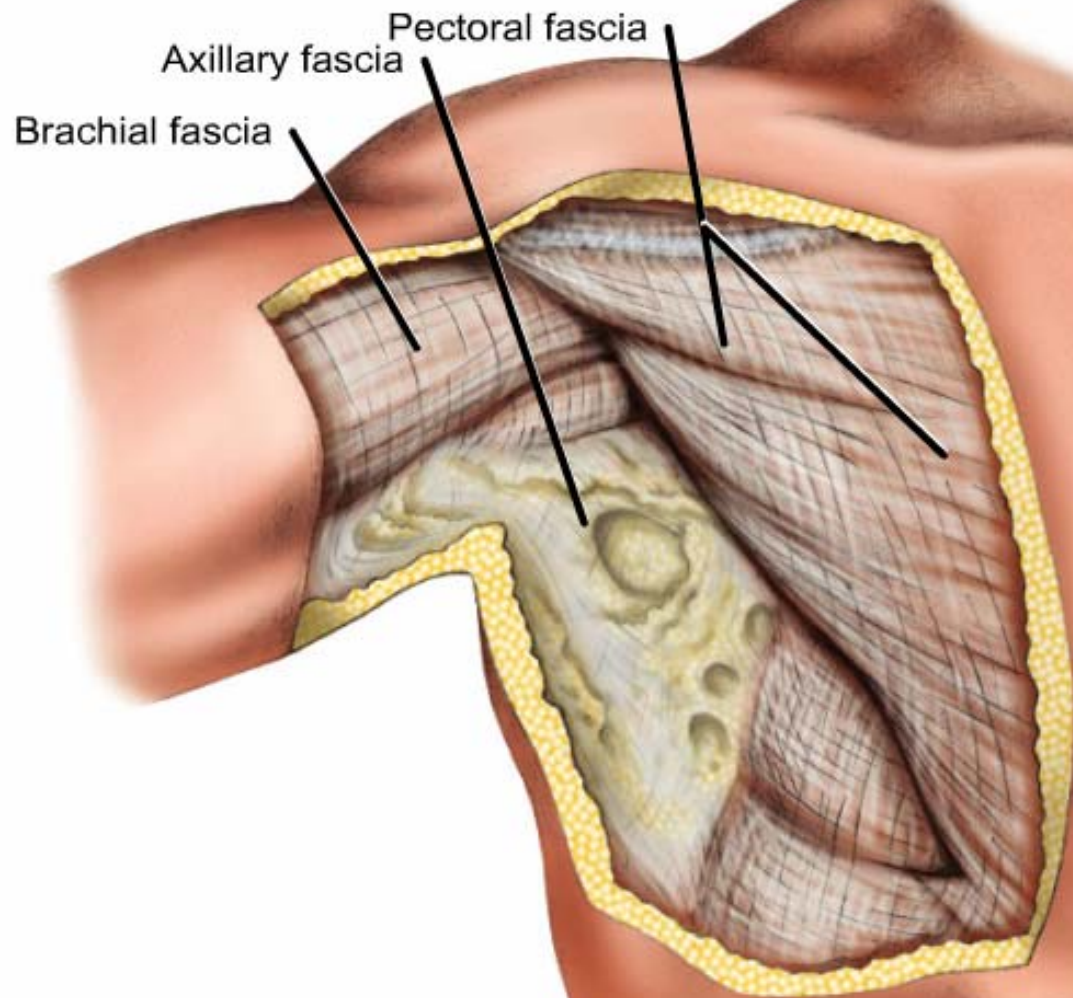


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AXILLA



Anterolateral View

- The axilla is a **pyramidal-shaped space** between the upper part of the arm and the side of the thorax.
- It forms **an important passage** for nerves and vessels from the root of the neck to the upper limb.
- As a pyramid, it has base (floor), apex and 4 walls (anterior, posterior, medial and lateral).
- It has **anterior and posterior folds**.
- **Many structures** pass through the axilla forming its **contents**.

Apex

- Is **directed upward** toward the root of the neck.
- Bounded **anteriorly** by the clavicle, **posteriorly** by the upper border of the scapula and **medially** by the outer border of the first rib.
- Forms a passage for the **axillary vessels and cords of the brachial plexus**.
- It is also called the **cervico-axillary canal**.

Base (floor)

- Is directed downward.
- Bounded anteriorly by the anterior axillary fold and posteriorly by the posterior axillary fold.
- It is made up of skin and axillary fascia.

Walls

➤ Anterior wall:

Pectoralis major, pectoralis minor and subclavius muscles.

➤ Posterior wall:

Subscapularis, latissimus dorsi and teres major muscles.

➤ Medial wall:

Upper 4 ribs and their intercostal spaces and serratus anterior muscle.

➤ Lateral wall:

Coracobrachialis, biceps brachii muscles and bicipital groove of the humerus.

Folds

➤ Anterior fold:

- It represents the lower border of the anterior wall.
- It is formed of the pectoralis major muscle.

➤ Posterior fold:

- It represents the lower border of the posterior wall.
- It is formed by the latissimus dorsi medially and teres major laterally.

➤ The anterior fold is thinner and shorter than the posterior fold.

Contents of the Axilla

1. Axillary artery and its branches.
2. Axillary vein and its tributaries.
3. Cords of the brachial plexus and their branches.
4. Axillary lymph nodes and lymph vessels.
5. Axillary tail of the mammary gland.
6. Axillary fat.

Pectoralis major

➤ Origin:

1. Anterior surface of the medial half of the clavicle
2. Anterior surface of the sternum.
3. Upper six costal cartilage.

➤ Insertion:

Lateral lip of bicipital groove of the humerus.

➤ Nerve Supply:

Medial and lateral pectoral nerves.

➤ Action:

- A. Adduction, flexion and medial rotation of the arm.
- B. Climbing.
- C. It is an accessory muscle of inspiration.

Pectoralis minor

➤ Origin:

3rd, 4th and 5th ribs near their cartilage.

➤ Insertion:

Anterior border of the coracoid process of the scapula.

➤ Nerve Supply:

Medial pectoral nerves.

➤ Action:

A. Depression and protraction of the scapula.

B. If the insertion is fixed, it elevates the 3rd, 4th and 5th ribs.

C. It rotates the scapula downward (with rhomboids).

Subclavius

➤ Origin:

The upper surface of the first costal cartilage.

➤ Insertion:

Middle third of the inferior surface of the clavicle.

➤ Nerve Supply:

Nerve to subclavius (from upper trunk of brachial plexus).

➤ Action:

A. It depresses the clavicle.

B. It steadies the clavicle during movement of the shoulder girdle.

Latissimus dorsi

➤ Origin:

1. Spines of the lower 6 thoracic vertebrae.
2. Lower 3 or 4 ribs.
3. Lumbar fascia and posterior part of iliac crest.
4. Inferior angle of the scapula.

➤ Insertion:

Floor of the bicipital groove of the humerus.

➤ Nerve Supply:

Thoracodorsal nerve.

➤ Action:

- A. Adduction, extension and medial rotation of the arm.
- B. Climbing.

Subscapularis

➤ Origin:

The medial 2/3 of the subscapular fossa of the anterior surface of the scapula and from the inner surface of the subscapular fascia.

➤ Insertion:

The lesser tuberosity of the humerus.

➤ Nerve Supply:

Upper and lower subscapular nerves.

➤ Action:

A. It adducts and medial rotates the arm.

B. It stabilizes the shoulder joints.

Teres major

➤ Origin:

The lower third of the posterior surface of the lateral border of the scapula.

➤ Insertion:

The medial lip of the bicipital groove of the humerus.

➤ Nerve Supply:

Lower subscapular nerve.

➤ Action:

It adducts, extends and medial rotates the arm.

Serratus anterior

➤ Origin:

By 8 digitations from the outer surface of the upper 8 ribs.

➤ Insertion:

To the anterior surface of the medial border of the scapula, mainly near the inferior angle.

➤ Nerve Supply:

Long thoracic nerve (from root of brach. plex.).

➤ Action:

- A. It protracts the scapula anteriorly and fixes it to the thoracic wall.
- B. With the trapezius, it rotates the scapula upward.
- C. It acts as a strong accessory muscle of inspiration.

THANK YOU