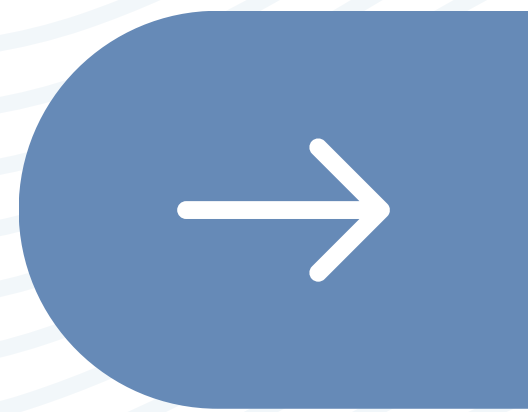


#DIBS BY NEXTILLO

DAILY INFORMATION BULLETIN SERVICE

BRACHIAL PLEXUS





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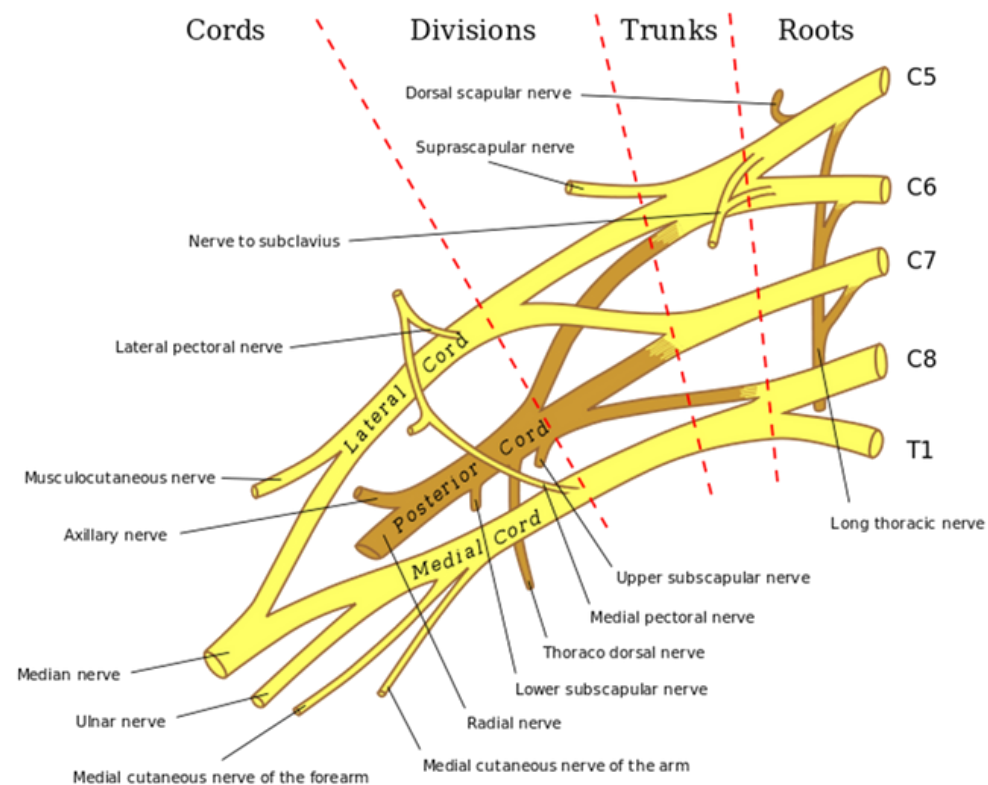
DAILY INFORMATION BULLETIN SERVICE

BRACHIAL PLEXUS

The brachial plexus is a network of nerves in the shoulder that carries movement and sensory signals from the spinal cord to the arms and hands. Brachial plexus injuries typically stem from trauma to the neck, and can cause pain, weakness and numbness in the arm and hand.

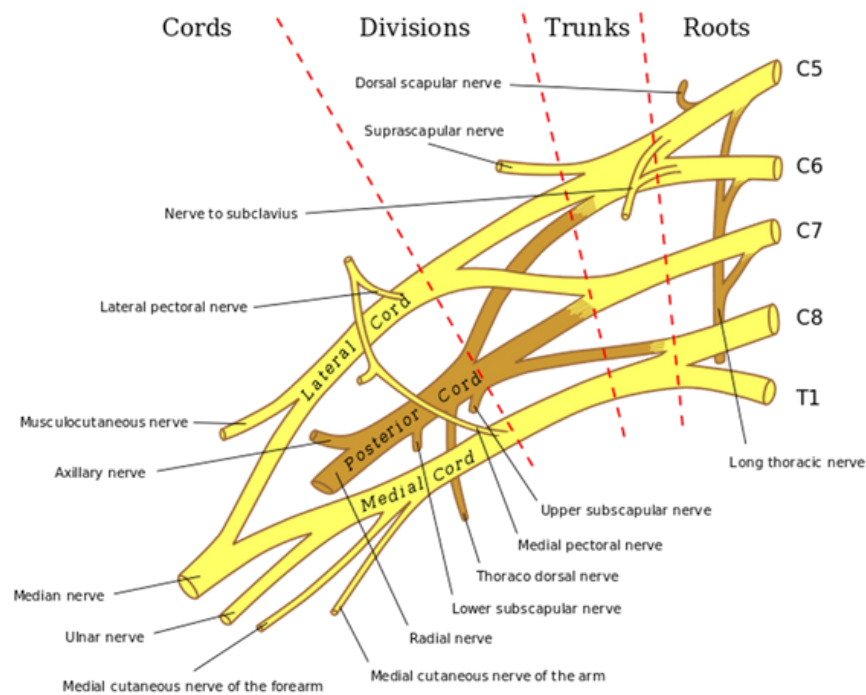


IMAGE DESCRIPTION



The image illustrates the brachial plexus, a nerve network from C5 to T1, detailing its hierarchical structure, trunk classifications, cord formations, and key branches with functional distributions in the upper limb.

CLINICAL IMPRESSION



- **Brachial Plexus Function:** Network of nerves controlling arm movements and sensory signals.
- **Injury Causes:** Trauma, birth complications, surgery, cancer, and sports-related incidents.
- **Symptoms:** Numbness, loss of control, pain, and weakness in the affected arm.
- **Diagnostic Methods:** Physical examination, X-rays, MRI, CT scans, nerve conduction studies.
- **Treatment Options:** Nonsurgical (physical therapy, medication) and surgical interventions (nerve repair, grafts).



BRACHIAL PLEXUS

1. Structural Hierarchy:

Roots, trunks, divisions, cords, and branches constitute the brachial plexus. Protected by the axillary sheath, an extension of the prevertebral fascia.

2. Trunk Classification:

Upper trunk: C5 and C6.

Middle trunk: C7.

Lower trunk: C8 and T1.

3. Divisional Functions:

Anterior divisions form cords supplying mainly flexors.

Posterior divisions create the posterior cord, supplying primarily extensors.

4. Cord Distribution:

Lateral cord: Anterior divisions of upper and middle trunks.

Posterior cord: Comprises all three posterior divisions.

Medial cord: Formed by the anterior division of the lower trunk.

5. Axillary Sheath Cover:

The brachial plexus is covered by the axillary sheath's prevertebral fascia extension.



TRUNK, CORD, AND BRANCH

1. Upper Trunk (C5-C6):

*Contributes to the formation of the lateral and posterior cords.
Nerve supply to shoulder and upper limb muscles.*

2. Middle Trunk (C7):

*Form the lateral and posterior cords.
A central role in nerve distribution to the upper extremities.*

3. Lower Trunk (C8-T1):

*Contributes to the formation of the medial cord.
Crucial for nerve supply to the hand and intrinsic muscles.*

4. Lateral Cord (LML):

*Formed by anterior divisions of upper and middle trunks.
Gives rise to the musculocutaneous nerve and lateral root of the median nerve.*

5. Posterior Cord (STARS):

*Formed by all three posterior divisions.
Gives rise to key nerves like the radial, axillary, and upper subscapular nerves.*



BRANCHES AND NERVE

1. Musculocutaneous Nerve (C5-C7):

Arises from the lateral cord.

Innervates flexors in the anterior compartment of the arm.

2. Ulnar Nerve (C8-T1):

Arises from the medial cord.

Supplies intrinsic hand muscles and provides sensory innervation.

3. Radial Nerve (C5-T1):

Arises from the posterior cord.

Innervates extensors in the posterior compartment of the arm.

4. Median Nerve (C5-T1):

Comprises from lateral and medial cords.

Supplies flexors in the anterior forearm and hand.

5. Additional Noteworthy Nerves:

Dorsal scapular, long thoracic, suprascapular, nerve to subclavius, and more.

These nerves contribute to the motor and sensory functions of specific muscles and regions.



BRACHIAL PLEXUS

Question:

What is the primary function of the posterior divisions of the brachial plexus?

- A) *Supplying mainly flexors*
- B) *Forming the lateral cord*
- C) *Innervating extensors*
- D) *Creating the medial cord*

Answer: C) Innervating extensors