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
• 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
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
• Proalpse 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
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 & S3
Recesses of Ischiorectal fossa

- Anterior recess
- Posterior recess
- Horseshoe recess
Applied anatomy

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

Perineal nerve

Sacrospinous ligament

Sacrotuberous ligament

Inferior haemorrhoidal nerve

Pudendal nerve in the pudendal canal
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