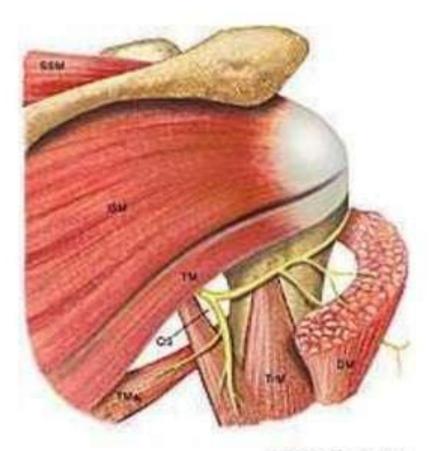
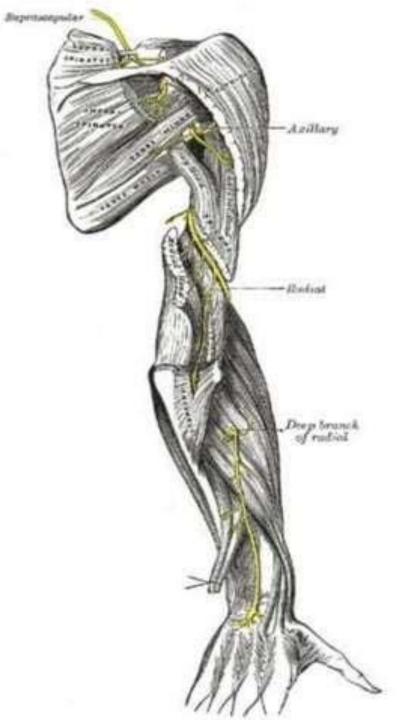
## **AXILLARY NERVE**



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- Branch: Posterior cord of the brachial plexus.
- Root value: C5,C6
- It is also called as circumflex humeral nerve.
- It supplies 2 muscles around shoulder jt i.e. deltoid and teres minor.

#### Course:

arises from the posterior cord of the brachial plexus, and its fibers are derived from the fifth and sixth cervical nerves.

It lies at first behind the axillary artery, and in front of the Subscapularis, and passes downward to the lower border of that muscle. It then winds backward, in company with the **posterior humeral circumflex artery**, through a **quadrilateral space** bounded above by the Subscapularis, below by the Teres major, medially by the long head of the Triceps brachii, and laterally by the surgical neck of the humerus, and divides into **an anterior and a posterior branch**.

The anterior branch (upper branch) winds around the surgical neck of the humerus, beneath the Deltoid, with the posterior humeral circumflex vessels, as far as the anterior border of that muscle, supplying it, and giving off a few small cutaneous branches, which pierce the muscle and ramify in the skin covering its lower part.

The posterior branch (lower branch) supplies the Teres minor and the posterior part of the Deltoid; upon the branch to the Teres minor an oval enlargement (pseudoganglion) usually exists. The posterior branch then pierces the deep fascia and is continued as the lateral cutaneous nerve of arm, which sweeps around the posterior border of the Deltoideus and supplies the skin over the lower two-thirds of the posterior part of this muscle, as well as that covering the long head of the Triceps brachii

### **Branches:**

Muscular branches to: Teres minor

 Sometimes long head of triceps.

Deltoid

#### Cutaneous branches to:

As it terminates as lateral cutaneus nerve of arm, it supplies skin on the lateral aspect of arm.

Articular branches to: ----> Shoulder jt

# Applied anatomy:

- The axillary nerve may be injured in anteriorinferior <u>dislocations of the shoulder joint</u>, compression of the axilla with a crutch or fracture of the surgical neck of the humerus. Injury to the nerve results in:
- Paralysis of the <u>teres minor muscle</u> and <u>deltoid</u> <u>muscle</u>, resulting in loss of abduction of arm (from 15-90 degrees), weak flexion, extension, and rotation of shoulder. Paralysis of deltoid & teres minor results in <u>Flat shoulder deformity</u>.
- Loss of sensation in the skin over a small part of the lateral upper <u>arm</u>.