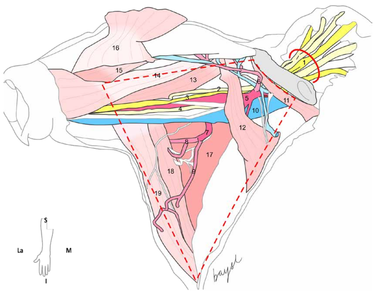
AXILLA



Nerves	1.	Brachial plexus
	2.	Musculocutaneous nerve
	3.	Median nerve
	4.	Ulnar nerve
Arteries	5.	Axillary artery
	6.	Thoraco-acromial artery (2nd branch of Axillary artery)
	7.	Subscapular artery (3rd branch of Axillary artery)
	8.	Circumflex scapular artery
	9.	Thoracodorsal artery
	10.	Axillary vein
Muscles	11.	Subclavius muscle
	12.	Pectoralis minor muscle
	13.	Coracobrachialis muscle
	14.	Biceps muscle (short head)
	15.	Biceps muscle (long head)
	16.	Pectoralis major muscle
	17.	Subscapularis muscle
	18.	Teres major muscle
	19.	Latissimus dorsi muscle

Anterior view of the right axilla region.

The axilla is a pyramid shaped region (red dotted line) located at the junction of the thorax and upper limbs and allows for the passage of neurovascular structures.

It's borders can be defined as:

- Anterior wall – pectoralis major, pectoralis minor and subclavius muscles
- Posterior wall – teres major, latissimus dorsi and subscapularis muscles
- Medial wall – serratus anterior, intercostal muscles and thoracic wall
- Lateral wall – intertubercular groove of the humerus
- Apex – formed by the scapula, clavicle and lateral border of the first rib

The contents of the axilla are:

1. Brachial plexus
2. Axillary artery
3. Axillary vein
4. Muscles – tendons of biceps brachii, coracobrachialis and pectoralis major

CLINICAL CORRELATION

1. Winged scapula – the serratus anterior muscle is innervated by the long thoracic nerve (C5 – C7) and travels down the axilla. If the long thoracic nerve is damaged, this could clinically result in the appearance of a winged scapula. In the event that the innervation to the serratus anterior muscle is compromised, protraction or stabilization of the scapula will not be possible therefore presenting as a winged scapula.

2. Radial nerve palsy – palsy is the paralysis or tremors associated with a nerve, if the axillary nerve is compressed or injured, this can cause palsy of the radial nerve. Prolonged injury to the axillary nerve will in turn result in radial nerve palsy which can cause wrist drop which reduces the grip strength of the affected individual. This occurs as the radial nerve serves to innervate the triceps brachii muscle, the muscles in the extensor compartment of the forearm.

Question(s)

- *The axillary nerve runs through the axilla. Discuss its path, stating its root value and branches.*
- *State the root value of the brachial plexus and the structures it innervates.*
- *Discuss the structures innervated by the axillary nerve and their respective actions.*

Edited by Dr Sara Kashkouli
Illustrated by Bay SL.
Layout by Rebecca Auw.