

DISSECTION SCHEDULE

Session I - Pectoral Region

Surface anatomy

- Clavicle and its ends
- Sternal angle, xiphoid process, jugular notch
- Ribs and cartilages
- Nipple and areola
- Axilla and axillary folds

Dissection

- Cutaneous nerves & vessels
- Deep fascia, clavipectoral fascia
- Breast (in female body)
- Pectoralis major muscle
- Cephalic vein

Self study

- *Location, extent, relations, blood supply, lymphatic drainage, applied anatomy of breast*
- *Axillary lymph nodes*
- *Attachments (proximal & distal), nerve supply and actions of pectoralis major*
- *Clavicle - attachments, movements & special features*

Session II - Axilla (Vessels)

Dissection

Muscles

- Pectoralis minor
- Coracobrachialis, short head of biceps

Nerves

- Lateral and medial pectoral nerves
- Median nerve
- Ulnar nerve
- Musculocutaneous nerve
- Medial cutaneous nerve of arm and forearm; intercostobrachial nerve

Vessels

- Thoracoacromial artery
- Axillary artery and vein

Other structures

- Axillary pad of fat
- Axillary lymph nodes

Self study

- *Boundaries and contents of axilla*
- *Origin, course, termination & branches of axillary artery*
- *Attachments, nerve supply & actions of pectoralis minor*

Session III - Axilla (Brachial Plexus)

Dissection

Nerves

- Cords of brachial plexus
- Median nerve
- Musculocutaneous nerve
- Ulnar nerve
- Radial nerve
- Axillary nerve
- Upper and lower subscapular nerves
- Thoracodorsal nerve

Vessels

- Subscapular artery
- Circumflex scapular artery

Joint

- Sternoclavicular joint
- Costoclavicular ligament

Self study

- *Formation, parts, distribution of brachial plexus*
- *Sternoclavicular joint - Type, description, movements*
- *Root value of median, ulnar, radial, musculocutaneous & axillary nerves*

Session IV - Scapular Region

Surface anatomy

- Spine of scapula,
- Inferior angle of scapula
- Acromion
- Spines of vertebrae C7, T1-T12

Dissection

Muscles

- Trapezius
- Latissimus dorsi
- Levator scapulae
- Rhomboid minor
- Rhomboid major

Nerves

- Spinal accessory nerve
- Dorsal scapular nerve

Vessels

- Superficial and deep branches of transverse cervical artery

Self study

- *Scapula Attachments, Movements of scapula*
- *Shoulder girdle*
- *Anastomosis around the scapula*

Session V - Free upper limb & Shoulder

Surface anatomy

- Greater tubercle of humerus
- Medial and lateral epicondyles of humerus

Bones

- Humerus, radius, ulna

Dissection

- Cutaneous nerves
- Cutaneous vessels
- Veins - cephalic, basilic

Muscles

- Deltoid
- Supraspinatus
- Infraspinatus
- Teres major
- Teres minor
- Long head of triceps brachii
- Subscapularis
- Long head of biceps brachii
- Quadrangular space
- Upper and lower triangular spaces of arm

Vessels ➤ Suprascapular vessels

Nerve ➤ Suprascapular nerve

Ligaments

- Coracoclavicular ligament
- Coracoacromial ligament

Joints:

- Interior of shoulder joint
- Glenoid labrum
- Gleno-humeral ligaments
- Acromio-clavicular joint
- Subscapular bursa
- Subacromial bursa

Self study

- *Cutaneous nerves - dermatomes*
- *Veins of upper limb*
Superficial
Deep
- *Lymph vessels and lymph nodes of upper limb*
- *Deep fascia of upper limb*
- *Muscles connecting trunk to scapula*
Attachments, nerve supply, actions
- *Muscles connecting scapula to humerus*
Attachments, nerve supply, actions
- *Shoulder joint – Type, articulation, ligaments, relations, blood supply, nerve supply, movements and muscles producing them*
- *Differences between*
Shoulder girdle movements and
Shoulder joint movements

Session VI - Arm

Dissection

Muscles

- Coracobrachialis
- Biceps brachii (two heads)
- Brachialis
- Triceps brachii (three heads)

Nerves

- Median nerve
- Ulnar nerve
- Radial nerve
- Musculocutaneous nerve

Vessels

- Brachial artery and branches
- Profunda brachii artery and branches

Cubital Fossa

Self study

- *Attachments, nerve supply and actions of biceps brachii, coracobrachialis, brachialis & triceps*
- *Origin, root value, course and distribution of musculocutaneous, axillary nerve and radial nerve*
- *Origin, course, termination and branches of brachial artery & profunda brachii artery*
- *Boundaries and contents of cubital fossa*

Session VII - Forearm and Hand (Superficial)

Dissection

- Superficial muscles of the forearm
- Flexor retinaculum
- Radial artery
- Ulnar artery
- Palmar aponeurosis
- Palmaris brevis
- Superficial palmar arch
- Branches of median nerve & ulnar nerve in the palm
- Flexor tendons, lumbricals
- Fibrous flexor sheath
- Synovial sheath

Self study

- *Attachments, nerve supply and actions of Pronator teres
Flexor carpi radialis
Palmaris longus
Flexor digitorum superficialis
Flexor carpi ulnaris*
- *Formation, relations & branches of Superficial palmar arch*
- *Formation and attachments of Palmar aponeurosis*
- *Boundaries & contents of Carpal tunnel*
- *Attachments of Flexor retinaculum*

Session VIII- Forearm (Deep)

Dissection

- Deep muscles of forearm
- Median nerve
- Anterior Interosseus nerve
- Ulnar nerve
- Radial artery
- Ulnar artery
- Anterior interosseus artery

Self study

- *Attachments, nerve supply and actions of*
Flexor digitorum profundus
Flexor pollicis longus
Pronator quadratus
- *Origin, course, relations And branches of*
Radial artery
Ulnar artery
- *Anastomosis around the elbow joint*
- *Origin, root value, course and distribution*
of Median nerve & Ulnar nerve

Session IX - Hand (Deep)

Dissection

- Muscles of thenar eminence
- Muscles of hypothenar eminence
- Adductor pollicis
- Deep palmar arch
- Deep branch of ulnar nerve
- Palmar interossei

Self study

- *Boundaries and clinical importance of fascial*
spaces of palm
- *Attachments, nerve supply and actions of*
Abductor pollicis brevis
Flexor pollicis brevis
Opponens pollicis
Abductor digiti minimi
Opponens digiti minimi
Adductor pollicis
- *Formations, relations and branches of deep*
palmar arch
- *Movements of thumb*

Session X - Forearm and Hand (Extensor Aspect)

Dissection

- Muscles of extensor compartment
- Extensor retinaculum & its six compartments & contents
- Extensor expansion
- Posterior interosseus nerve & vessels
- Dorsal interossei

Self study

- *Attachments, nerve supply and actions of all*
extensor muscles, palmar and dorsal
interossei, lumbricals
- *Attachments of extensor retinaculum and*
compartments & contents
- *Extensor expansion - Formation & actions*
- *Movements of fingers & thumb*
- *Boundaries and contents of anatomical snuff*
box

Session XI - Joints

Dissection

- Elbow joint
- Wrist joint
- Radio-ulnar joints

Revision and study of bones

Self study

- Type, articulation, ligaments, relations, nerve supply, movements of
 - Elbow joint*
 - Wrist joint*
 - Radio-ulnar joints*
 - Intercarpal, carpometacarpal and intermetacarpal joints*
 - Metacarpophalangeal joints*
 - Interphalangeal joints*

DEMONSTRATIONS

- 1 Clavicle
- 2 Axilla - boundaries and contents
- 3 Brachial plexus
- 4 Scapula; muscles of the back
- 5 Humerus; Shoulder joint; muscles of the shoulder region
- 6 Muscles, vessels & nerves of arm; cubital fossa
- 7 Radius & ulna
- 8 Muscles, vessels & nerves of flexor compartment of forearm
- 9 Articulated hand; palmar aponeurosis, nerves of the hand
- 10 Muscles, vessels & nerves of back of forearm
- 11 Elbow, wrist and 1st CMC joints

TOPICS ANNEXED TO SESSION GOALS

- Mammary gland
- Axillary lymph nodes
- Movements of pectoral girdle
- Scapular anastomosis
- Dermatomes and myotomes
- Elbow anastomosis
- Superficial and deep palmar arches
- Movements of thumb & Carpal tunnel
- Fascial spaces of palm
- Extensor expansion
- Radio-ulnar & Metacarpophalangeal joints

Topics for Clinical Integration (covered in Applied Anatomy lecture)

- Nerve injuries at different levels of median, radial and ulnar nerves
- Concept of common fractures and dislocations
- Surgical approaches

Wilhelm Heinrich Erb
(1840 -1921)



He was a German neurologist. He began his medical career in the fields of toxicology and histology, but later his interest switched to neurology.

Erb's point - an anatomical location 2-3 cm above the clavicle, at the upper trunk of brachial plexus where six nerves meet.

Erb's palsy or Erb-Duchenne palsy - lesion of upper trunk of brachial plexus