Brachial Plexus Anatomy

Editor: Anthony Busti, MD, PharmD, FNLA, FAHA



ebmconsult.com

Figure:



Axillary Nerve

- Origin: Receives fibers from C5 and C6 and terminal branch of the posterior cord
- Innervation:
 - Glenohumeral joint (Shoulder)
 - Deltoid muscle
 - Teres minor muscle
 - Skin over the superolateral arm (just inferior to the deltoid)

Dorsal Scapular Nerve

- Origin: The posterior of the anterior ramus of C5 (mainly) and some contribution of C4
- Innervation:
 - Rhomboids
 - Levator scapulae (not completely)

Lateral Pectoral Nerve

- Origin: Receives fibers from C5, C6 (mainly), C7 and lateral cord
- Innervation:
 - Pectoralis major muscle (mainly)
 - Pectoralis minor muscle (some fibers extend)

E B M CONSULT[®]

ebmconsult.com

Long Thoracic Nerve

- Origin: Receives fibers from posterior aspect of anterior ramus of C5 and C6 mainly and some C7
- Innervation:
 - Serratus anterior

Lower Subscapular Nerve

- Origin: Receives fibers from C6 and side branches of posterior cord
- Innervation:
 - Subscapularis (inferior aspect)
 - Teres major

Medial Cutaneous Nerve of the Arm

- Origin: Receives fibers from C8 and T1 and side branches of the medial cord
- Innervation:
 - Skin overlying the medial side of the forearm (from medial epicondyle of the humerus to olecranon of the ulna)

Medial Cutaneous Nerve of the Forearm

- Origin: Receives fibers from C8 and T1 and side branches of the medial cord
- Innervation:
 - Skin overlying the medial side of arm (extends down to the wrist)

Medial Pectoral Nerve

- Origin: Receives fibers from C8 and T1 and side branches of the medial cord
- Innervation:
 - Pectoralis minor muscle
 - Pectoralis major muscle (sternocostal portion)

Median Nerve

- Origin: The lateral root of the medial nerve comes from the terminal branch of the lateral cord from C6 and C7 whereas the medial root of the median nerve comes from the terminal branch of the medial cord from C8 and T1
- Innervation:
 - Muscles in the compartment of the anterior forearm except flexor carpi ulnaris and the ulnar half of flexor digitorum profundus.
 - Intrinsic muscles of the palm (ulnar half)
 - Palmar skin

Musculocutaneous Nerve

- Origin: Receives fibers from C5 C7 and the terminal branch of the lateral cord
- Innervation:
 - Muscles in the anterior compartment of the arm which include coracobrachialis, biceps brachii, and brachialis
 - Skin over the lateral aspect of the forearm

Radial Nerve

- Origin: Receives fibers from C5 T1 and the terminal branch of the posterior cord
- Innervation:
 - Muscles of the posterior compartment of the arm and forearm
 - Skin overlying the posterior and inferolateral arm, posterior forearm, and dorsum of the hand (lateral to the 4th digit)

Subclavian Nerve

- Origin: Receives fibers from C5, C6 (mainly), and some C4.
- Innervation:
 - Subclavius muscle
 - Sternoclavicular joint

Suprascapular Nerve

- Origin: Receives fibers from C5 (mainly), C6, and some C4
- Innervation:
 - Infraspinatus muscle
 - Supraspinatus muscle

Thoracodorsal Nerve

- Origin: Receives fibers from C6, C7, C8 and a side branch of the posterior cord
- Innervation:
 - Latissimus dorsi

Ulnar Nerve

- Origin: Receives fibers from C8, T1, and some C7 and the terminal branch of the medial cord
- Innervation:
 - Flexor carpi ulnaris
 - Flexor digitorum profundus (basically the forearm)
 - Intrinsic muscles of the hand
 - Skin overlying the medial aspect of the hand from 4th digit

Upper Subscapular Nerve

- Origin: Receives fibers from C5 and branch of the posterior cord
- Innervation: Superior portion of subscapularis

ebmconsult.com

E B M CONSULT[®]