Unit 28: Topographic anatomy: Anterolateral abdominal wall and inguinal region

Guide for the practical class using Anatomedia online

Topography of the abdominal wall

1. Go to An@tomedia, **abdomen** module-regions-frames: **01 and 02** (Surface margins of abdomen, Bony boundaries of abdomen)

-Click on underlined text: (see figure) to see the shape of abdomen; reasons for lumbar lordosis and pelvic tilt; bones protecting the abdomen

-Activate 'can you identify' to visualize surface margins and bony boundaries of the abdomen

2. Go to An@tomedia, **abdomen** module-regions-frames: **04 and 05** (Position of abdomen in trunk, Relations of abdomen)

-Click on underlined text to see vertebral levels of transverse sections on frame 5

-Activate 'can you identify' to visualize position of the abdomen in trunk and its relations to neighboring body modules

3. Go to An@tomedia, **abdomen** module-regions-frames: **07 and 09** (Position of regions in abdomen, Sites of inguinal & femoral rings)

-Click on underlined text to review the boundaries of inguinal and femoral rings

-Activate 'can you identify' to visualize position of abdominal wall and boundaries of inguinal/femoral rings in the abdominal wall

4. Go to An@tomedia, **abdomen** module-regions-frames: **10 and 11** (Anterior abdominal wall: layers and superficial contents, Muscle layers and rectus sheet)

-Click on colored buttons to visualize cutaneous nerves, arteries, veins and lymph vessels in subcutaneous layer of the abdomen

-Click on underlined text to review layers of anterior abdominal wall (particularly muscle layers) and neurovascular territories of the abdominal skin

-Activate 'can you identify' to visualize these supply structures

5. Go to An@tomedia, **abdomen** module-regions-frames: **13, 14 and 15** (Inguinal canal, Scrotum, Spermatic cord)

-Click on underlined text to review boundaries/walls/contents/orientation of inguinal canal, layers/contents/supply of scrotum, coverings/contents/course of spermatic cord

-Activate ‘can you identify’ to visualize openings of inguinal canal and neurovascular supply of scrotum and its contents, including spermatic cord

6. Go to An@tomedia, **abdomen** module-regions-frame: **20** (Hernial sites)
-Click on underlined text to review potential pathways of abdominal hernia, areas of weakness in the abdominal wall, contributing factors, differences between direct and indirect inguinal hernia
-Activate ‘can you identify’ to visualize potential hernial sites

Muscles and vascular structures of the abdominal wall

7. Go to An@tomedia, **abdomen** module-systems-frames: **01 and 02** (External & internal oblique muscles)
-Click on underlined text to review position/course/attachment/supply of oblique abdominal muscles and their action
-Activate ‘can you identify’ to visualize oblique abdominal muscles

8. Go to An@tomedia, **abdomen** module-systems-frames: **03 and 04** (Transversus abdominis, Rectus abdominis)
-Click on underlined text to review position/course/attachment/supply of transversus and rectus abdominis muscles
-Activate ‘can you identify’ to visualize these two muscles and their attachments

9. Go to An@tomedia, **abdomen** module-systems-frame: **05** (Fascia of anterior abdominal wall)
-Click on underlined text to review specifics of abdominal fascia, rectus sheet, linea alba, semilunar and arcuate lines
-Activate ‘can you identify’ to visualize walls of rectus sheet and different lines in the wall

10. Go to An@tomedia, **abdomen** module-systems-frame: **28** (Abdominal aorta and branches)
-Click on underlined text to review branches of aorta (unpaired/paired visceral and parietal) and of external iliac artery
-Activate ‘can you identify’ to branches of abdominal aorta, particularly parietal branches

11. Go to An@tomedia, **abdomen** module-systems-frame: **30** (Inferior vena caval system)

-Click on underlined text to review tributaries to IVC and principles of the venous return against gravity

-Activate 'can you identify' to visualize principle tributaries to IVC, particularly parietal

Dissection

12. Go to An@tomedia, **abdomen** module-dissection-frames: **04 to 09** (Anterior abdominal wall: LAYER-BY-LAYER DISSECTION)

-Turn on the colored buttons to highlight different dissected structures, from surface to deep

-Activate 'can you identify' to see dissected structures

13. Go to An@tomedia, **abdomen** module-dissection-frames: **10 to 15** (Inguinal canal & scrotum: LAYER-BY-LAYER DISSECTION)

-Turn on the colored buttons to highlight different dissected structures, from surface to deep

-Activate 'can you identify' to see dissected structures

Anatomical basis of some clinical procedures

14. Go to An@tomedia, **abdomen** module-dissection-frame: **53** (Common abdominal incisions)

-Click on underlined text to review anatomical basis of abdominal wall incisions to access the peritoneal cavity and structures endangered by incisions

-Activate 'can you identify' to visualize sites of common incisions

15. Go to An@tomedia, **abdomen** module-dissection-frame: **55 and 56** (Vasectomy & hydrocele tap)

-Click on underlined text to review layers traversed during vasectomy

-Activate 'can you identify' to visualize structures in the inguinal region including parts of the spermatic cord