

Axillary Artery

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Anatomy of Axillary Artery

- **Origin** ? Continuation of **subclavian artery** at the outer border of 1st rib.
- **Termination** ? Becomes **brachial artery** at lower border of teres major.
- **Course** ? Lies in axilla, surrounded by cords of brachial plexus.
- **Division** ? Divided into 3 parts by **pectoralis minor**:
 1. **First part (proximal to pectoralis minor)** ? 1 branch
 - Superior thoracic artery.
 2. **Second part (behind pectoralis minor)** ? 2 branches
 - Thoracoacromial artery (Clavicular, Acromial, Deltoid, Pectoral branches).
 - Lateral thoracic artery.
 3. **Third part (distal to pectoralis minor)** ? 3 branches
 - Subscapular artery (largest branch).
 - Anterior circumflex humeral artery.

- Posterior circumflex humeral artery.

? Mnemonic: “1, 2, 3 rule ? Screw The Lawyer, Save A Patient”.

Relations of Axillary Artery

First Part

- **Anteriorly** ? Pectoralis major, clavipectoral fascia.
- **Posteriorly** ? 1st intercostal space, serratus anterior.
- **Medially** ? Axillary vein.
- **Laterally** ? Trunks/cords of brachial plexus (at higher level).

Second Part (behind pectoralis minor)

- **Anteriorly** ? Pectoralis minor, pectoralis major.
- **Posteriorly** ? Posterior cord of brachial plexus, subscapularis.
- **Medially** ? Medial cord of brachial plexus.
- **Laterally** ? Lateral cord of brachial plexus.

Third Part

- **Anteriorly** ? Skin, fascia, pectoralis major, medial root of median nerve.
- **Posteriorly** ? Subscapularis, teres major, latissimus dorsi, axillary nerve, radial nerve.

- **Medially** ? Ulnar nerve, medial cutaneous nerves of arm & forearm, axillary vein.
 - **Laterally** ? Lateral root of median nerve, musculocutaneous nerve.
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Clinical Anatomy of Axillary Artery

- **Compression** ? Can be compressed against 1st rib in axilla to control bleeding in upper limb.
- **Aneurysm** ? Axillary artery aneurysm may compress brachial plexus ? pain, paresthesia, weakness.
- **Trauma** ? Injured in stab wounds or dislocation of shoulder.
- **Collateral circulation** ? Important around scapula; ensures blood supply in case of arterial obstruction.
- **Surgical relevance** ? During axillary clearance (for carcinoma breast), artery is exposed and must be preserved along with surrounding nerves.
- **Relations with brachial plexus** ? Clinical basis for **axillary nerve blocks** (anesthesia of upper limb)