Gluteal Region - Today’s Dissection -

Unit 2, p35
Gluteal Region
- A Practical Lesson -

Projected anatomy through the gluteal region

- Iliac crest
- Safe area for injections
- Region of the gluteus maximus m.
- Sciatic n.
- Reflect **ONLY** the gluteus maximus m.
- To reveal the ischioanal triangle
- Do **NOT** dissect
  - Deeper than the sacro-spinous and tuberous ligaments
  - Lateral to the sciatic nerve

Unit 2, p35
Perineum

- Today’s Word & Intellectual Challenge -

• The region that closes the pelvic outlet
  • Means “modest or private”

• Divided into two spaces (triangles)
  • Ischioanal (Anal) triangle
  • Urogenital (UG) triangle
Abdominopelvic Region

Diaphragm
Abdominal cavity
Muscles of abdominal wall
Greater pelvis
Pelvic brim
Ala of ilium
Obturator membrane
Lesser pelvis (pelvic cavity)
Pelvic diaphragm (levator ani)

Perineum
Perineal Triangles (2)

- Urogenital triangle
- Anal triangle
- Ischial tuberosity
- Pubic symphysis
- Coccyx

Unit 2, p35
Perineal Recesses

Unit 2, p36
Perineal Vasculature

- Internal iliac artery
- Internal pudendal artery
- Inferior rectal artery
- Artery to bulb
- Urethral artery
- Deep artery of penis (or deep artery of clitoris in women)

Unit 2, p37
Ischioanal (Anal) Triangle

- Divided into two lateral fossae by the rectum
- **Boundaries**
  - Lateral: Sacrotuberous ligaments
  - Posterior: Coccyx
  - Anterior: Perineal body (muscle)
  - Superior (roof): Pelvic diaphragm
  - Inferior (floor): Skin
Landmarks

Ischial tuberosity

Sacrotuberous ligament

Rectum

Coccyx
Contents

- Levator ani muscle
- Ischioanal fat pad
- Pudendal (Alcock’s) canal
  - Pudendal neurovascular bundle and their peripheral branches
- Anococcygeal (perineal) body
  - Convergence of muscles
- Rectum and anus
Inferior Rectal Nerves

Innervation of the female perineum
Central Tendon of the Perineum
- Perineal Body -

- Area of fusion among the
  - Posterior margin of the UG diaphragm
  - Perineal fascia
  - Pelvic diaphragm
  - External anal sphincter
- Same in males and females
  - In females, fusion is more extensive and the fused tissue is yellow fibroelastic connective tissue
Perineal Body

- Urethra
- Vaginal orifice
- Ischiocavernosus m.
- Bulbospongiosus m.
- Superficial transverse perineal m.
- Perineal body
- Anus
- External anal sphincter

Unit 2, p37
Perineal Body

Male

Female

Bulbospongiosus muscle
Superficial and deep transverse perineal muscles
External anal sphincter

External anal sphincter
Perineum

- Pubic symphysis
- Urogenital triangle
- Ischial tuberosity
- Anal triangle
- Coccyx

Unit 2, p35
Urogenital (UG) Triangle
- Subdivided into 2 Parallel Planes -

- Deep perineal “space”
  (also called superior perineal pouch)
- Superficial perineal “space”
  (also called inferior perineal pouch)
Deep Perineal Space

- Contents -

• Filled by 2 muscles and their superior and inferior fasciae
  • Deep transverse perineus muscle
  • Sphincter urethrae muscle
Deep Perineal Space

- Boundaries -

- Superior: Superior fascial layer of the UG diaphragm
- Inferior: Inferior fascial layer of the UG diaphragm
- Anterior: Pubic symphysis
- Lateral: Ischiopubic (conjoined) rami
- Posterior: Closed (fasciae are fused)
Superficial Perineal Space

- Contents -

• Filled by erectile tissue and their overlying muscles
  • Cavernous and bulbous erectile tissue
  • Ischiocavernosus and bulbospongiosus muscles, respectively

Superficial (inferior) space
Superficial Perineal Space
- Boundaries -

• Superior: Inferior fascial layer of the UG diaphragm
• Inferior: Colles’ fascia
• Anterior: Pubic symphysis
• Lateral: Ischiopubic (conjoined rami
• Posterior: Closed; Fused to the UG diaphragm

Superficial (inferior) space
Deep Perineal "Space"

Superficial Perineal "Space" (SPS)

Superior (the pelvic diaphragm)
Superior Fascia of the UG Diaphragm

Inferior Fascia of the UG Diaphragm

Inferior Fascia of the SPS
(Colles’ Fascia; Contiguous with Scarpa’s Fascia)

Inferior (the skin of the perineum)
Anterior Abdominal Wall

- Superficial Fascia -

• Superficial layer
  • Fatty = Camper’s fascia

• Deep layer
  • Membranous = Scarpa’s fascia
  • Contiguous with the membranous fascia of the perineum (Colles’ fascia)
Clinical Significance of the Superficial Fascial Connections
A Major Cause for the Clinical Significance?

Y Chromosome
Strabismus

Sibilance
Perineum (Sagittal Section)

Female

Male

Orange = Deep perineal space

Red = Superficial perineal space