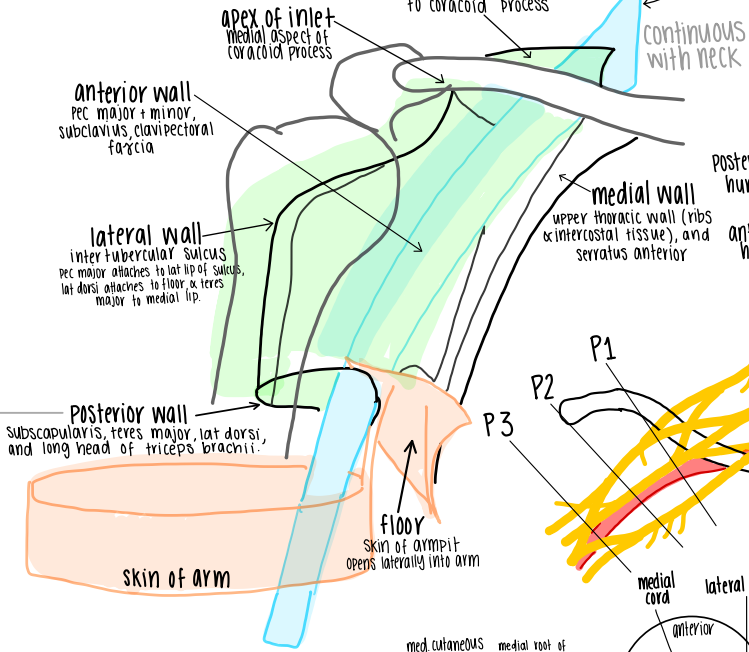
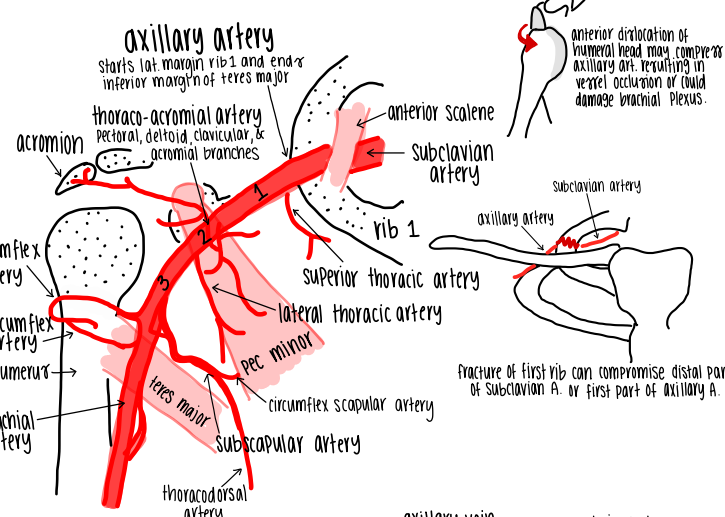


axilla

gateway to upper limb

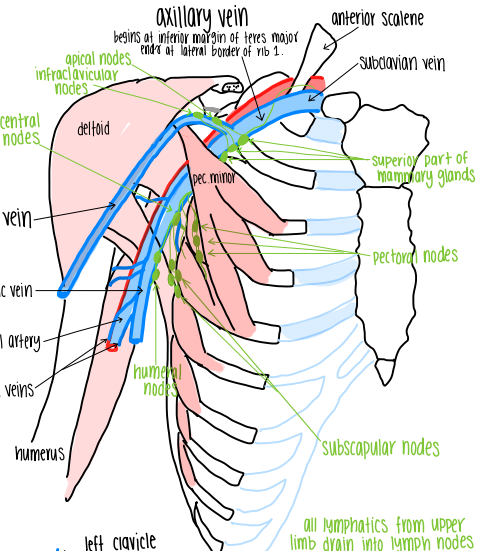
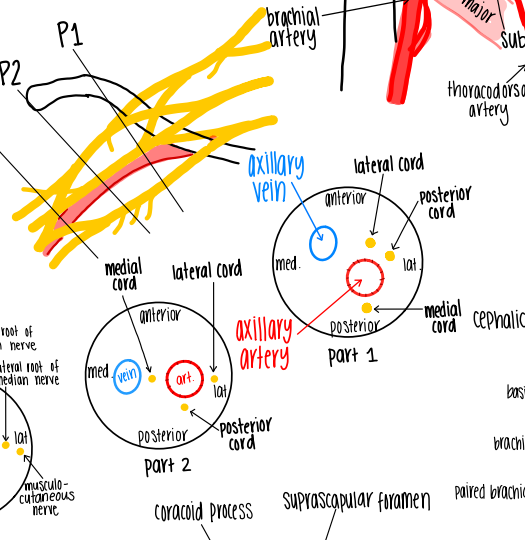


axillary sheath surrounding arteries, veins, nerves, and lymphatics.

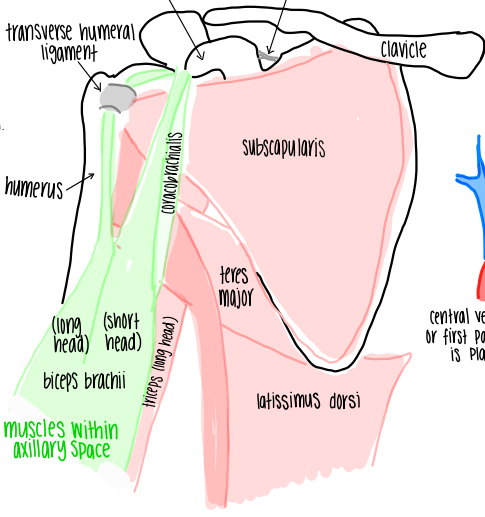
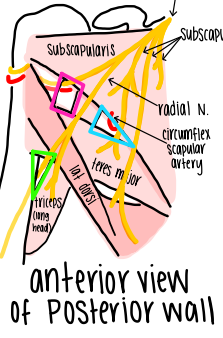
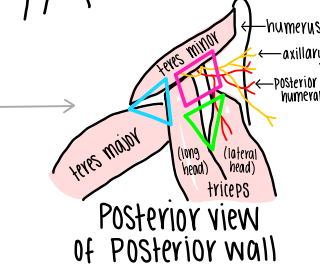


anterior dislocation of humeral head may compress axillary art. resulting in vessel occlusion or fluid damage brachial plexus.

fracture of first rib can compromise distal part of subclavian A. or first part of axillary A.



humeral fracture could compromise circumflex arteries or could cause quadrangular space syndrome by compressing axillary nerve & post. circumflex humeral artery



central venous access is often subclavian or first part of axillary vein. the needle is placed superomedially in the infraclavicular region.

lymphatic drainage from breast passes through lymph nodes, spread to lymphatic system (identified by sentinel node) may require a mastectomy and surgical axillary node clearance.

lymphedema
if lymphatic drainage is compromised the arm cannot drain lymph & excess collects in limb causing swelling & edema

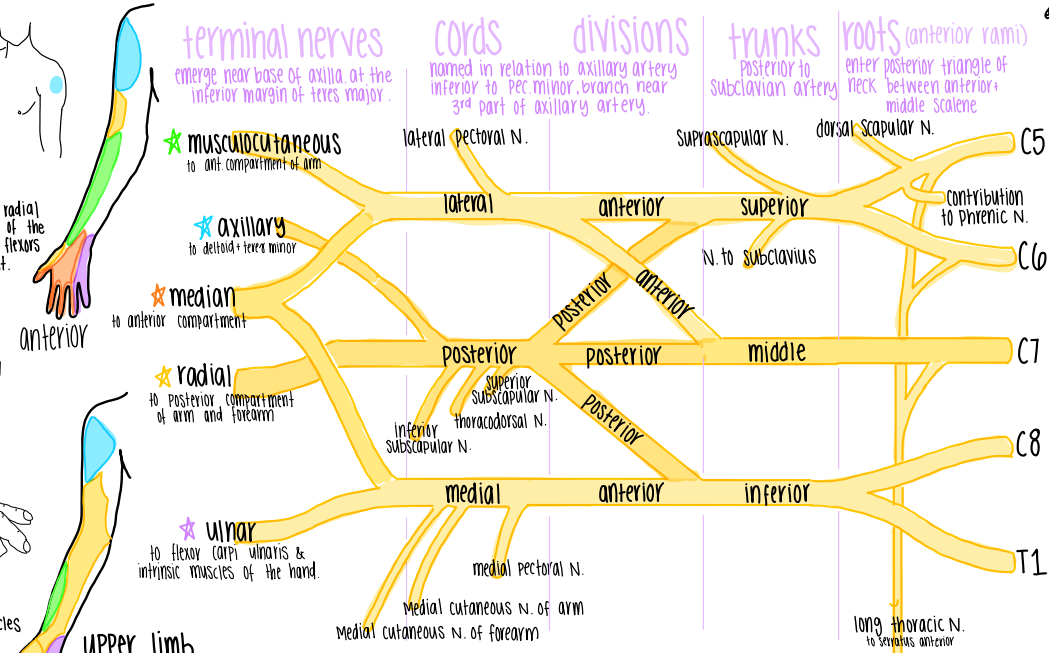
musculo-cutaneous injury weakened flexion of elbow and shoulder if damaged but actions still possible due to brachioradialis & pecr.

axillary nerve damage loss of sensory in regional badge area on arm.

wrist drop due to radial nerve injury. muscles of the posterior arm are paralyzed & flexors have unopposed flexion at wrist.

"Ape hand" due to injury of median nerve

clawed hand due to ulnar nerve lesion. results in loss of function of intrinsic muscles in the hand.



erb's palsy or "waiter's tip hand" due to damage of upper plexus at roots C5+C6. affects anterior arm but action of posterior arm + forearm is unopposed => positioning.

brachial plexus nerve root injury may occur as a result of trauma, may be nontraumatic (e.g. thoracic outlet syndrome), or may have iatrogenic cause. neonatal brachial plexus palsy is a rare iatrogenic injury that occurs in 0.15% of live births.

klumpke's palsy or "claw hand" due to damage to lower plexus roots C8+T1. primarily affects flexors + intrinsic muscles of the hand.

brachial plexus

UPPER limb dermatomes

anterior

posterior

References:

Netter, F. H. (2018). *Atlas of Human Anatomy*, 7th Ed. Philadelphia, PA: Saunders/Elsevier. Print.

Drake, R. L., Vogl, A. W., Mitchell, A. (2019). *Gray's Anatomy for Students*, 4th Ed. Philadelphia, PA: Saunders/Elsevier. Print.

Abrahams, P.H., Spratt, J. D., Loukas, M., van Schoor, A. (2013) *McMinn and Abrahams' Clinical Atlas of Human Anatomy*, 7th Ed. Saunders/Elsevier. Ebook.

Coakley, B. *Anatomy Drawings - Upper Limb*. Digitised copy made available to UCD Medical Students.