

Unit 29: Topographic anatomy: **Thoracic walls & respiration**

Guide for the practical class using Anatomedia online

Topography of the thoracic wall

1. Go to An@tomedica, **thorax** module-regions-frames: **01 and 02** (Surface margins of thorax, Bony boundaries of thorax)
 - Click on underlined text: (see figure) to see the position of thorax between four other modules of the body on frame 1
 - Activate 'can you identify' to visualize surface margins and bony boundaries of the thorax
2. Go to An@tomedica, **thorax** module-regions-frame: **09** (Subcutaneous layer of thorax)
 - Click on colored buttons to visualize cutaneous **nerves**, **arteries**, **veins** and **lymph vessels** in subcutaneous layer of the thorax
 - Click on underlined text to review vascular territories overlapping the nipple and specifics of thoracic wall lymph drainage
 - Activate 'can you identify' to visualize these supply structures
3. Go to An@tomedica, **thorax** module-regions-frames:**10 and 11** (Muscles in front of thorax, Structures behind thorax)
 - Click on underlined text to review muscles covering the front and the back of thorax, and to see the position of triangle of auscultation
 - Activate 'can you identify' to visualize above muscles and the auscultation triangle
4. Go to An@tomedica, **thorax** module-regions-frames: **12 and 13** (Anterior & posterior thoracic wall)
 - Click on underlined text to review position and importance of internal thoracic artery and to see organization of an intercostal space with intercostal veins, arteries and nerves (and their branches)
 - Activate 'can you identify' to visualize layers of thoracic wall and its neurovascular supply
5. Go to An@tomedica, **thorax** module-regions-frames: **12 and 13** (Superior & inferior thoracic aperture)
 - Click on underlined text to review structures traversing thoracic inlet, the diaphragm and its openings as well as structures transmitting them

-Activate 'can you identify' to visualize viscera, nerves and vessels traversing thoracic inlet and outlet

Muscles and neurovascular structures of the thoracic wall

6. Go to An@tomedica, **thorax** module-systems-frames: **07 and 08** (External & internal intercostals, Innermost thoracic muscles)
 - Click on underlined text to review position/course/attachment of intercostal muscles, its action in respiration, the accessory respiratory muscles and their clinical significance
 - Activate 'can you identify' to visualize muscles in three distinct layers
7. Go to An@tomedica, **thorax** module-systems-frame: **09** (The diaphragm)
 - Click on underlined text to review position/shape/attachment of the diaphragm, its action in respiration, specifics of its supply and clinical significance of that
 - Activate 'can you identify' parts and attachment of the diaphragm
8. Go to An@tomedica, **thorax** module-systems-frame: **33** (Aorta & branches in thorax)
 - Click on underlined text to review parts aorta (ascending, arch, descending), its parietal branches, particularly internal thoracic artery
 - Activate 'can you identify' to visualize components of parts of aorta and its principle branches (parietal and visceral)
9. Go to An@tomedica, **thorax** module-systems-frames: **34 and 35** (Caval & azygous systems in thorax, Lymph vessels & nodes of thorax)
 - Click on underlined text to review tributaries to SVC, brachicephalic veins, azygous vein (and its tributaries) and principles of the lymph flow in the thoracic wall
 - Activate 'can you identify' to visualize principle veins, lymph ducts and nodes in the thoracic wall
10. Go to An@tomedica, **thorax** module-systems-frame: **23** (Somatic nerves of thorax)
 - Click on underlined text to review specifics of somatic innervation of thoracic wall and the diaphragm
 - Activate 'can you identify' to visualize components somatic innervation of thorax

Dissection

11. Go to An@tomedica, **thorax** module-dissection-frames: **04 to 06** (Anterior thoracic 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

12. Go to An@tomedica, **thorax** module-dissection-frames: **07 to 09** (Anterior thoracic 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

Anatomical basis of some clinical procedures

13. Go to An@tomedica, **thorax** module-dissection-frame: **46** (Pleural tap: layers & hazards)

- Click on underlined text to review anatomical basis of the pleural tap procedure
- Activate 'can you identify' to visualize structures that are traversed and those that might be endangered by this procedure

14. Go to An@tomedica, **thorax** module-dissection-frame: **47** (Intercostal block: layers & hazards)

- Click on underlined text to review anatomical basis of the intercostal block
- Activate 'can you identify' to visualize structures that are traversed and those that might be endangered by this procedure