

AXILLARY ARTERY

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KGMC

The axillary artery is separated into three parts by the pectoralis minor muscle, which crosses anteriorly to the vessel.

- The **first part** is proximal to pectoralis minor
- The **second part** is posterior to pectoralis minor
- The **third part** is distal to pectoralis minor

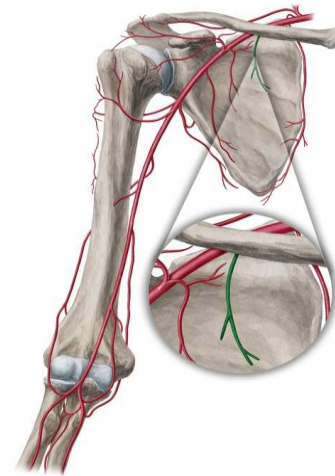
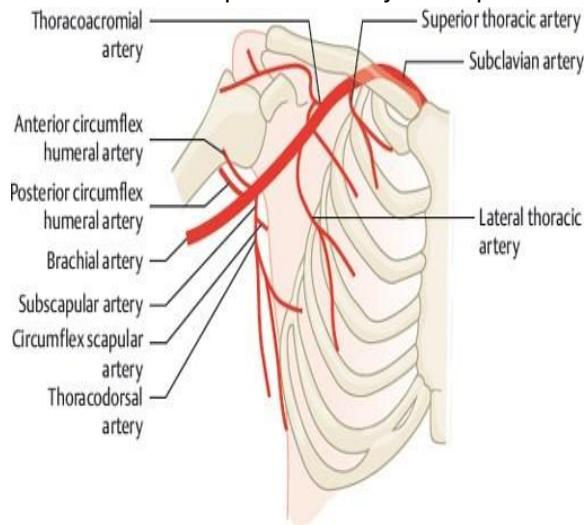
Generally, six branches arise from axillary artery:

1. Superior Thoracic artery
2. Thoraco-acromial artery
3. Lateral thoracic artery
4. Subscapular artery
5. Anterior circumflex humeral artery
6. Posterior circumflex humeral artery

LOCATION OF ARTERIES

1. Superior Thoracic artery

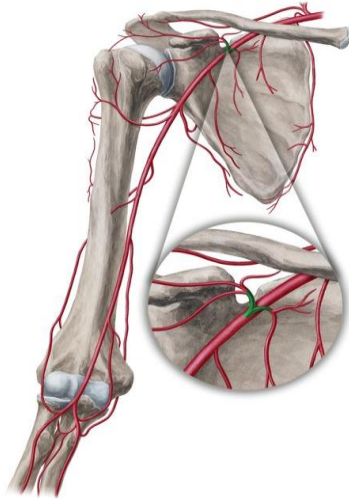
- Originates from anterior surface of first part of axillary artery
- Located between pectoralis major and pectoralis minor



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2. Thoraco-acromial artery

- Originates from anterior surface of second part of axillary artery
 - Posterior to medial (superior) margin of pectoralis minor muscle
 - Penetrates clavipectoral fascia
- (The green portion in diagram represent thoracoacromial artery)



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3. Lateral thoracic artery

- Originates from anterior surface of second part of axillary artery
- Posterior to lateral (inferior) margin of pectoralis minor
- Courses inferomedially along the inferior border of pectoralis minor to the anterior surface of serratus anterior

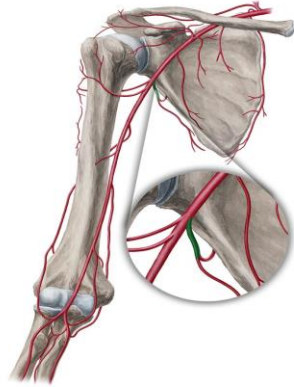


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4. Subscapular artery

- Originates from posterior surface of third part of axillary artery
- Inferior margin of subscapularis muscle

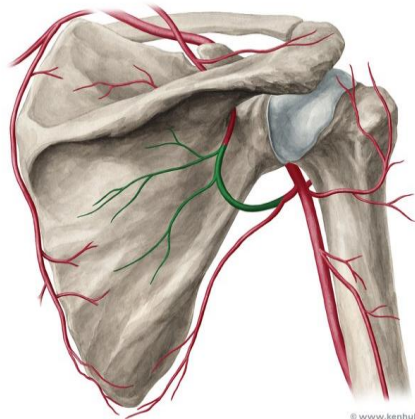


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- Two branches:

1. Circumflex Scapular Artery

- Through triangular space
- Posteriorly, it passes inferior to, or pierces, the origin of the teres minor muscle to enter the infraspinatus fossa
- It anastomoses with the suprascapular artery and the dorsal scapular artery

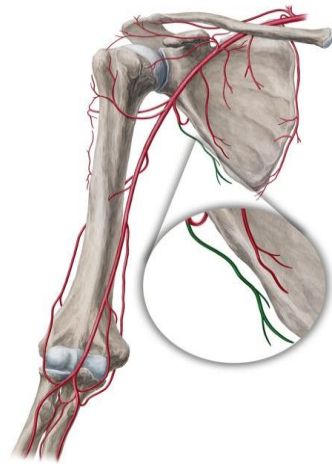


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2. Thoracodorsal Artery

Follows the lateral border of the scapula to the inferior angle



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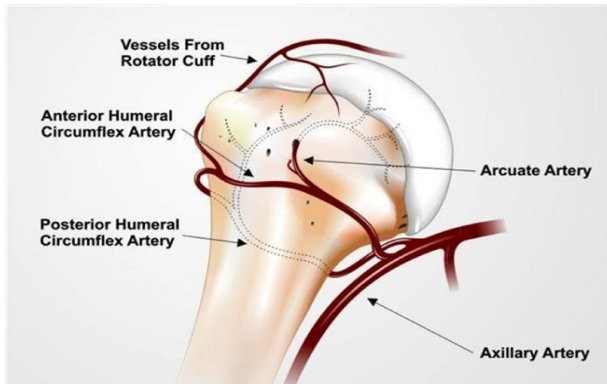
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5. Anterior circumflex humeral artery

- Originates from lateral side of third part of the axillary artery
- Passes anterior to surgical neck of humerus
- Anastomoses with posterior circumflex humeral artery

6. Posterior circumflex humeral artery

- Originates from lateral side of third part of the axillary artery
- Passes through quadrangular space and surgical neck of humerus



ARTERIAL BLOOD SUPPLY

1. Superior Thoracic artery

Supplies upper regions of the medial and anterior axillary walls

2. Thoraco-acromial artery

Supplies the pectoralis major and minor muscles, a part of the deltoid muscle and skin overlying the clavicular fascia.

Four branches

- a. Pectoral – contributes vascular supply to breast
- b. Deltoid – supplies pectoralis major and deltoid muscle
- c. Clavicular – supplies the sternoclavicular joint and subclavius muscle
- d. Acromial – supplies the deltoid muscle

3. Lateral thoracic artery

- Supplies the medial and anterior walls of axilla
- Contributes to vascular supply of breasts

4. Subscapular artery

- Major blood supply to posterior wall of axilla
- Also contributes to blood supply of posterior scapular region

5. Anterior circumflex humeral artery

Supplies branches to surrounding tissues, which include the glenohumeral joint and the head of humerus.

6. **Posterior circumflex humeral artery**

Supplies the surrounding muscles and glenohumeral joint