SNS COLLEGE OF ALLIED HEALTH SCIENCES

SNS Kalvi Nagar, Coimbatore - 35

Affiliated to Dr MGR Medical University, Chennai

DEPARTMENT : CARDIO PULMONARY PERFUSION CARE TECHNOLOGY

COURSE NAME : ANATOMY

UNIT : THORAX

TOPIC : BONY THORACIC CAGE

BONY THORACIC CAGE

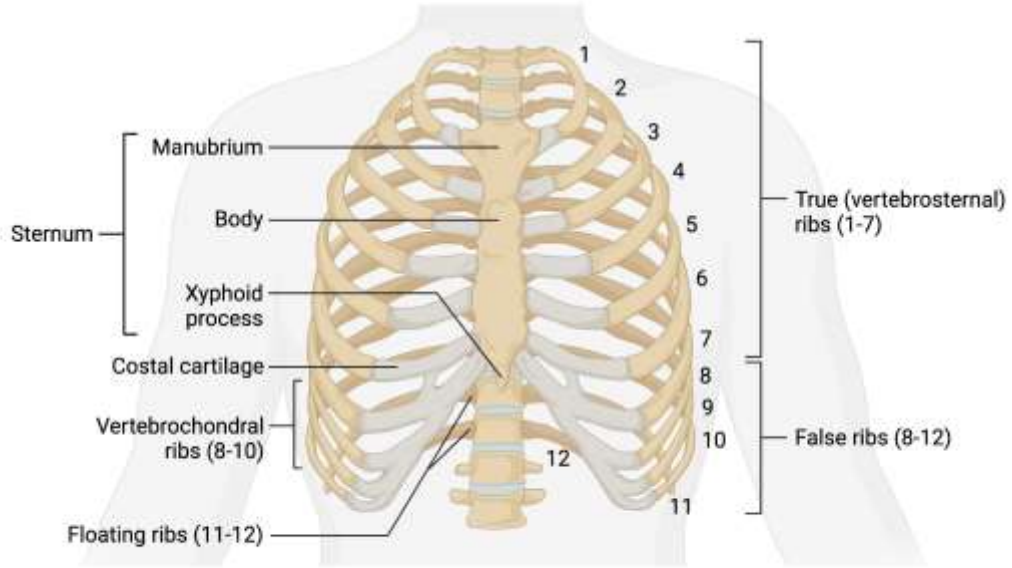
- The thoracic cage, also known as the rib cage, is the osteocartilaginous structure that encloses the thorax.

- It is formed by the 12 thoracic vertebrae, 12 pairs of ribs and associated costal cartilages and the sternum.

- The bony thoracic cage is a protective structure that surrounds and supports the thoracic organs, primarily the heart and lungs.

- It consists of several bones, cartilages, and joints, forming a framework that provides stability while allowing flexibility for breathing.

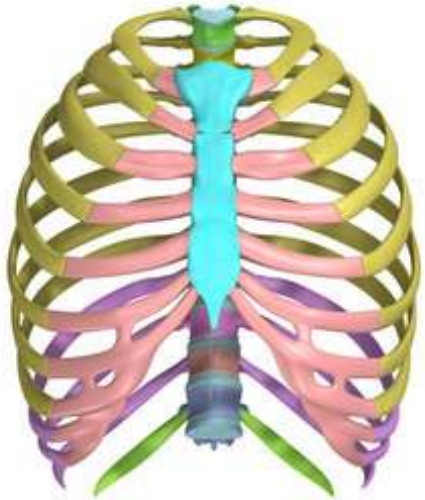
Thoracic Cage Anatomy



- The thoracic cage takes the form of a domed bird cage with the horizontal bars formed by ribs and costal cartilages.

- It is supported by the vertical sternum (anteriorly) and the 12 thoracic vertebrae (posteriorly).

Thoracic skeleton: Anterior view



- The main function of the thoracic cage is to support thorax and protect the vital structures within it (e.g. heart, lungs, aorta, etc).

- In addition, the rigid structure of the cage allows it to be an attachment point for many muscles of the upper body and to support the weight of the upper limbs.

- The thoracic cage also facilitates the act of breathing by resisting the negative pressure generated by the elastic recoil of the lungs and respiration-induced movements.

APPLIED ANATOMY

- Rib Fractures
- Costochondritis
- Sternal Fractures
- Pectus Deformities:
- Thoracic Outlet Syndrome
- Costovertebral Joint Dysfunction
- Scoliosis
- Tietze Syndrome
- Thoracic Cancer

ASSESSMENT

- What all are the Structures involved in Thoracic cage ?
- What all are the Applied aspects of Thoracic cage ?