

UPPER LIMB MUSCLES	ANATOMICAL LOCALISATION
Flexor digitorum Superficialis C7 C8 T1 Middle and lower trunks Lateral and medial cords N medianus	Grasp wrist, point the index finger to biceps tendon, place needle ulnar to tip of finger at the middle and upper third junction of the forearm to get slip of muscle to middle finger, insert 2 cm deep to get to the muscle perpendicular to the skin
Flexor pollicis longus C7 C8 T1 Middle and lower trunks Lateral and medial cords N medianus (n interosseous anterior)	At the mid forearm, below shaft of radius, ulnar side
Pronator Quadratus C7 C8 Middle and lower trunks Lateral and medial cord N medianus (n interosseous anterior)	Supinate hand with elbow bent, 2 finger breadth proximal to midpoint from inter styloid process line, insert needle from dorsal surface to avoid nerves and vessels, penetrate interosseous membrane
Flexor pollicis brevis C8 T1 Lower trunk Medial cord Ulnar and median	1/3 rd of distance from ulnar aspect of first metacarpophalangeal joint to pisiform bone, 1 cm deep or 1/3 rd distance between the tubercle to the trapezium and base of the middle finger
Adductor pollicis C8 T1 Lower trunk Medial cord ulnar	Hand pronated, at free edge of first web space
First dorsal interosseous C8 T1 Lower trunk Medial cord ulnar	1 finger breadth distal from the angle between 1 st and 2 nd metacarpal bones midway between first and 2 nd metacarpal, aim the needle toward the head of the 2 nd MCP at 30 degrees angle
Abductor digiti minimi C8 T1 Lower trunk Medial cord ulnar	Midway between distal wrist crease and distal palm crease in the ulnar edge of the hand
Opponens digiti minimi C8 T1 Lower trunk Medial cord ulnar	Midway between midpoint pisiforme and midpoint 5 th MCP
Abductor pollicis brevis C8 T1 Lower trunk Medial cord median	Midway between trapezium just lateral to flexor carpi radialis attachment at the wrist and the radial MCP, insert needle just lateral to the junction of the palmar and dorsal surface, aim the needle toward the bulk of the muscle

UPPER LIMB MUSCLES	ANATOMICAL LOCALISATION
Opponens pollicis C8 T1 Lower trunk Medial cord median	Midway between radial aspect of 1 st carpometacarpal and MCP 1. Straight in right next to the bone
Supinator C5 C6 C7 Upper and middle trunk Posterior cord radial	Lateral to the biceps brachii tendon on the radial tuberosity
Extensor carpi ulnaris C7 C8 Middle and lower trunk Posterior cord Radial Posterior interosseus	Pronate hand, lateral to subcutaneous edge of shaft of ulna at mid forearm
Extensor digitorum C7 C8 Middle and lower trunk Posterior cord Radial Posterior interosseus	Pronate hand, grasp forearm at wrist, drop index finger at junction of proximal and mid third of forearm, line up with lateral epicondyle
Extensor indicis proprius C7 C8 Middle and lower trunk Posterior cord Radial Posterior interosseus	2 finger breath proximal to ulnar styloid and 1 finger breath radial to ulna in extensor forearm (same as pronator quadratus insertion point) aim the needle proximally
Extensor pollicis longus C7 C8 Middle and lower trunk Posterior cord Radial Posterior interosseus	Distal 1/3th of extensor forearm, along radial border of ulna
Extensor pollicis brevis C7 C8 Middle and lower trunk Posterior cord Radial Posterior interosseus	4 fingerbreadths above radial styloid, 1 cm ulnar to the edge of the radius
Abductor pollicis longus C7 C8 Middle and lower trunk Posterior cord Radial Posterior interosseus	4 fingerbreadths above radial styloid on the radius

UPPER LIMB MUSCLES	ANATOMICAL LOCALISATION
Flexor carpi ulnaris C8 T1 Lower trunk Medial cord ulnar	1/3th down ulna from olecranon, 2 fingerbreadth volar to subcutaneous edge of shaft of ulna
Flexor digitorum profundus C8 T1 Lower trunk Medial cord Ulnar and median Anterior interosseus	Flex wrist, elbow; 4 finger breath from olecranon off ulna, deep to FCU for ulnar portion, for median portion insert the needle deep toward midpoint of arm
Pronator teres C6 C7 Upper and middle trunks Lateral cord median	Midway point between medial epicondyle and biceps tendon, 2 finger breath distal to cubital crease on a line toward the radial styloid
Flexor carpi radialis C6 C7 Upper and middle trunks Lateral cord median	Midway point between medial epicondyle and biceps tendon at the cubital crease, 4 finger breath distal along the line that joins the midpoint and the radial styloid
Romboid C5 Dorsal scapular	$\frac{3}{4}$ of the way down at the medial edge of the scapula with the needle angled along the course of the rhomboid toward the spine
Levator scapulae C3C4 cervical nerve C5 dorsal scapular	In a line extending from the medial angle of the scapula to the occipital protuberance approximately 2,5 cm from the scapula
Serratus anterior C5 C6 C7 Long Thoracic	In lateral decubitus position, mid axillary line and four fingerbreadths below the axilla. Insert needle directly above the rib. Keep fingers in the intercostal spaces.
Infraspinatus C5C6 Upper trunc Suprascapular	Mid part of spine of scapula, draw a line to the angle of scapula. Insert the needle 5 cm below the spine on this line
Supraspinatus C5C6 Upper trunc Suprascapular	Sitting, half way point between medial and lateral border of scapular spine at the superior edge
Teres minor C56 Upper trunc Posterior cord axillary	Patient prone with forearm over the table, with arm in abduction 90 degrees and elbow bent, 2 cm distance under acromion on the line to angle of scapula along lateral margin of scapula

UPPER LIMB MUSCLES	ANATOMICAL LOCALISATION
Latissimus dorsi C5/67 Upper/ middle trunc Posterior cord thoracodorsal	One fingerbreadth lateral to inferior angle of scapula. Aim the needle toward posterior axillary fold.
Subscapularis C5/67 Upper/ middle trunc Posterior cord Upper and lower subscapular	Lateral decubitus position on the side of the muscle to be examined. Shoulder in external rotation and abduction. Midpoint of medial edge and deep to the scapula, aiming to hug the anterior surface of the scapula
Teres major C5/67 Upper/ middle trunc Posterior cord Upper and lower subscapular	Arm over the examination table, with shoulder at 90 ° abduction and elbow bent in prone position. 1/3 distance from the lower angle at the lower margin of the scapula
Anterior deltoid C5 (C6) Upper trunc Posterior cord Axillary nerve	Medial edge of acromion, 3 finger breadths below on a line towards the biceps tendon
Middle deltoid C5 (C6) Upper trunc Posterior cord Axillary nerve	3 to 4 fingerbreadths below the distal end of acromion. To the bulk of the muscle around shoulder toward deltoid tuberosity
Posterior deltoid C5 (C6) Upper trunc Posterior cord Axillary nerve	Posterior edge of acromion, 3 fingerbreadth below on a line toward olecranon
Triceps lateral head C6/7(C8) Upper and middle trunc (and lower trunc) Posterior cord Radial nerve	1/3th of the way above the elbow on the lateral side of the arm just posterior to the humerus with elbow flexed and rested on the exam table with hand on the body in pronation, insert the needle perpendicular to the arm
Anconeus C7(C8) Middle and lower trunc Posterior cord Radial nerve	Halfway between olecranon and medial epicondyle
Brachialis C5/6 Upper trunc Lateral and posterior cord Musculocutaneous and radial	3 fingerbreadths proximal to the insertion of the biceps tendon on the tuberositas radii lateral to the biceps brachii
Coracobrachialis C5/6 Upper trunc Lateral cord musculocutaneous	Four fingerbreadths distal to coracoid process off anterior axillary fold

UPPER LIMB MUSCLES	ANATOMICAL LOCALISATION
Biceps brachii C5C6 Upper trunc Lateral cord musculocutaneus	Bulk of muscle in anterior mid arm, angle the needle proximally
Brachioradialis (C5)C6 Upper trunc Posterior cord Radial nerve	1 fingerbreadth lateral to biceps tendon and 2 fingerbreadths distal to elbow crease
Extensor carpi radialis longus (C5)C6(C7) Upper and medial trunc Posterior cord Radial nerve	4 fingerbreadths distal along the joining midpoint between lateral epicondyle and biceps brachii tendon to the radial styloid at the wrist (forearm semipronated)

www.pascalprool.be