

Bony Landmarks

AXIAL SKELETON

Skull

Most of the superficial bones of the skull should be easy for you to locate. Pay attention to:

1. Nasal bones (commonly broken)
2. Mandible (commonly broken). Note the angle of the mandible which is sometimes used in CPR to open the airway.
3. Temporomandibular joint (TMJ disease)
4. Mastoid process (mastoiditis)
5. Zygomatic (cheek bone)

Vertebral Column

1. Spinous processes of vertebra (note especially the vertebral prominens of C7)

Thorax

1. Sternum.
 - A. Sternal angle formed by the joining of the manubrium and body. Used to find the location of the 2nd rib.
 - B. Xiphoid process (important in CPR)
2. Ribs. The heart is located deep to the attachments of the second to sixth costal cartilages to the sternum.

APPENDICULAR SKELETON

Shoulder

1. Clavicle (collar bone) - commonly broken
2. Scapula
 - A. Spine and borders
 - B. Acromion (point of shoulder)
 - C. Coracoid process

Upper Limb

1. Humerus
 - A. Greater and lesser tubercles can be felt while rotating the humerus.
 - B. Medial and lateral epicondyles
2. Ulna
 - A. Olecranon
 - B. Head of radius can be felt while supinating and pronating the forearm.
 - B. Head of ulna
3. Radius - distal end is the site for taking the pulse.
4. Carpals
5. Metacarpals (knuckles)
6. Phalanges

Pelvis

1. Iliac crest
2. Anterior superior iliac spine - important landmark for finding the correct site for injections.
3. Ischial tuberosity - possible site of "pressure sores" (decubitus ulcers).

Lower Limb

1. Femur
 - A. Greater trochanter
 - B. Medial and lateral epicondyles
2. Patella
3. Tibia
 - A. Medial and lateral condyles
 - B. Tibial tuberosity
 - C. Medial malleolus
4. Fibula - lateral malleolus
5. Tarsals - note the calcaneus (heel bone)
6. Metatarsals
7. Phalanges