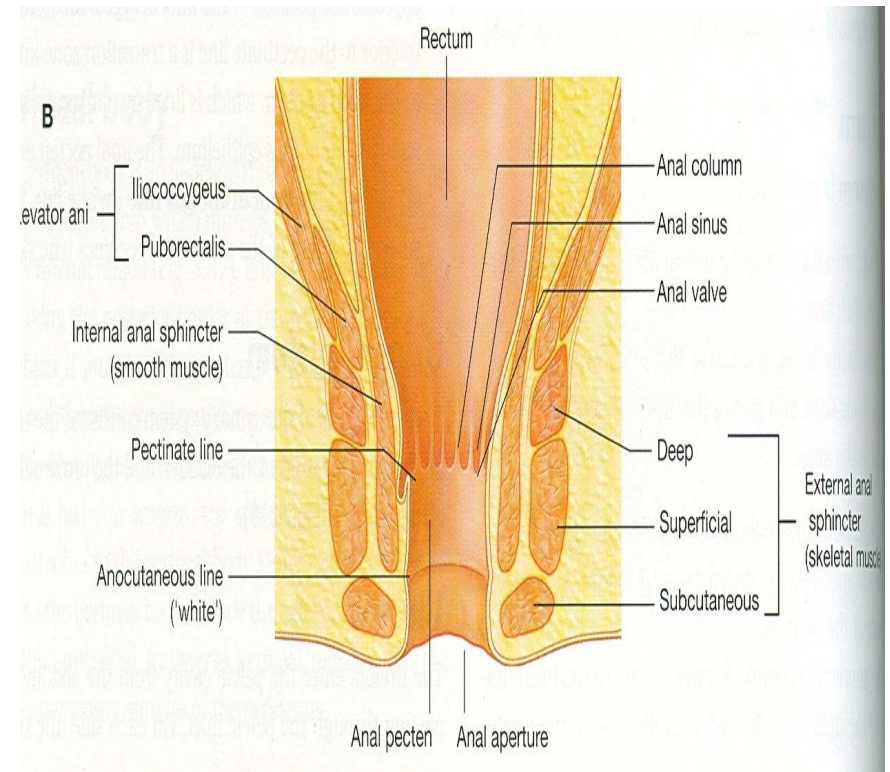
- Membranous part of urethra is narrowest & least dilatable
- Extravasation of urine
- Proalapse of pelvic viscera due to perineal body rupture

# ANAL REGION

- Triangular area between the posterior margin of the urogenital diaphragm & the coccyx
- Transmits the anal canal



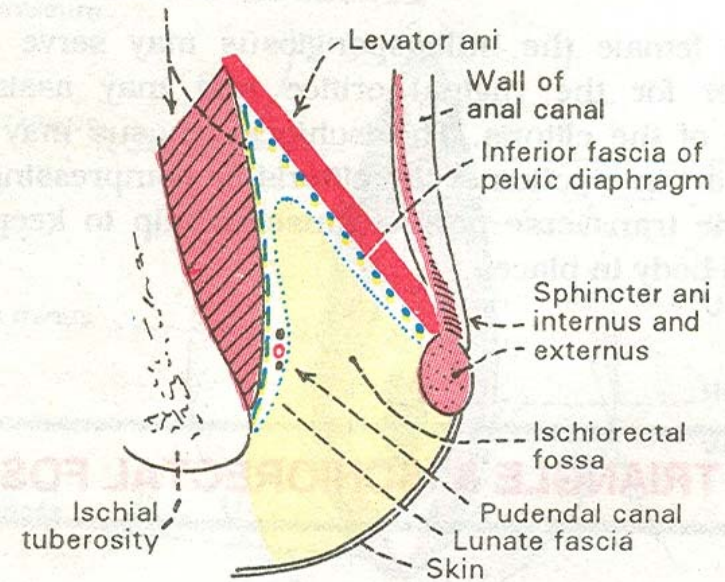
- Anal canal is surrounded by external anal sphincter
- Anal canal is connected to the coccyx by anococcygeal ligament
- On either side of canal is a triangular space called ischiorectal fossa
- Perineal body (central tendon of perineum) is situated 1.25 cm anterior to anal canal



# Ischiorectal fossa

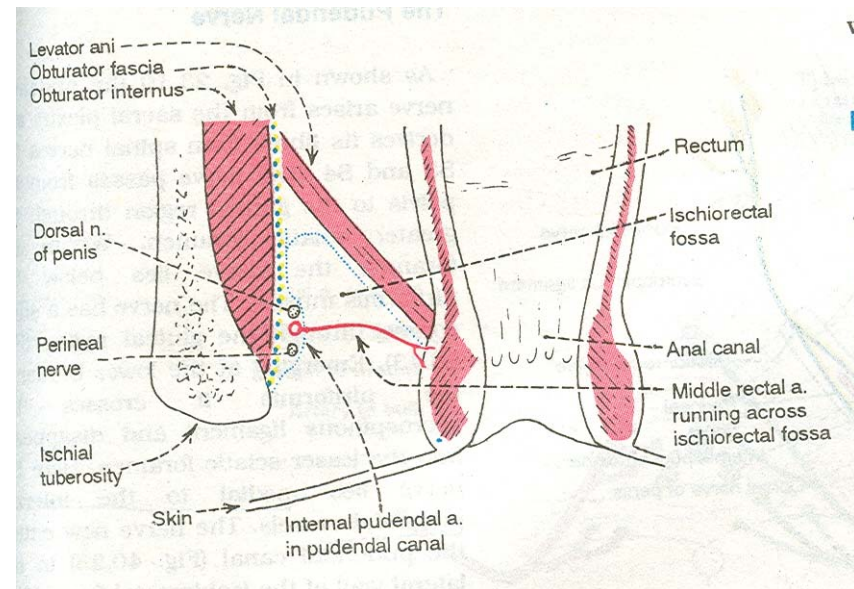
- **Wedge shaped space between obturator internus & levator ani**
- **Base is formed by skin**
- **Widest & deepest**  
**Posteriorly, continues with the lesser sciatic foramen**
- **Anteriorly continues with a narrow space filled with loose areolar tissue**
- **Lateral wall by fascia covering obturator internus**
- **superomedial wall formed by fascia covering levator ani & external anal sphincter**

Obturator internus  
and its fascia



# Contents of Ischiorectal fossa

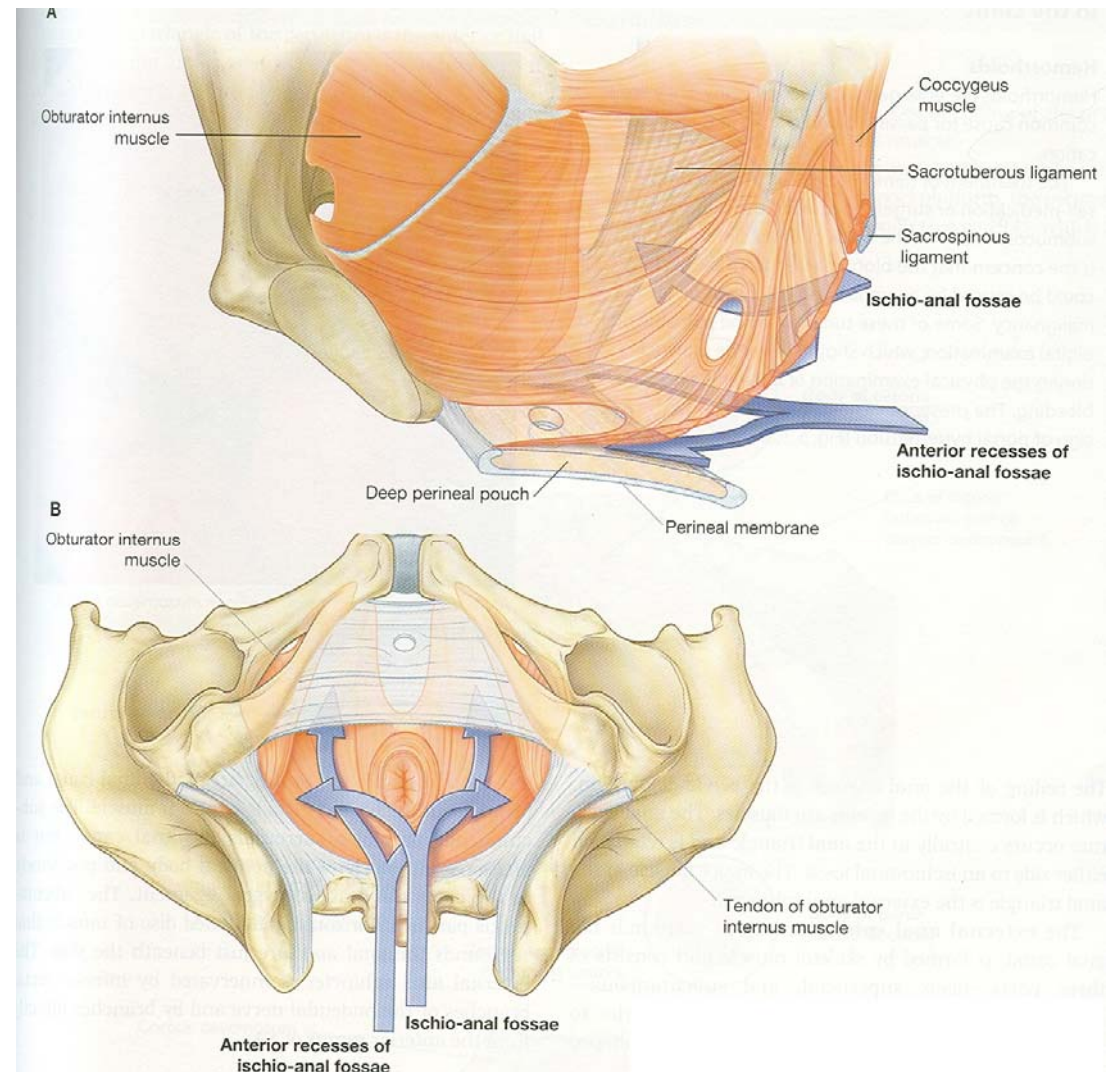
- vessels & nerves that enter thru lesser sciatic foramen and run in pudendal canal
- Perineal branch of the fourth sacral nerve
- Perforating cutaneous branches of S2 &3





# Recesses of Ischioanal fossa

- Anterior recess
- Posterior recess
- Horseshoe recess

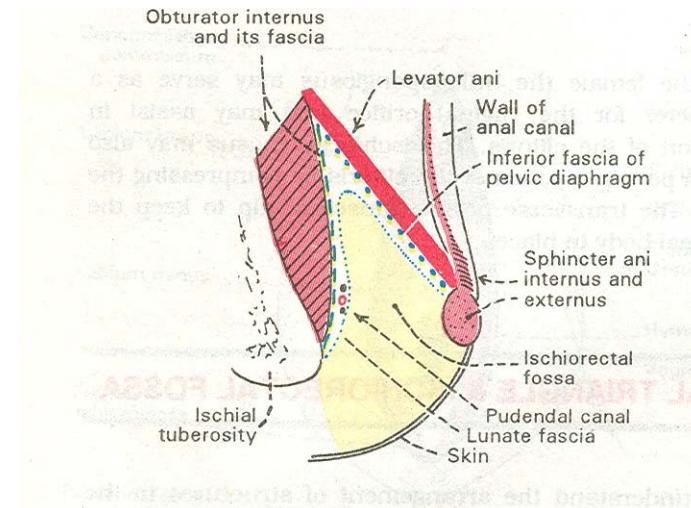


# Applied anatomy

- Ischiorectal abscess
- Anorectal fistula and external sinus
- Prolapse of rectum
- Ischiorectal hernia

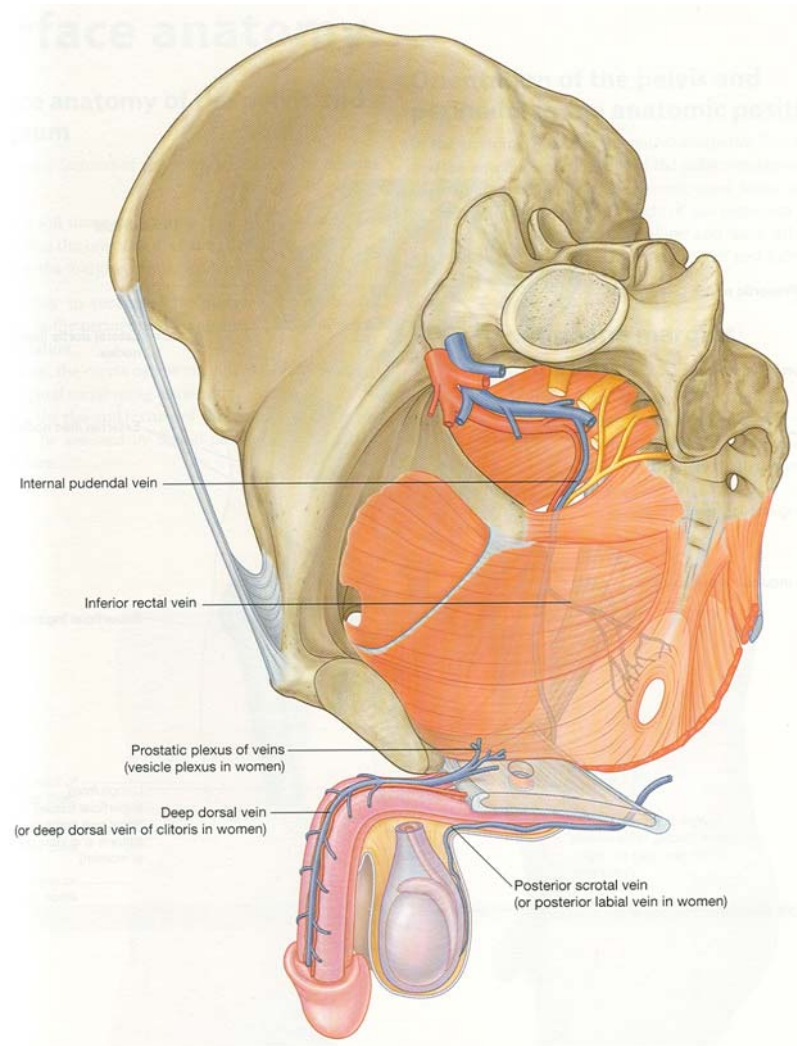
# PUDENDAL CANAL

- seen in the lateral wall of Ischiorectal fossa
- bounded laterally by obturator fascia
- Medially by lunate fascia
- Begins Posteriorly near lesser sciatic foramen
- Inferiorly related to sacrotuberous ligament
- Extends to the posterior border of perineal membrane



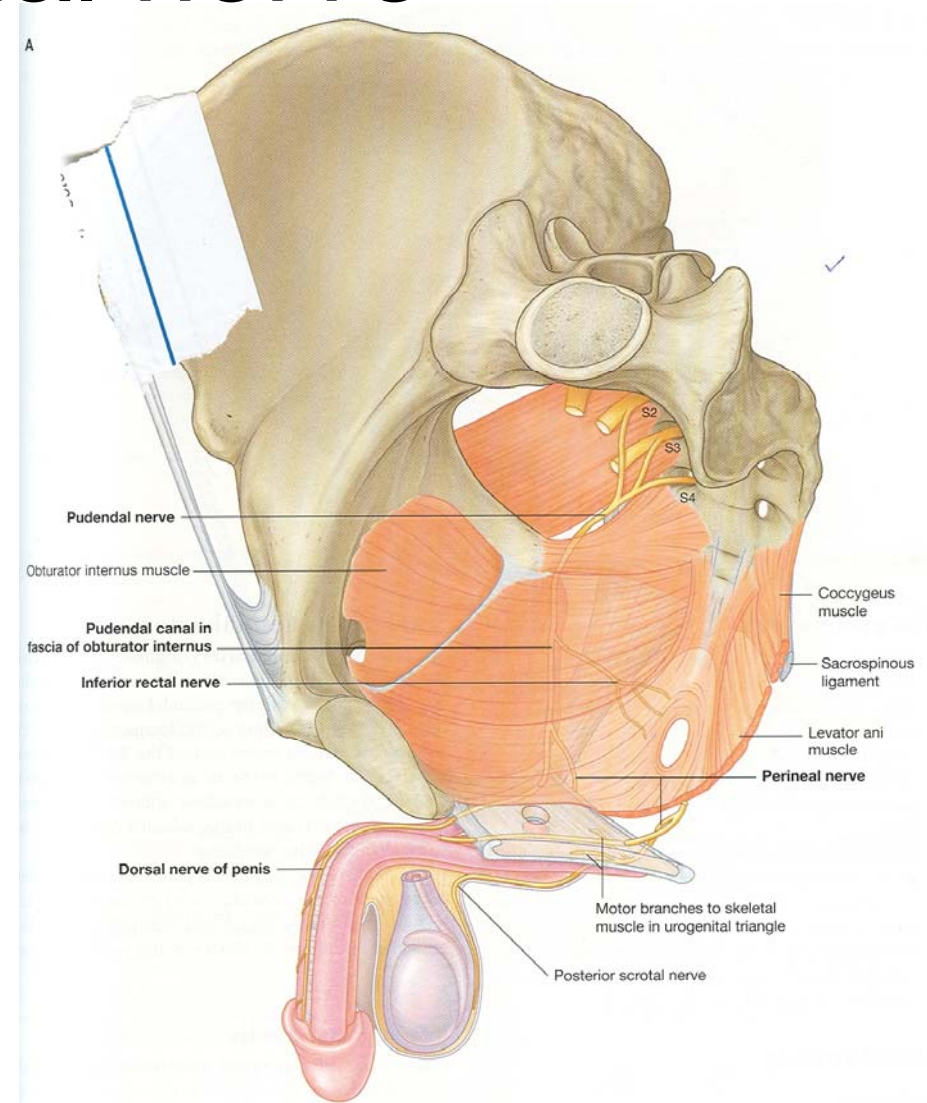
# Contents

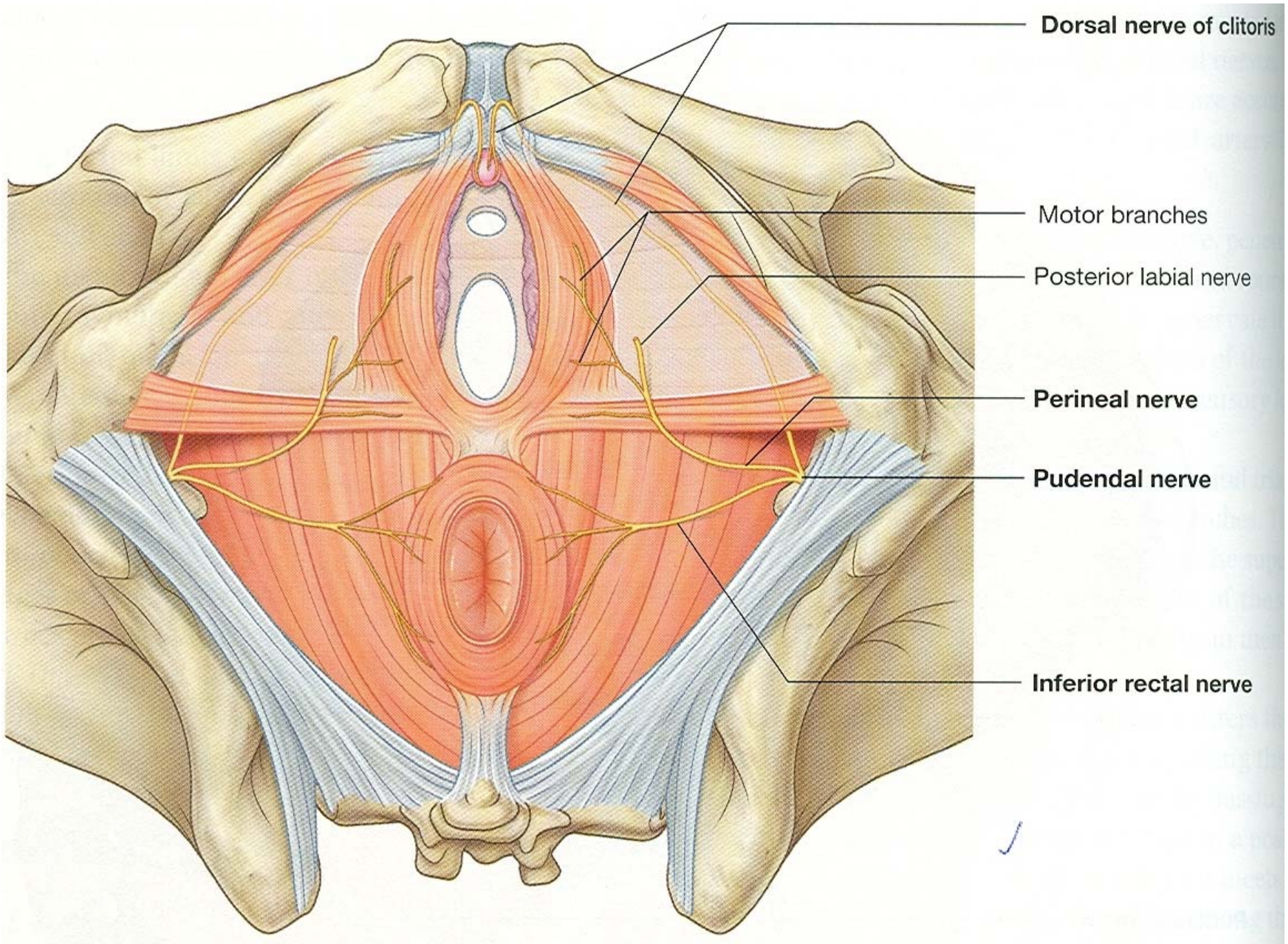
- Pudendal nerve S234
- Internal pudendal vessels



# Pudendal nerve

- Chief nerve of perineum & external genitalia
  - Derived from sacral plexus
  - Branches
    - Inferior rectal nerve
    - Perineal nerve
    - Dorsal nerve of penis
- Applied – pudendal nerve block





**Dorsal nerve of clitoris**

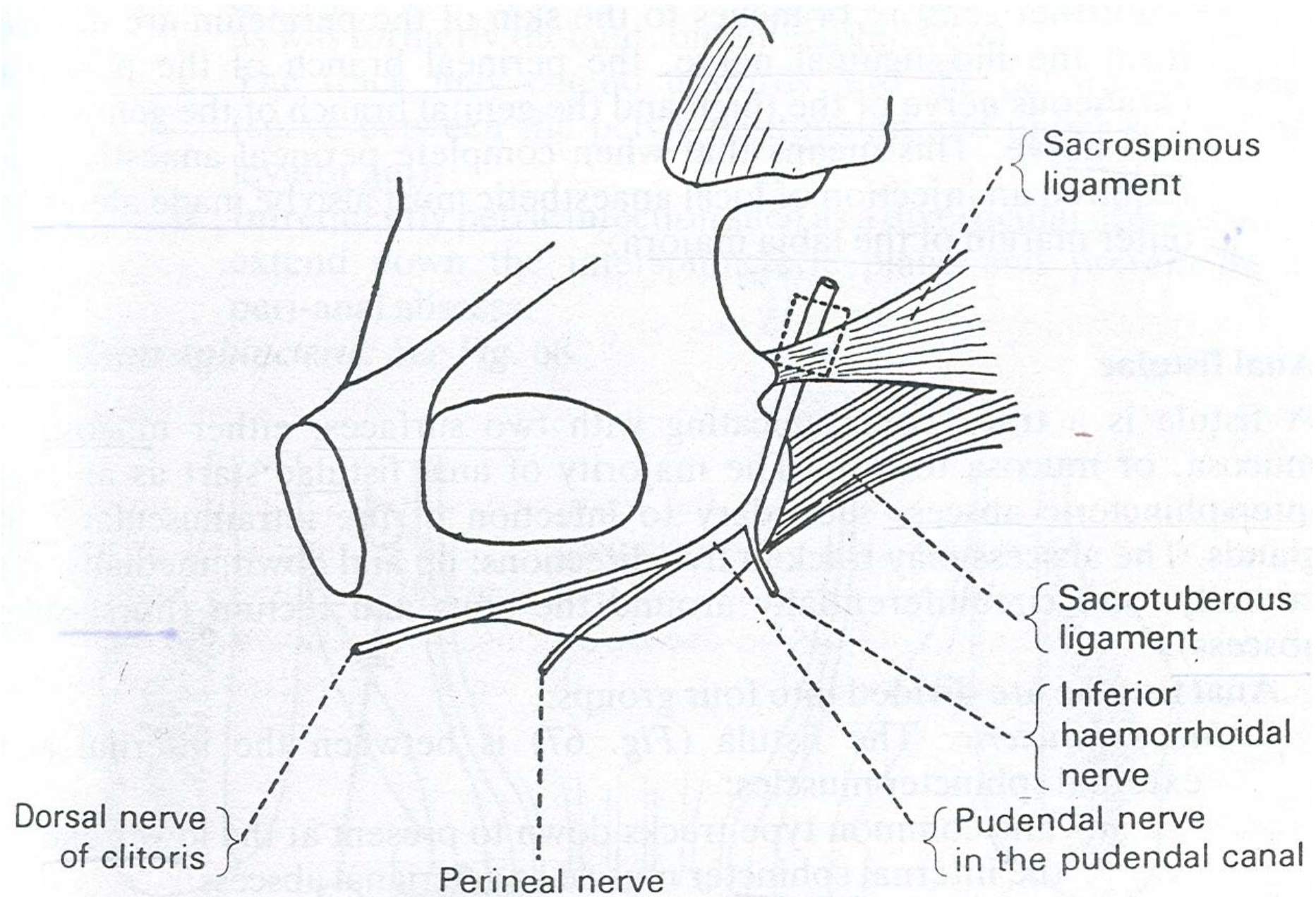
**Motor branches**

**Posterior labial nerve**

**Perineal nerve**

**Pudendal nerve**

**Inferior rectal nerve**



Sacrospinous ligament

Sacrotuberous ligament

Inferior haemorrhoidal nerve

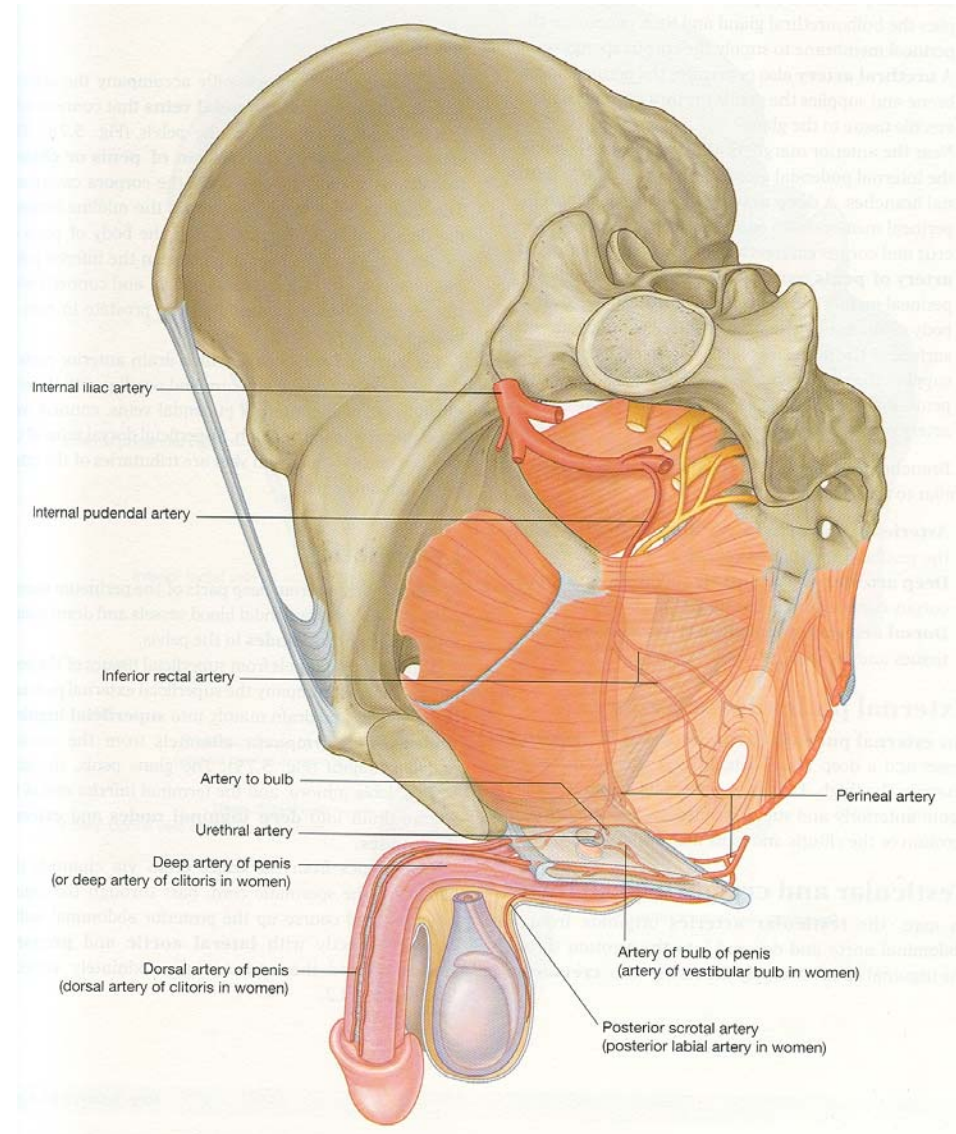
Pudendal nerve in the pudendal canal

Dorsal nerve of clitoris

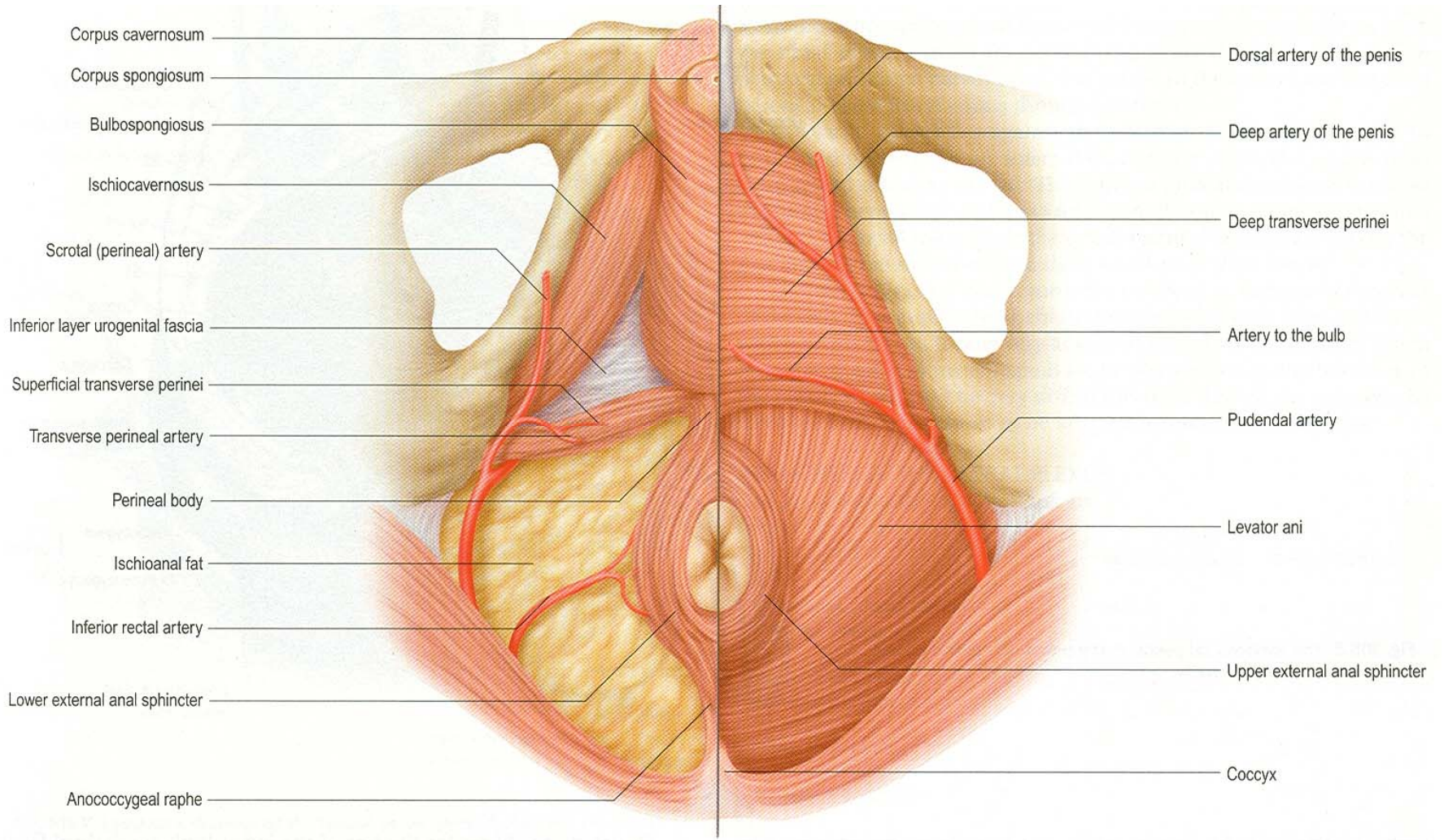
Perineal nerve

# Internal pudendal artery

- Chief artery of perineum
- Terminal branch of anterior division of internal iliac artery
- Branches
  - Inferior rectal artery
  - Perineal artery
  - Artery of penis/clitoris







Corpus cavernosum  
 Corpus spongiosum  
 Bulbospongiosus  
 Ischiocavernosus  
 Scrotal (perineal) artery  
 Inferior layer urogenital fascia  
 Superficial transverse perinei  
 Transverse perineal artery  
 Perineal body  
 Ischioanal fat  
 Inferior rectal artery  
 Lower external anal sphincter  
 Anococcygeal raphe

Dorsal artery of the penis  
 Deep artery of the penis  
 Deep transverse perinei  
 Artery to the bulb  
 Pudendal artery  
 Levator ani  
 Upper external anal sphincter  
 Coccyx