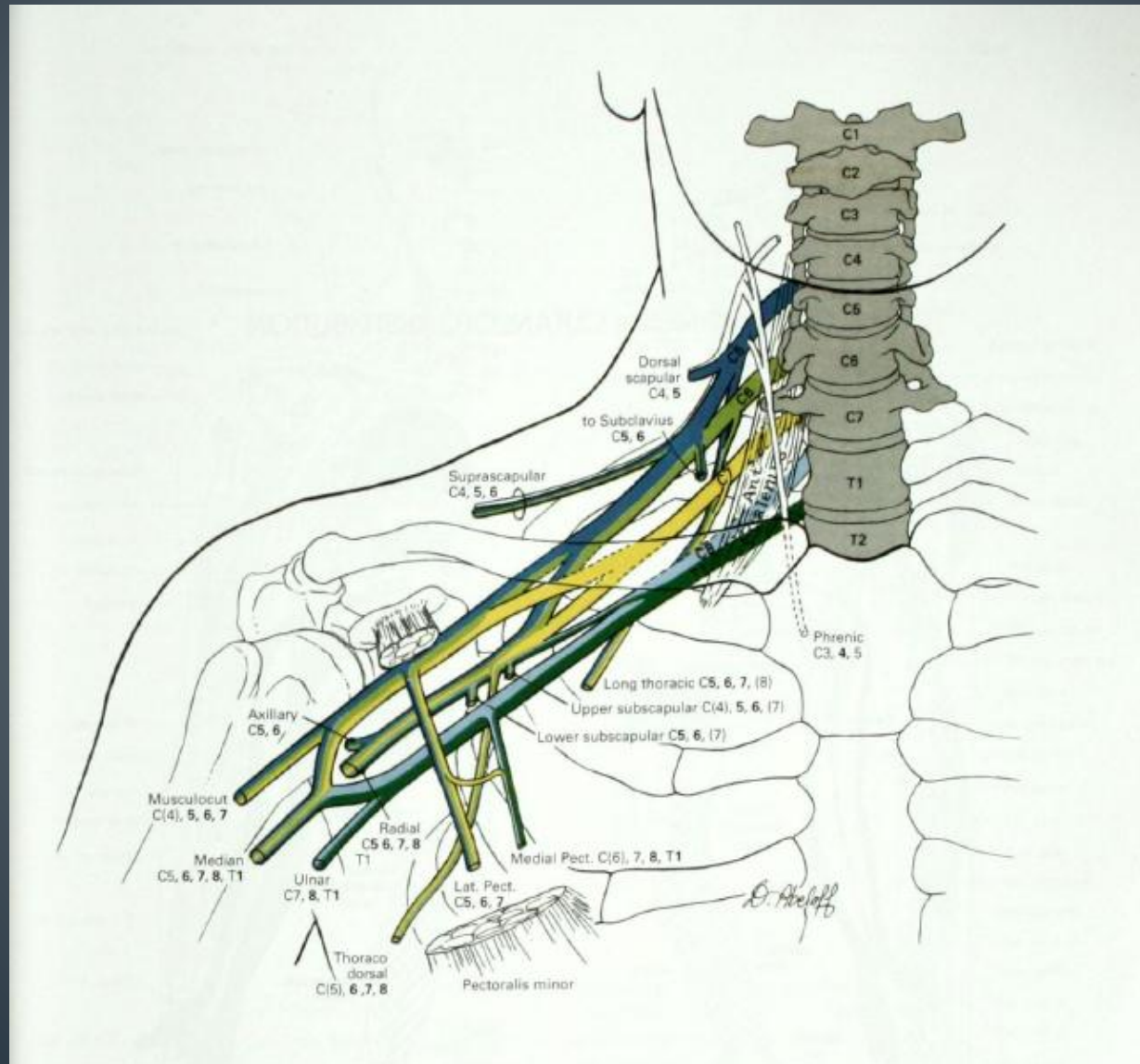


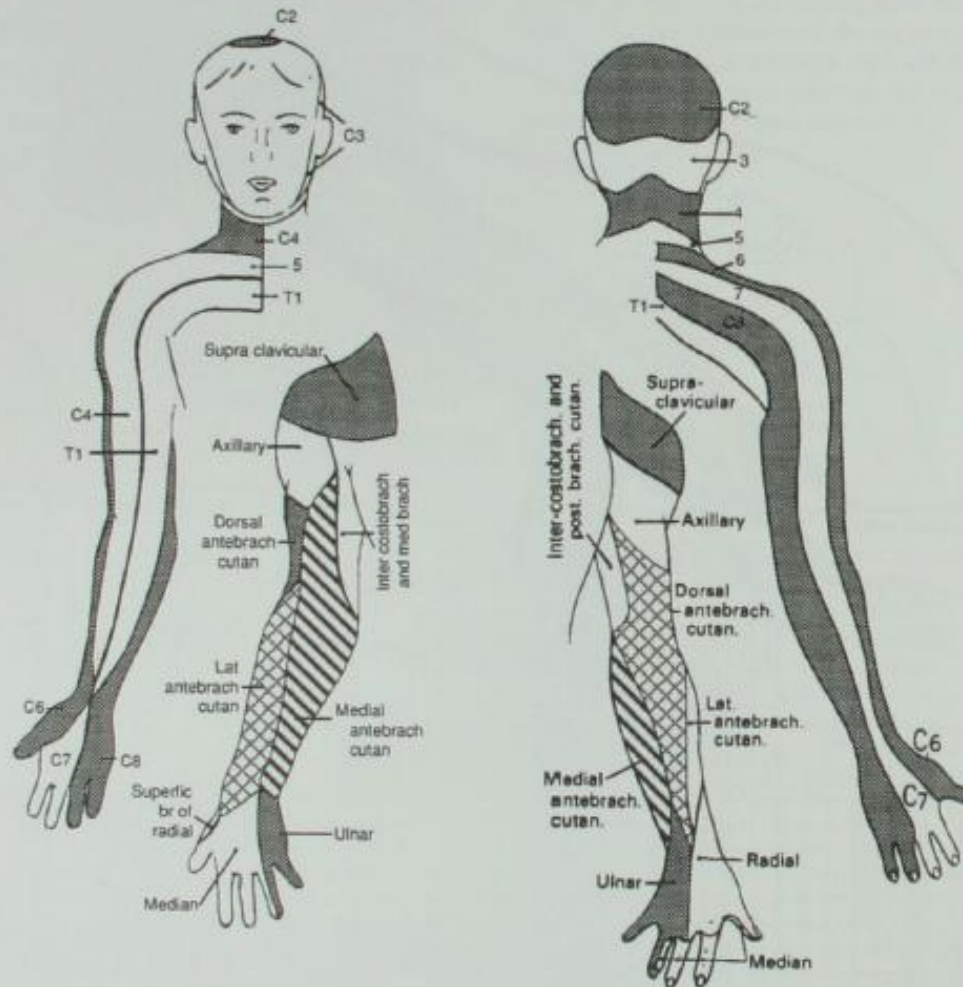
Upper Extremity And Shoulder Girdle

The Brachial Plexus

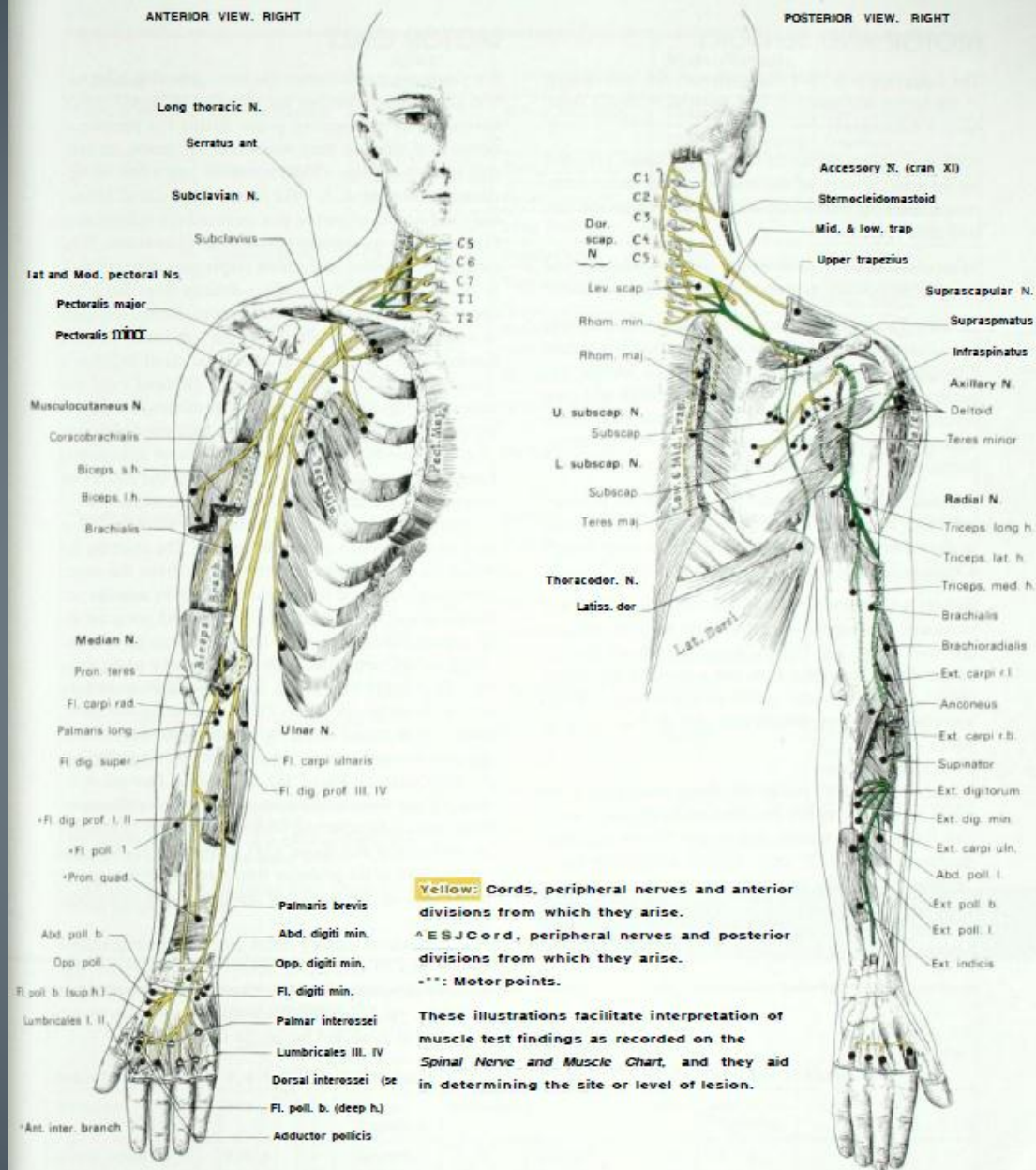


Cutaneous Distribution

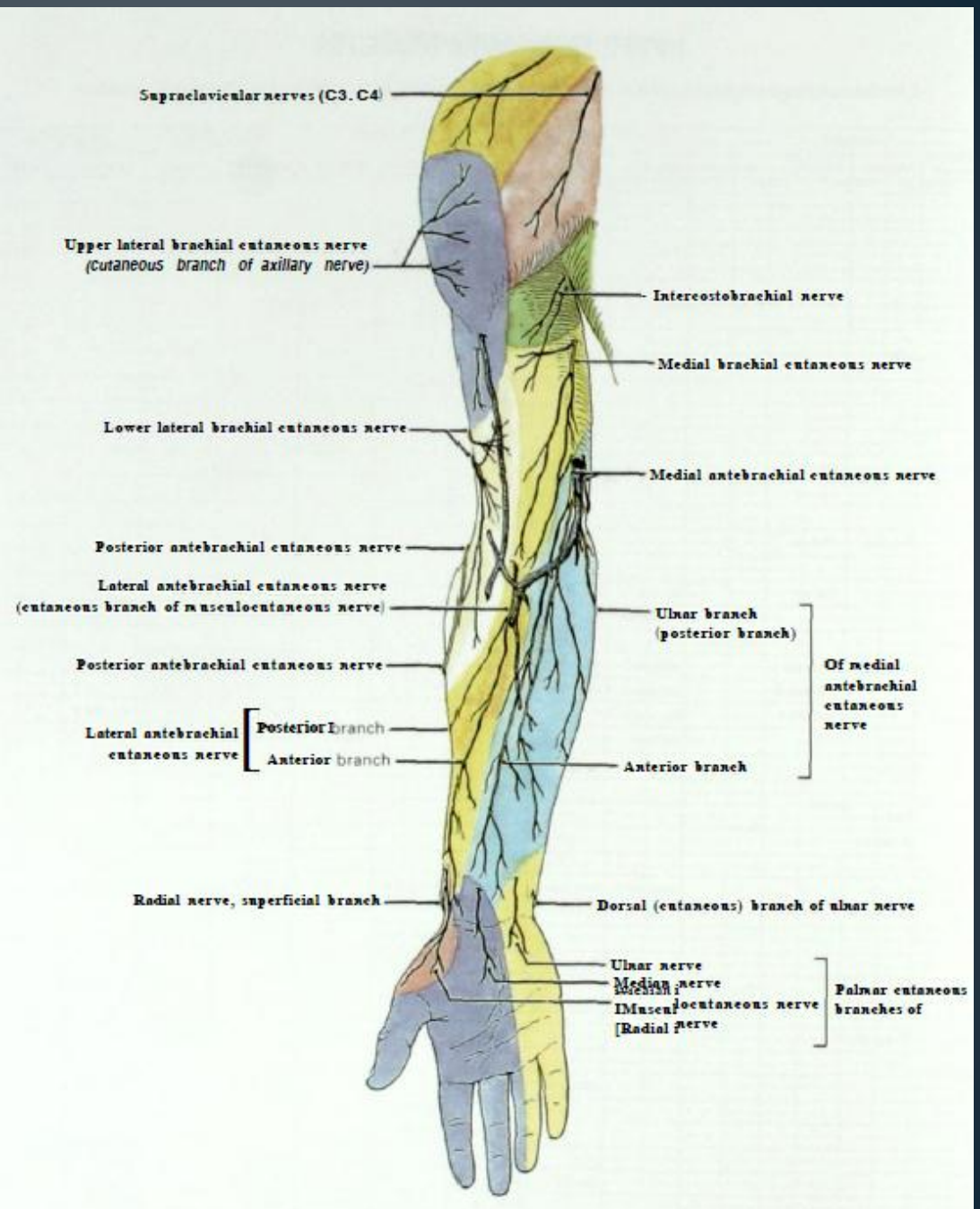
DERMATOMES + CUTANEOUS DISTRIBUTION



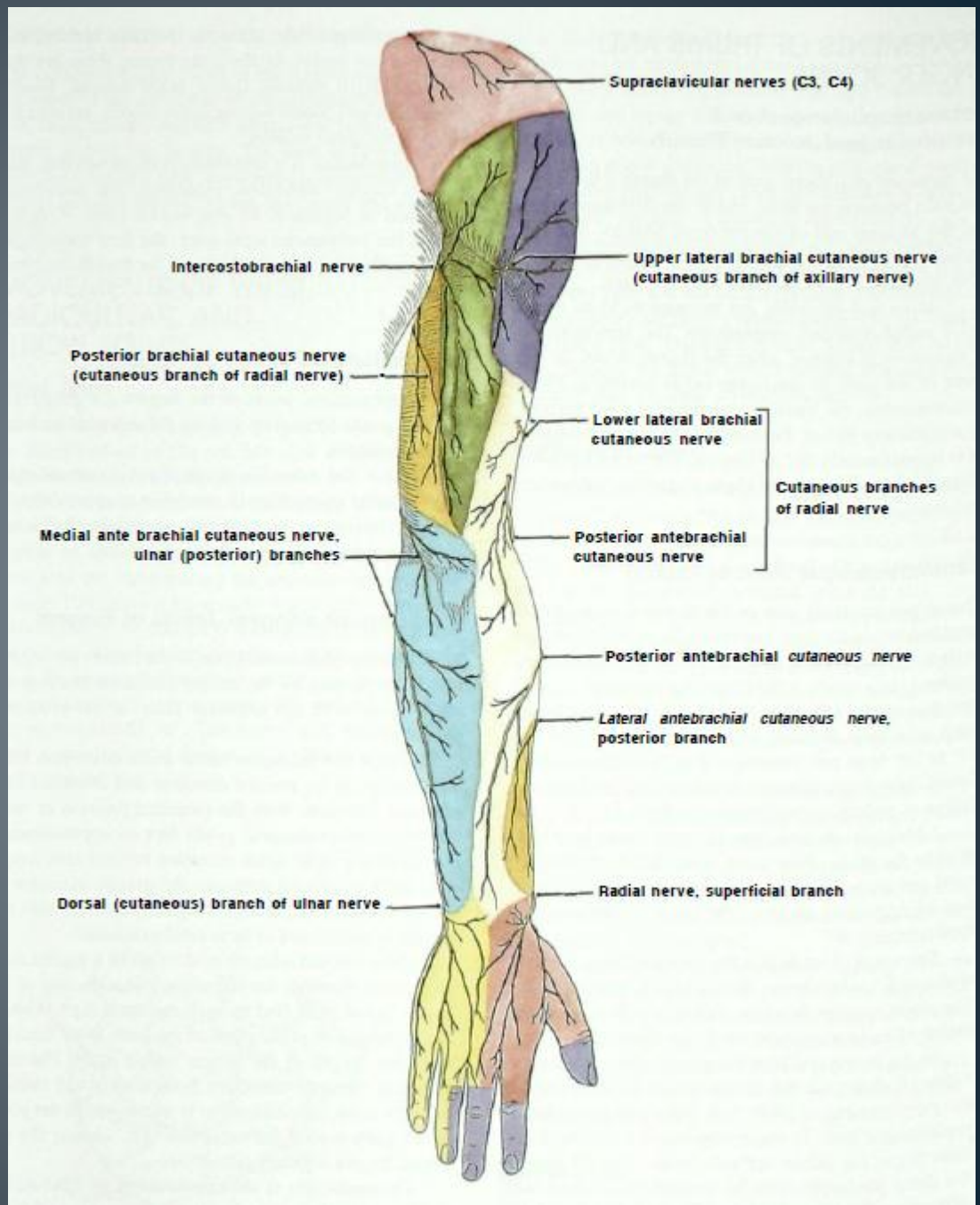
Spinal Nerve And Motor Point Chart



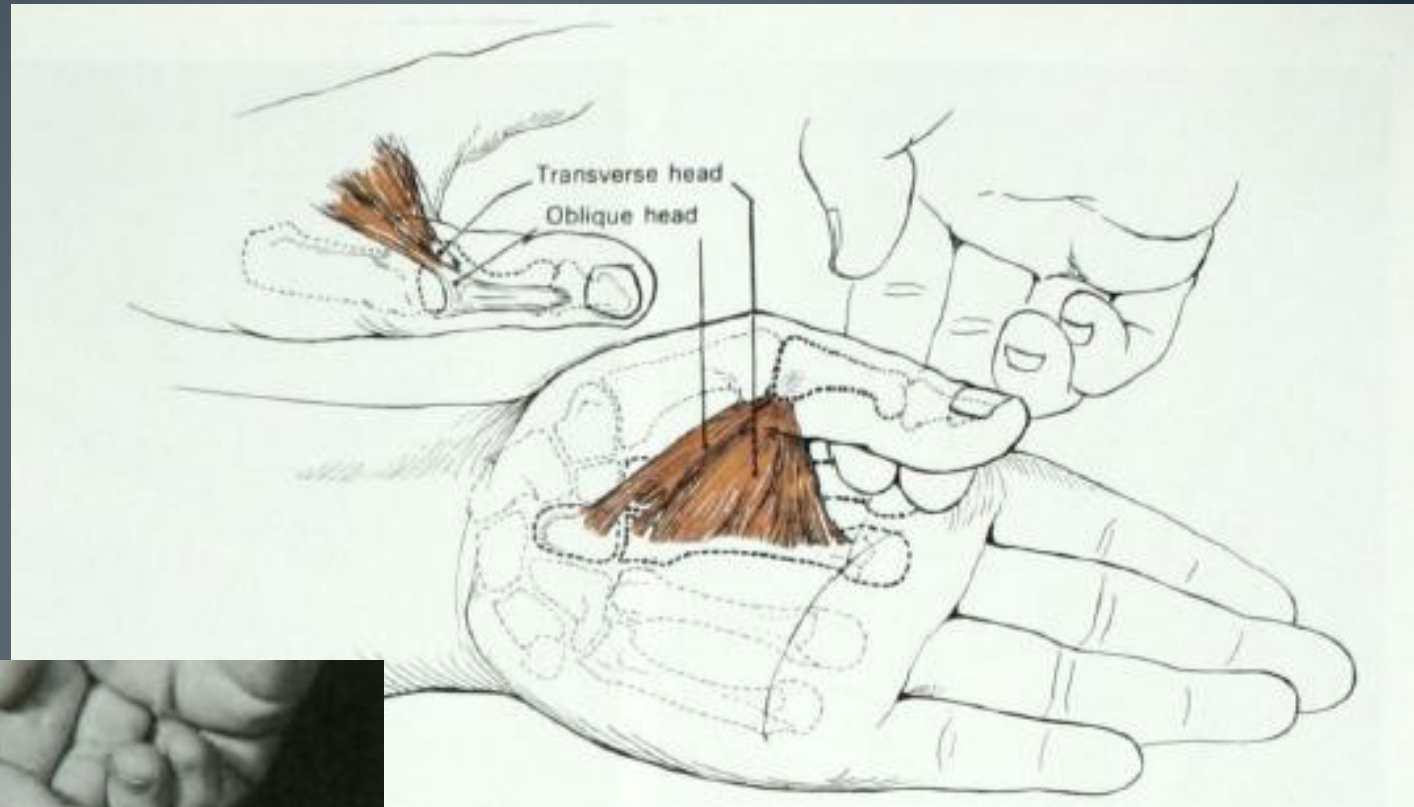
Cutaneous Nerves Of The Upper Limb: Anterior View



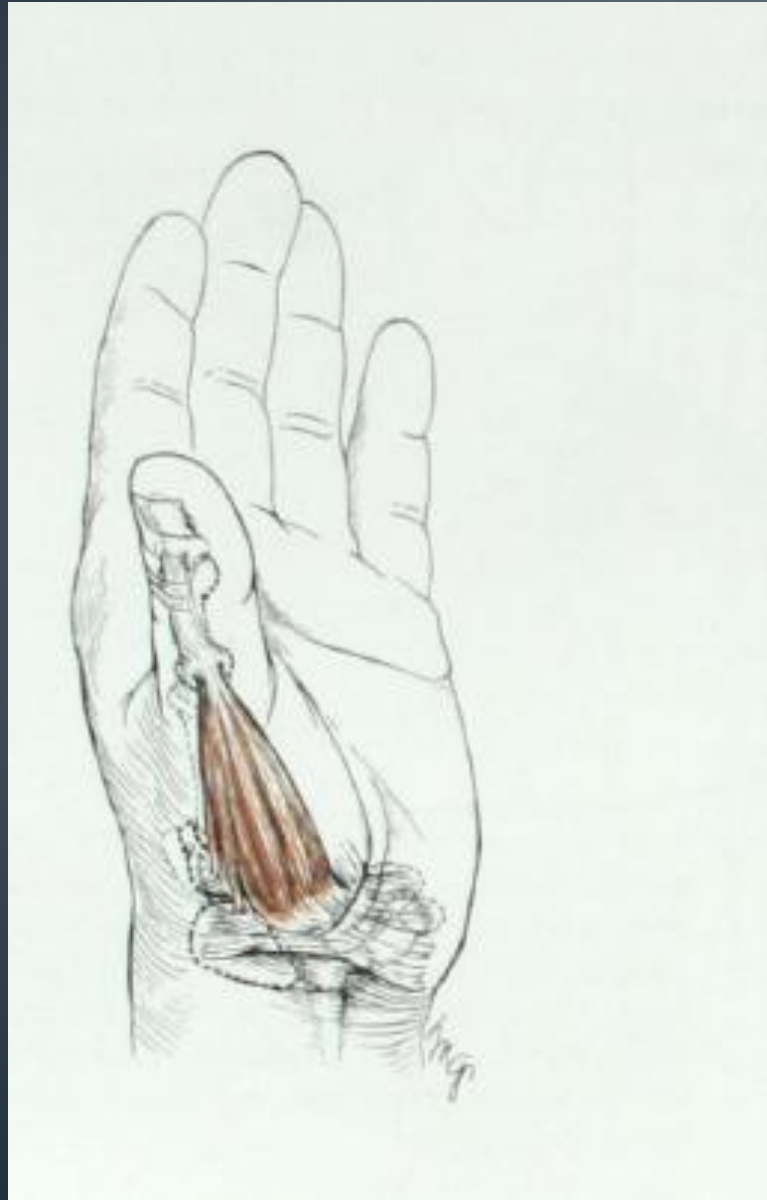
Cutaneous Nerves Of The Upper Limb: Posterior View



Adductor Pollicis



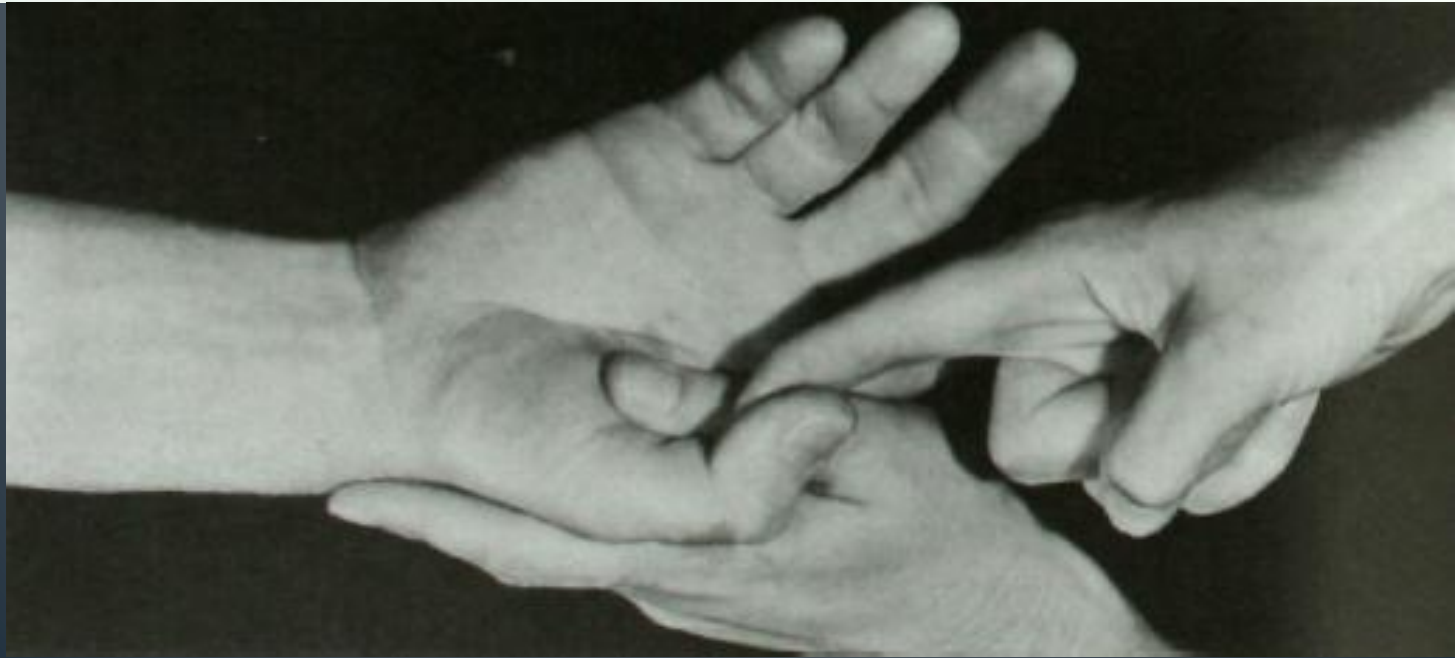
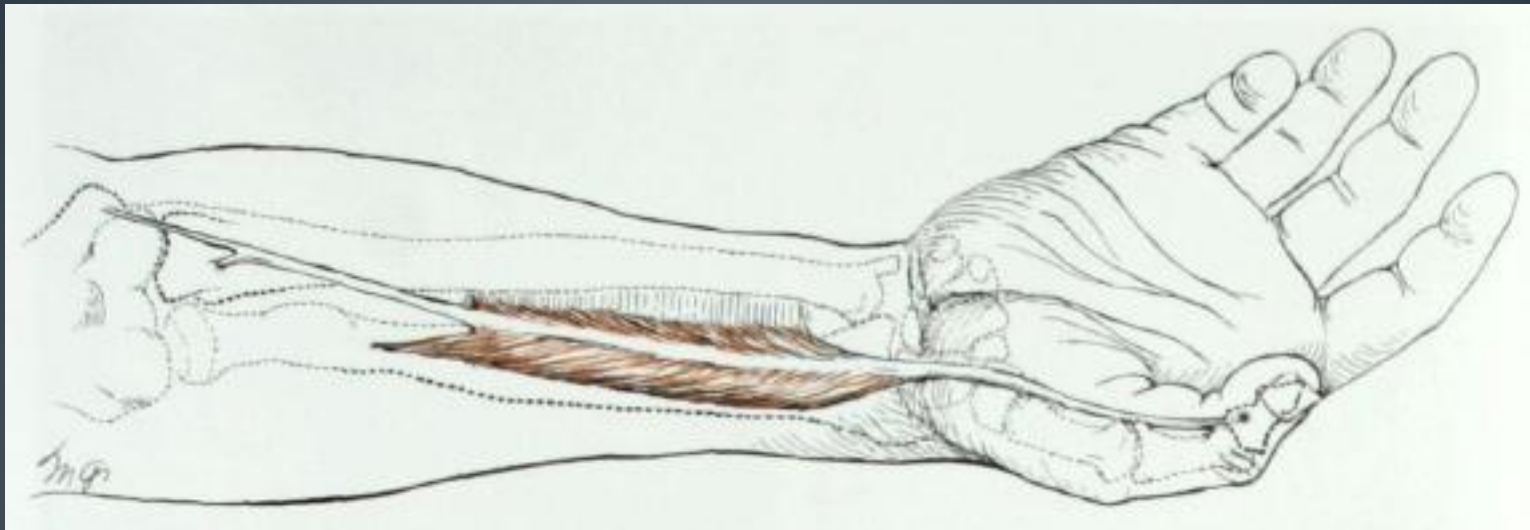
Abductor Pollicis Brevis



Opponens Pollicis



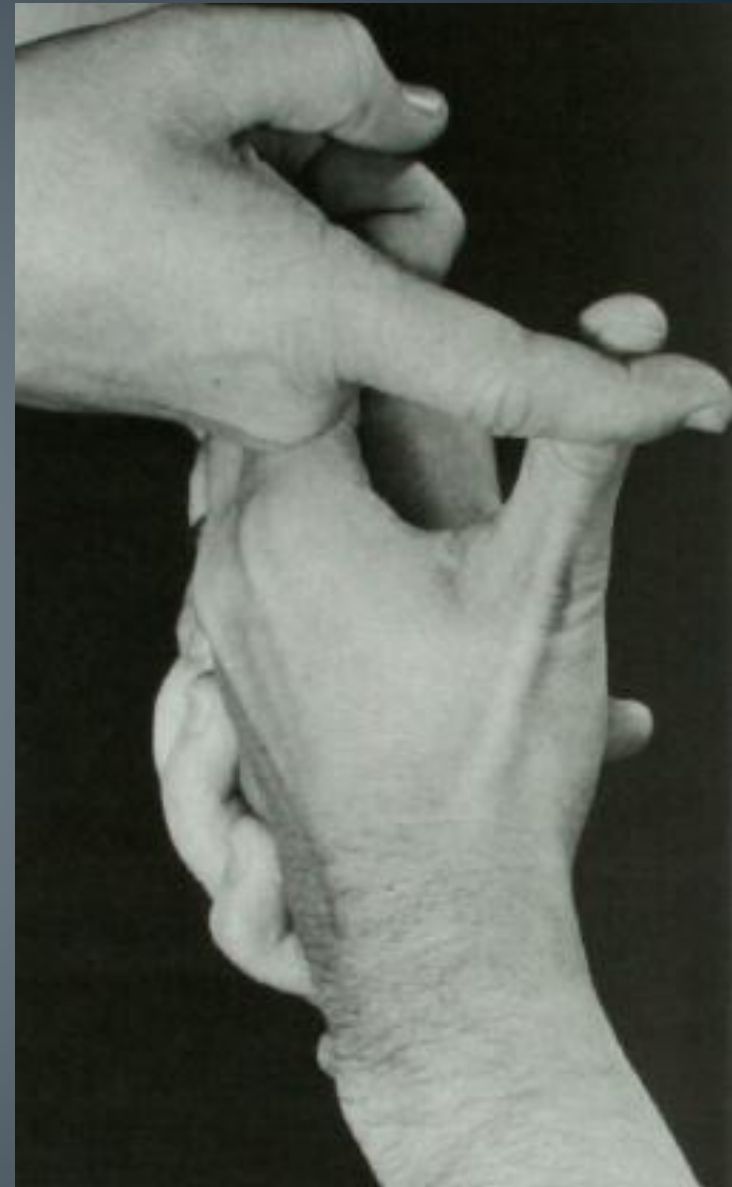
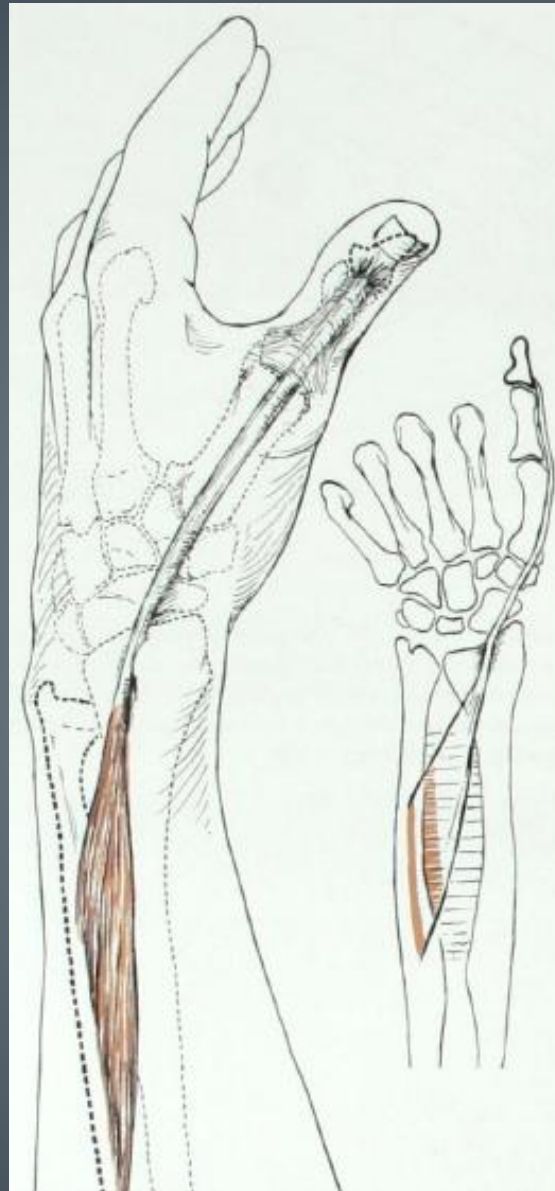
Flexor Pollicis Longus



Flexor Pollicis Brevis



Extensor Pollicis Longus



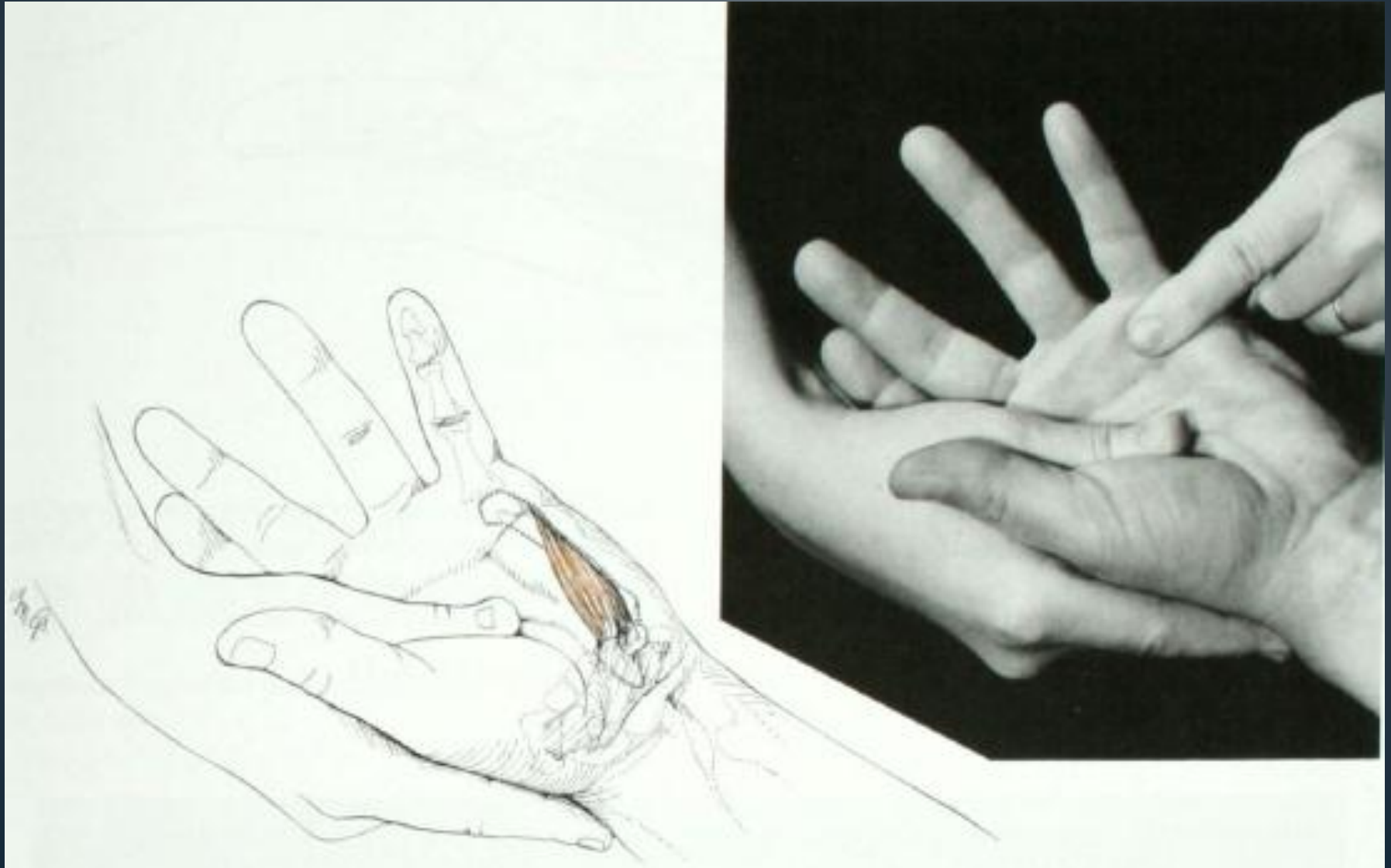
Extensor Pollicis Brevis



Abductor Polucis Longus



Opponens Digiti Minimi



Abductor Digiti Minimi



Flexor Digiti Minimi



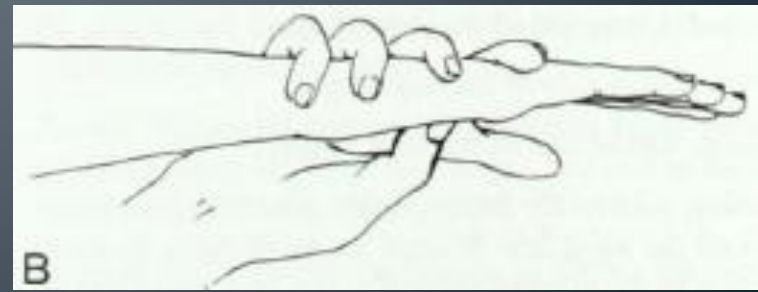
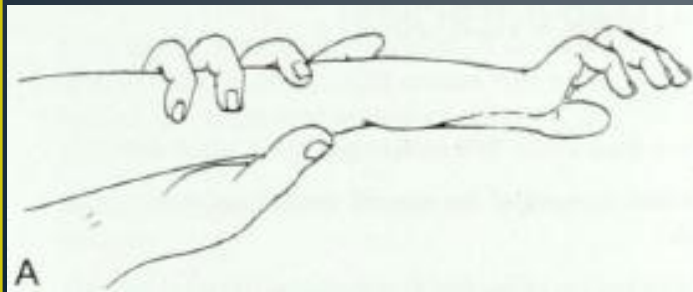
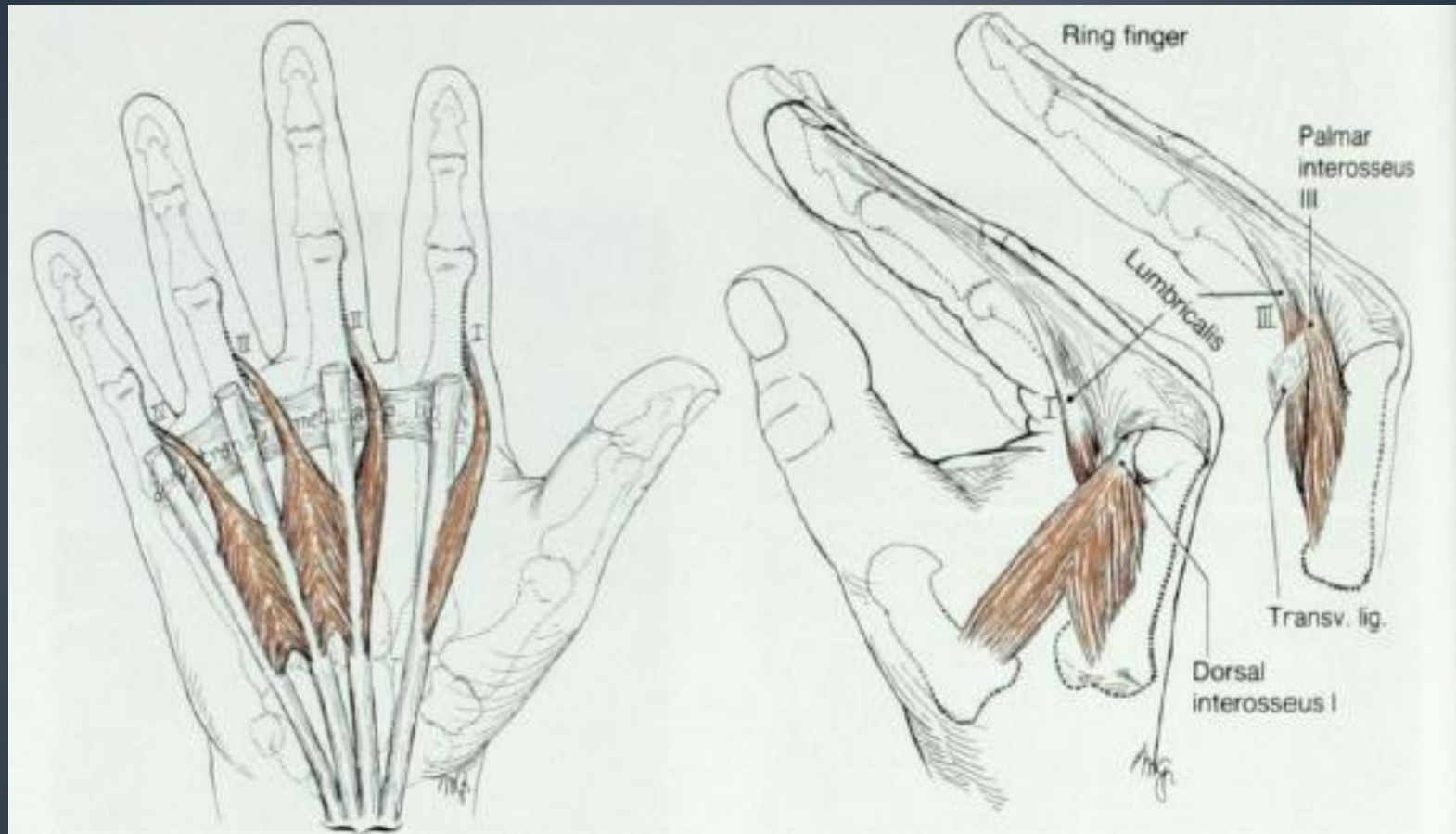
Dorsal Interossei



Palmar Interossei



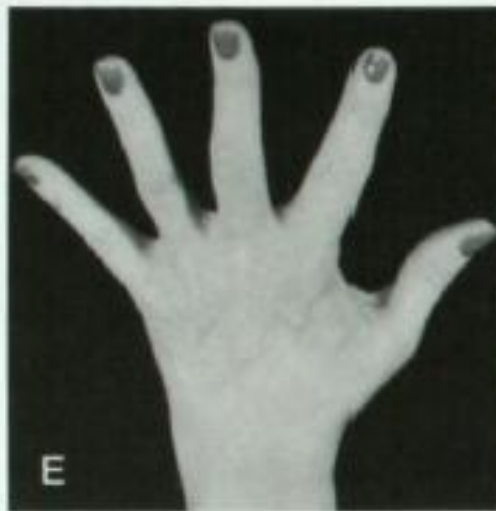
Lumbricales



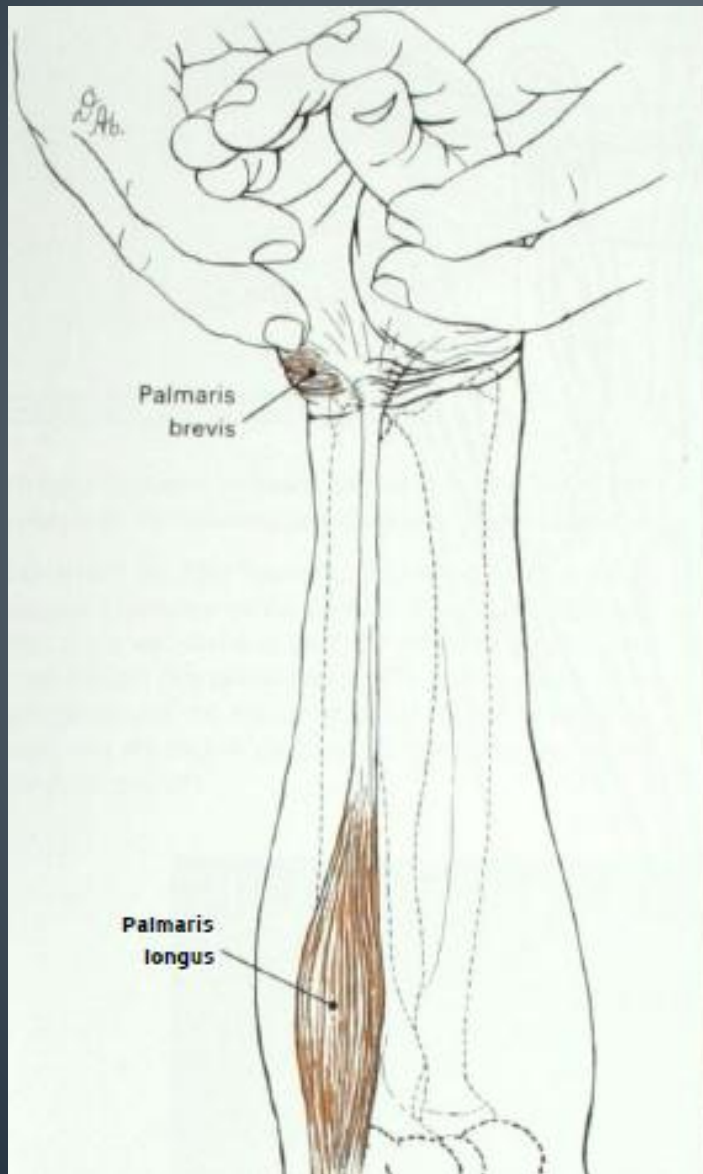
Lumbricales And Interossei



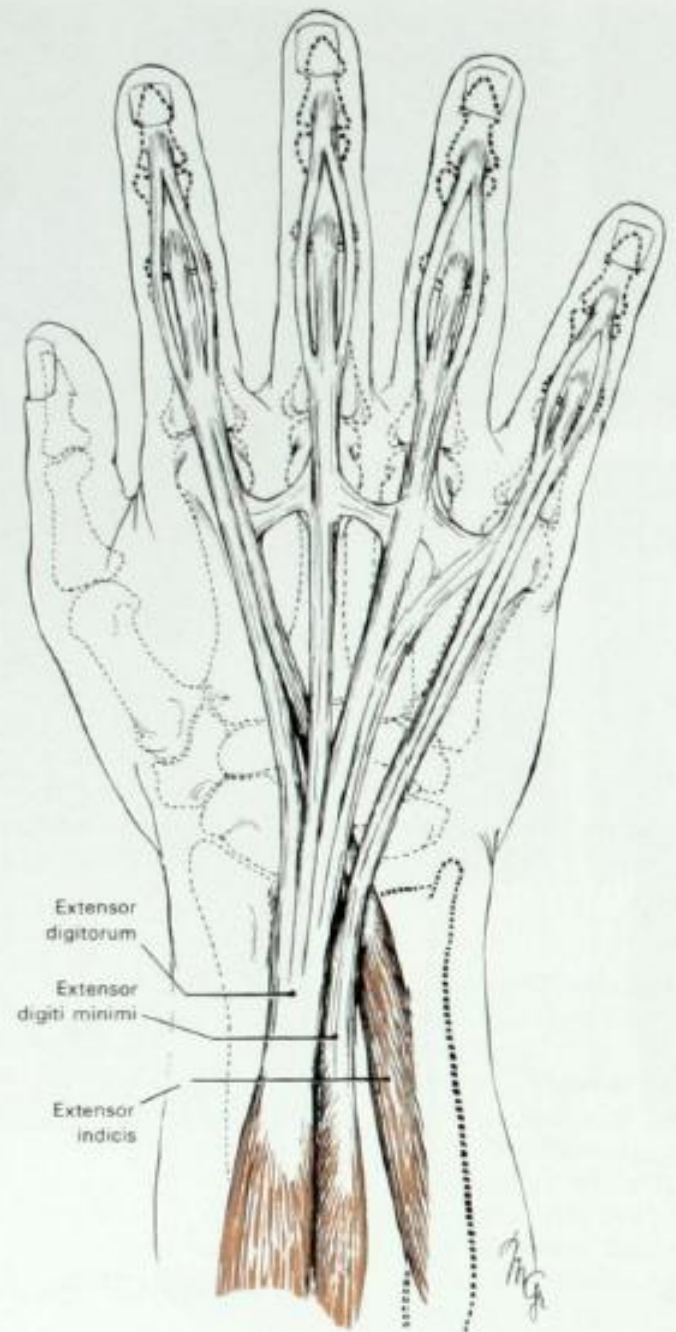
Tests For Length Of Lumbricales And Interossei



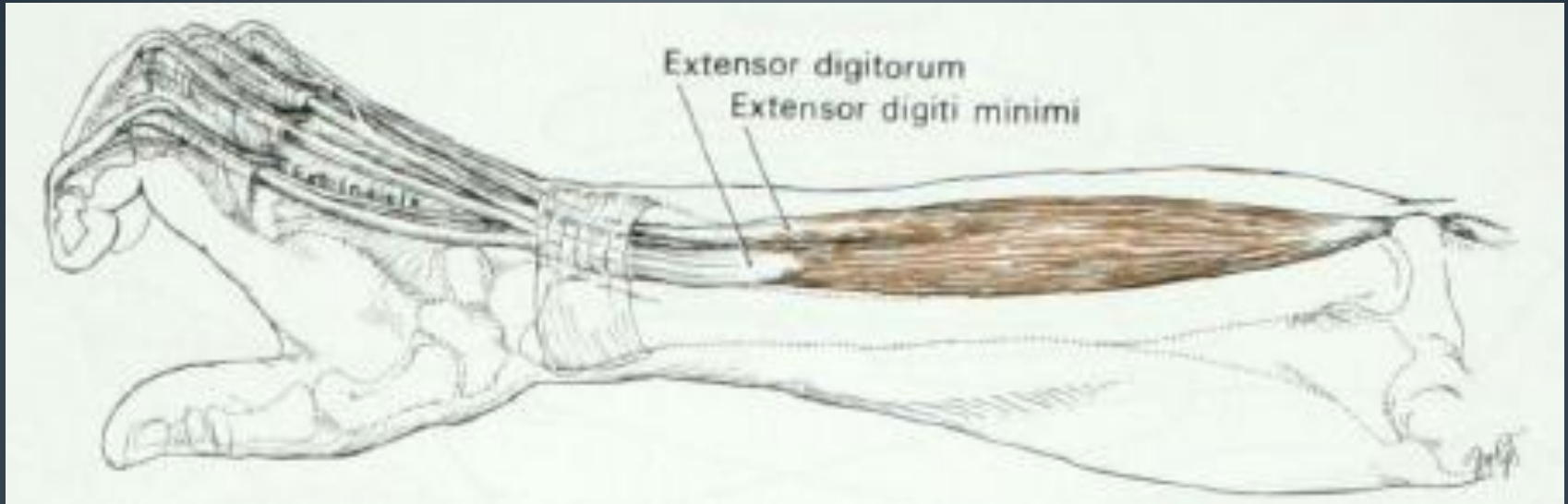
Palmaris Longus And Brevis



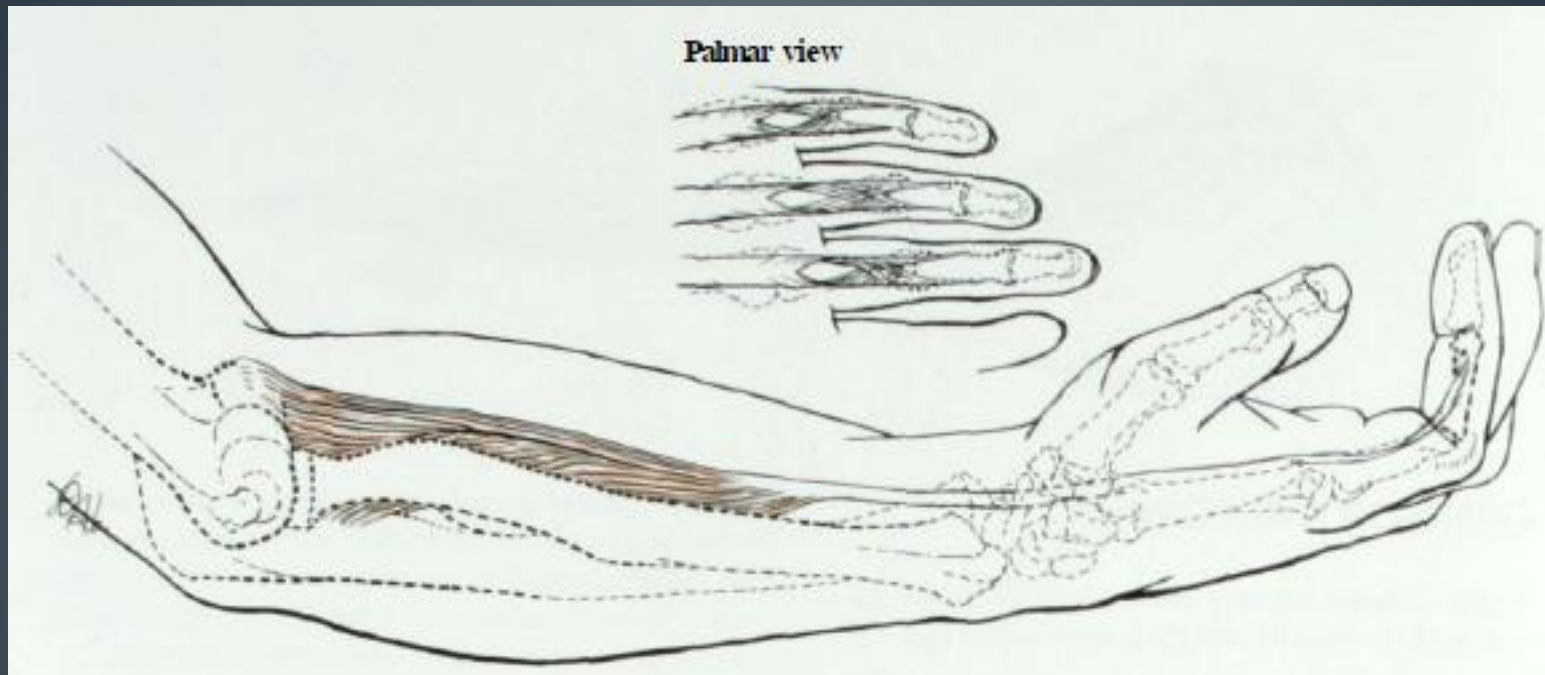
Extensor Indios And Digiti Minimi



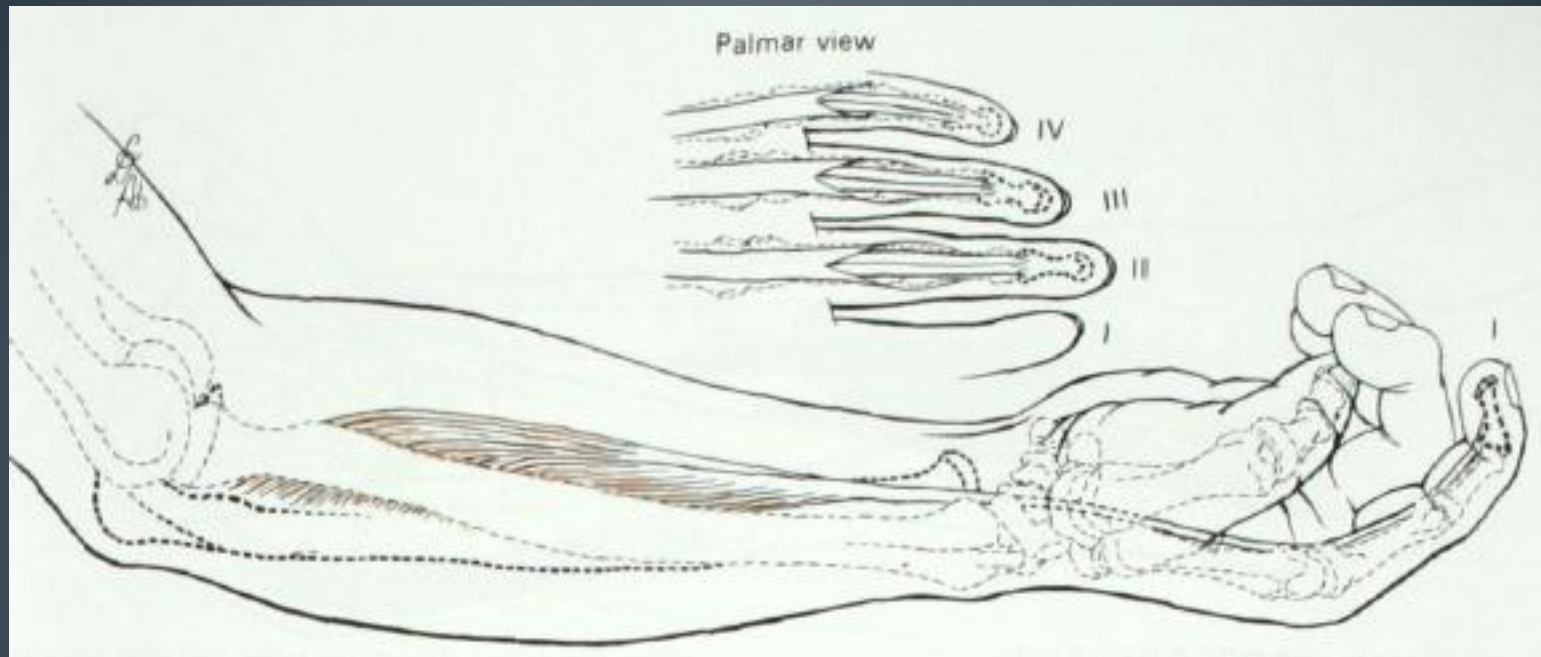
Extensor Digitorum



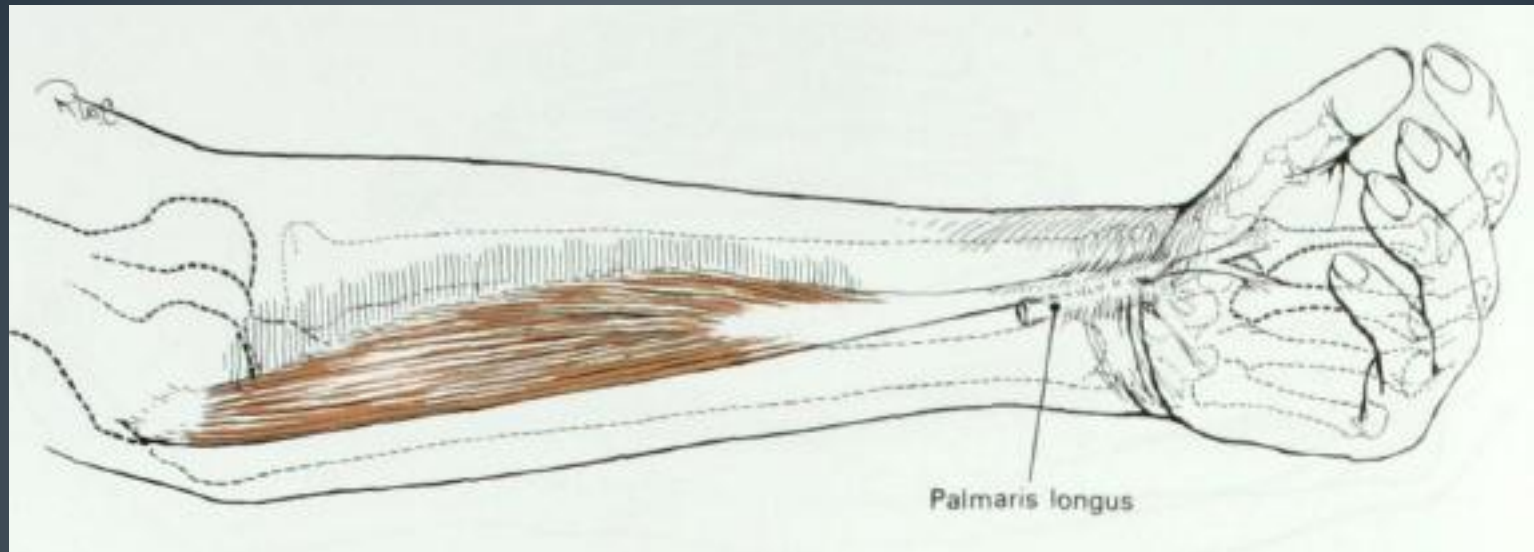
Flexor Digitorum Superficialis



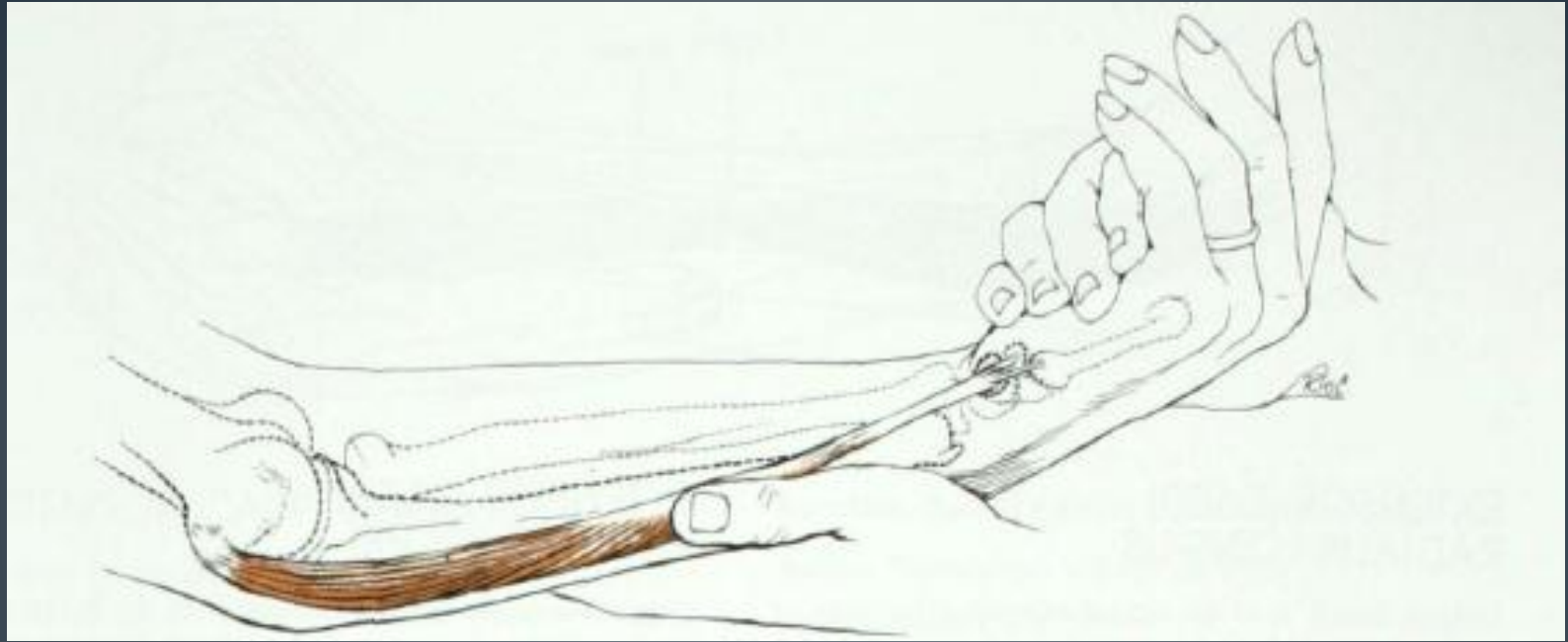
Flexor Digitorum Profundus



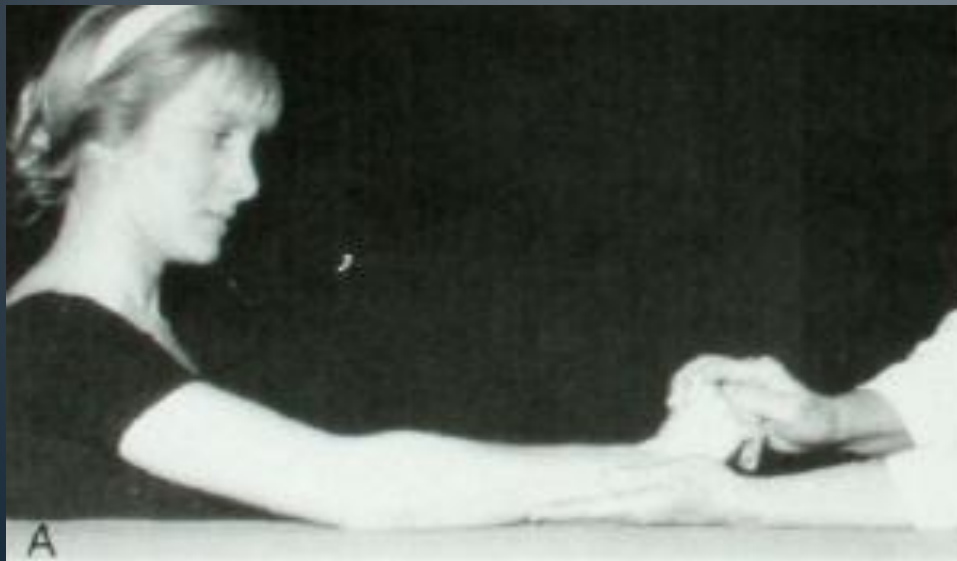
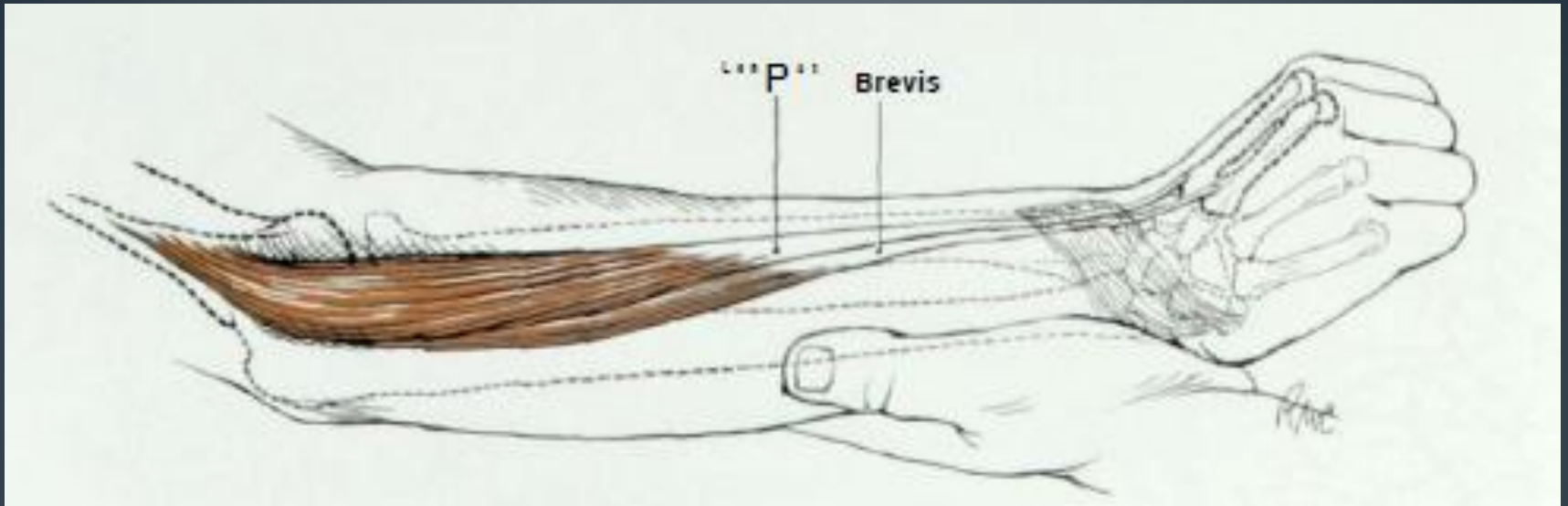
Flexor Carpi Radialis



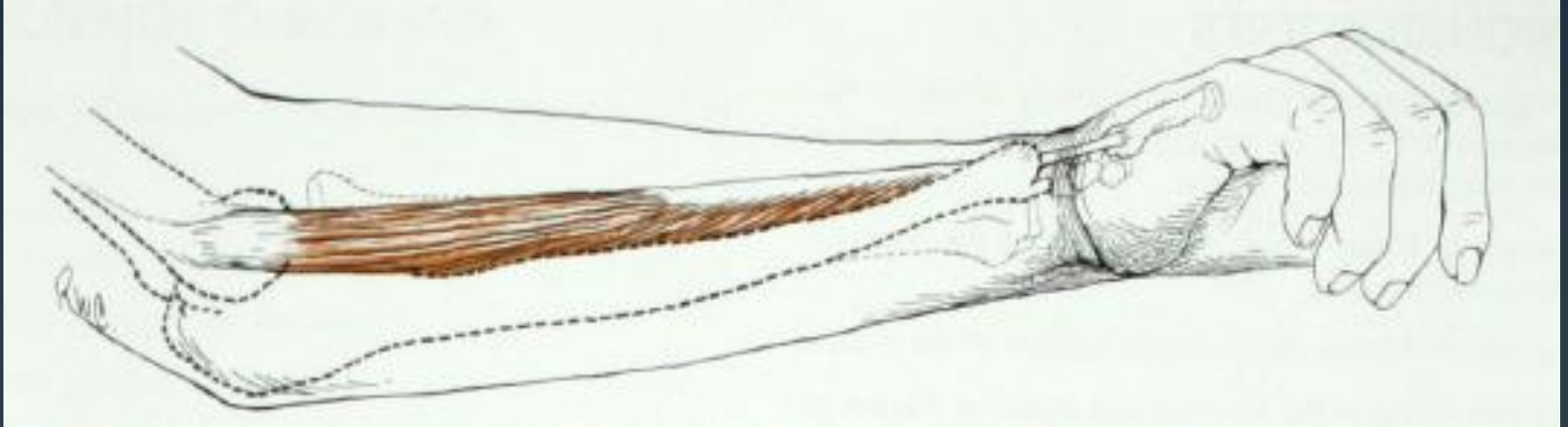
Flexor Carpi Ulnaris



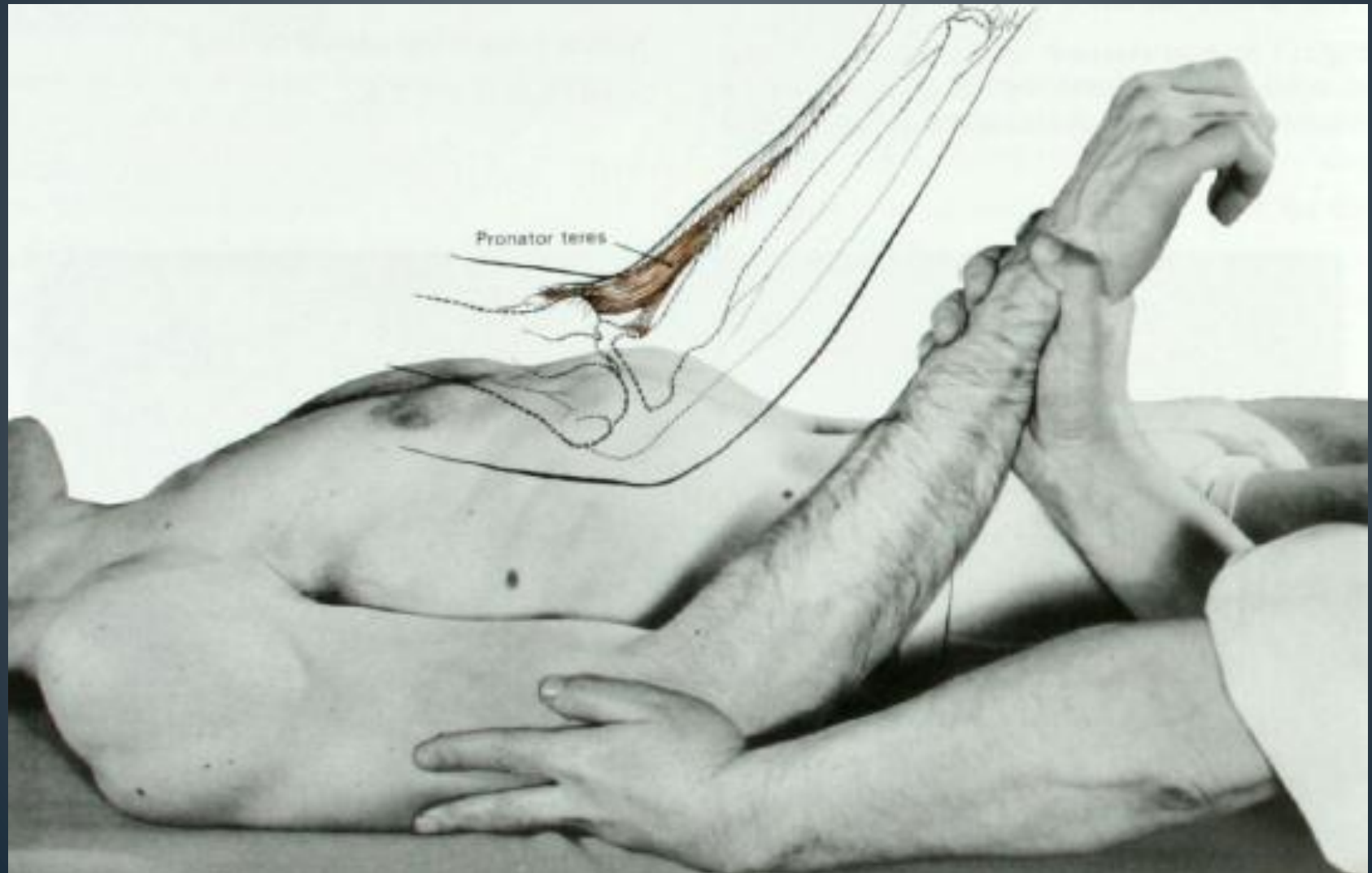
Extensor Carpi Radialis Longus And Brevis



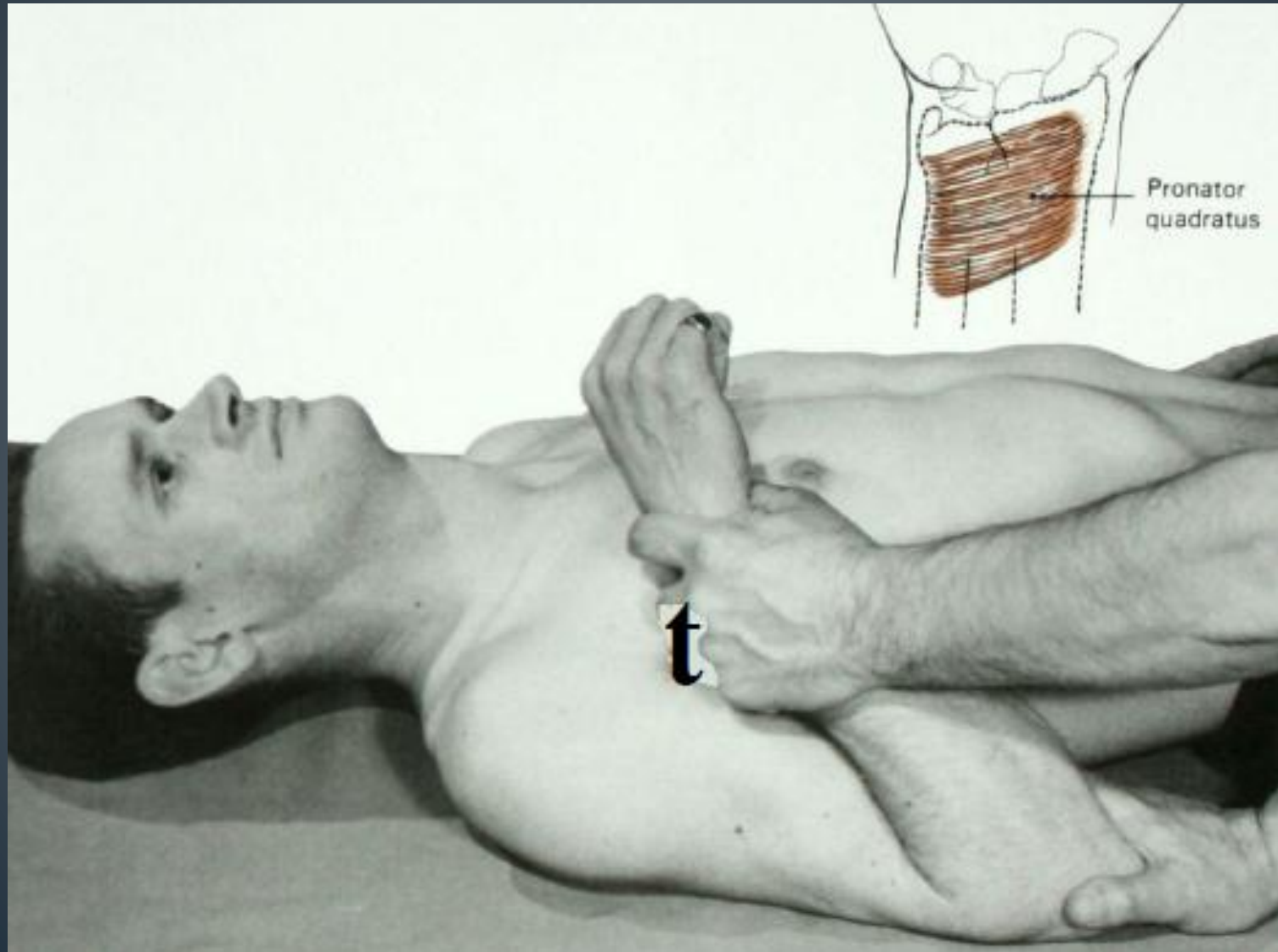
Extensor Carpi Ulnaris



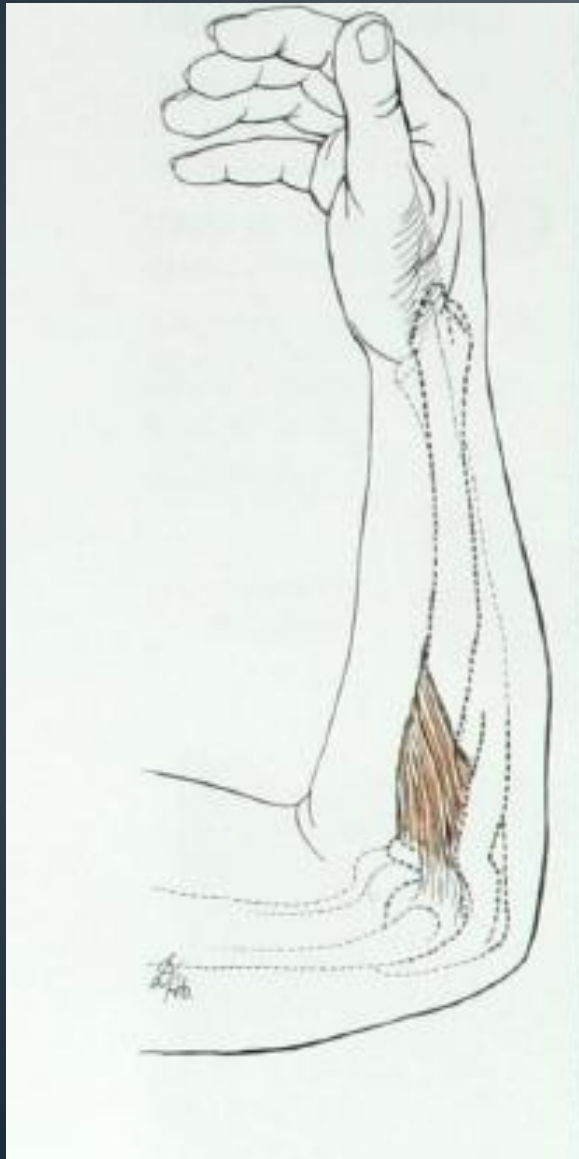
Pronator Teres And Quadratus



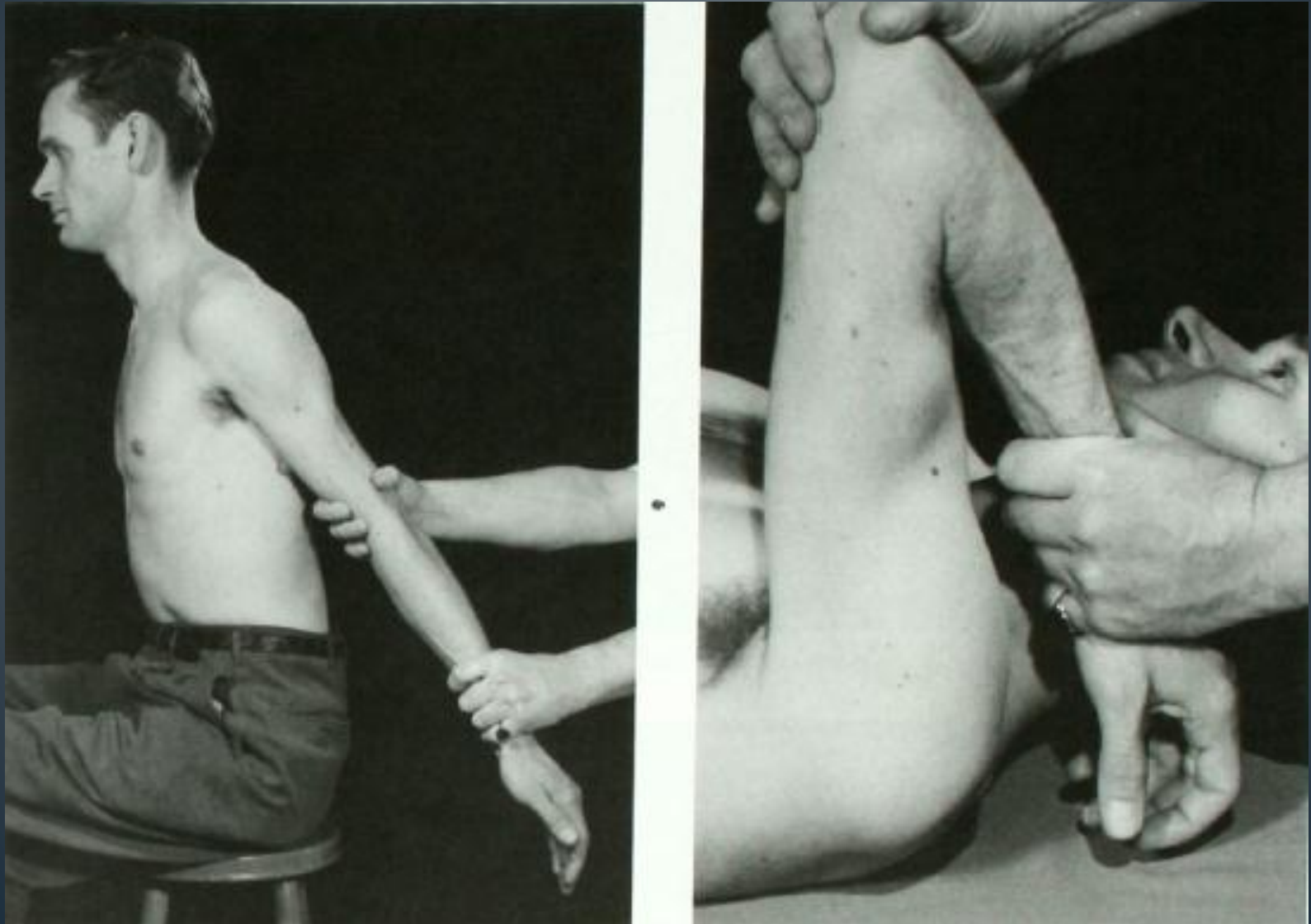
Pronator Quadratus



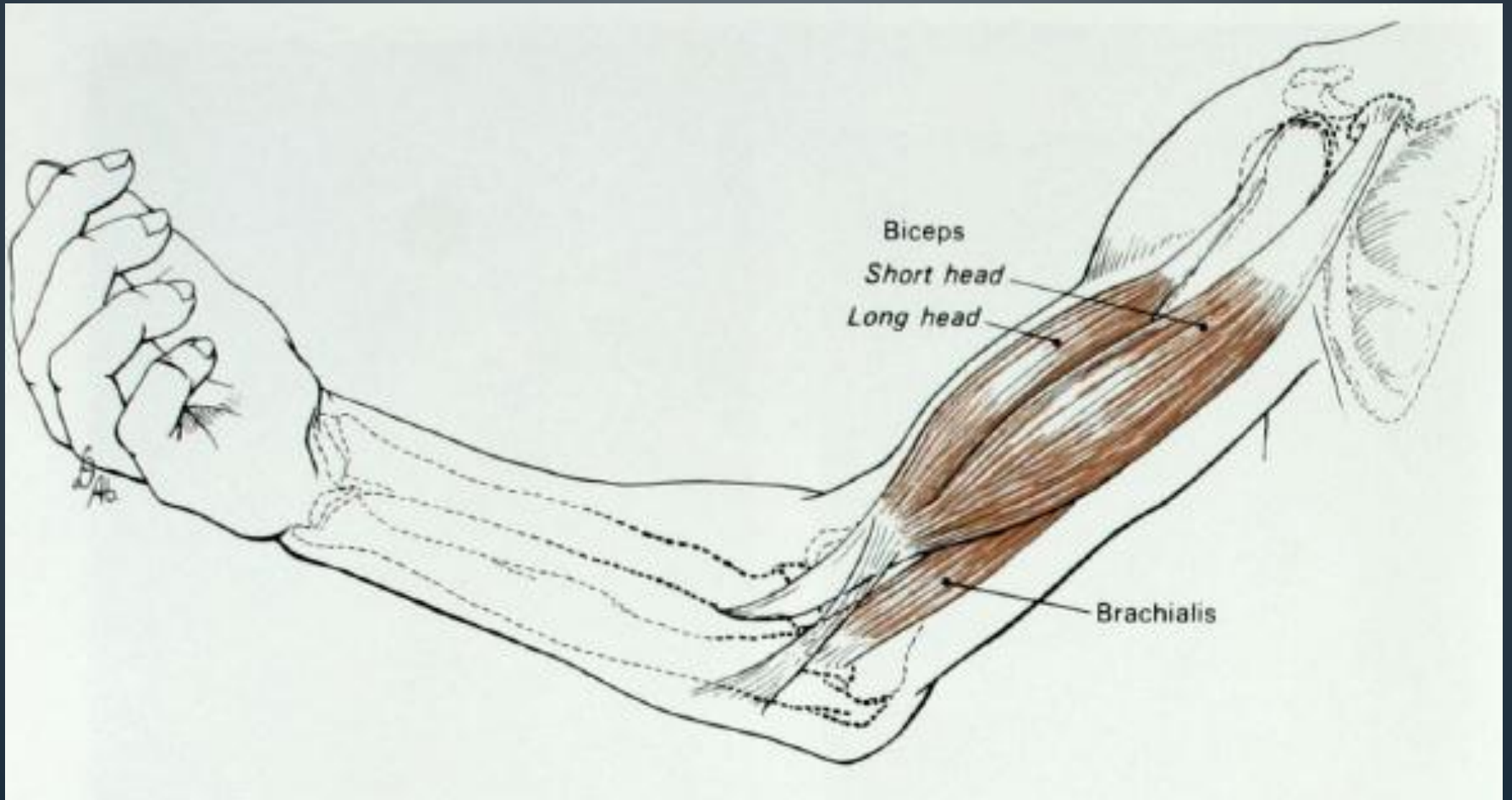
Supinator And Biceps



Supinator



Biceps Brachii And Brachialis



Elbow Flexors

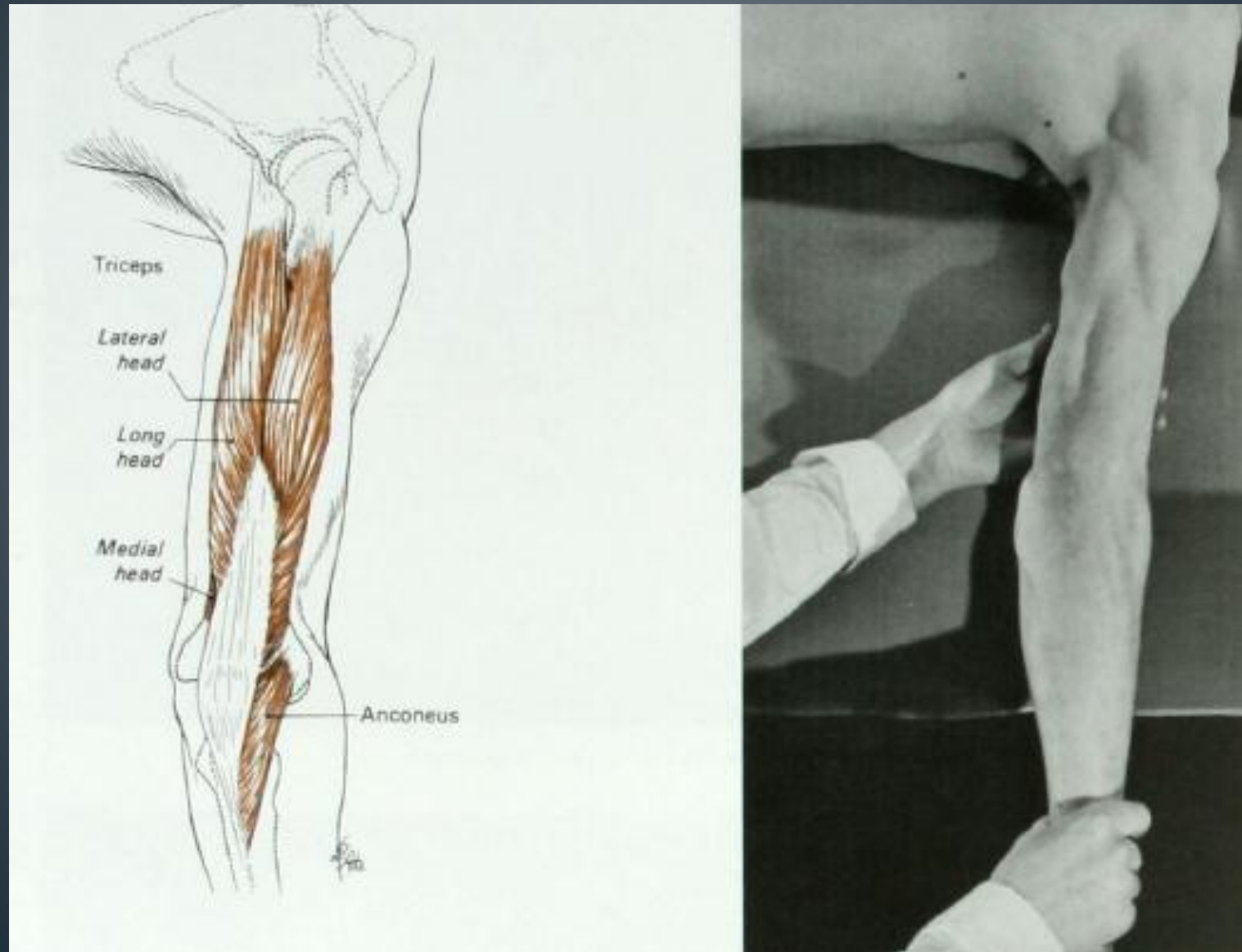


Elbow flexion with the forearm supinated.



Elbow flexion with the forearm pronated.

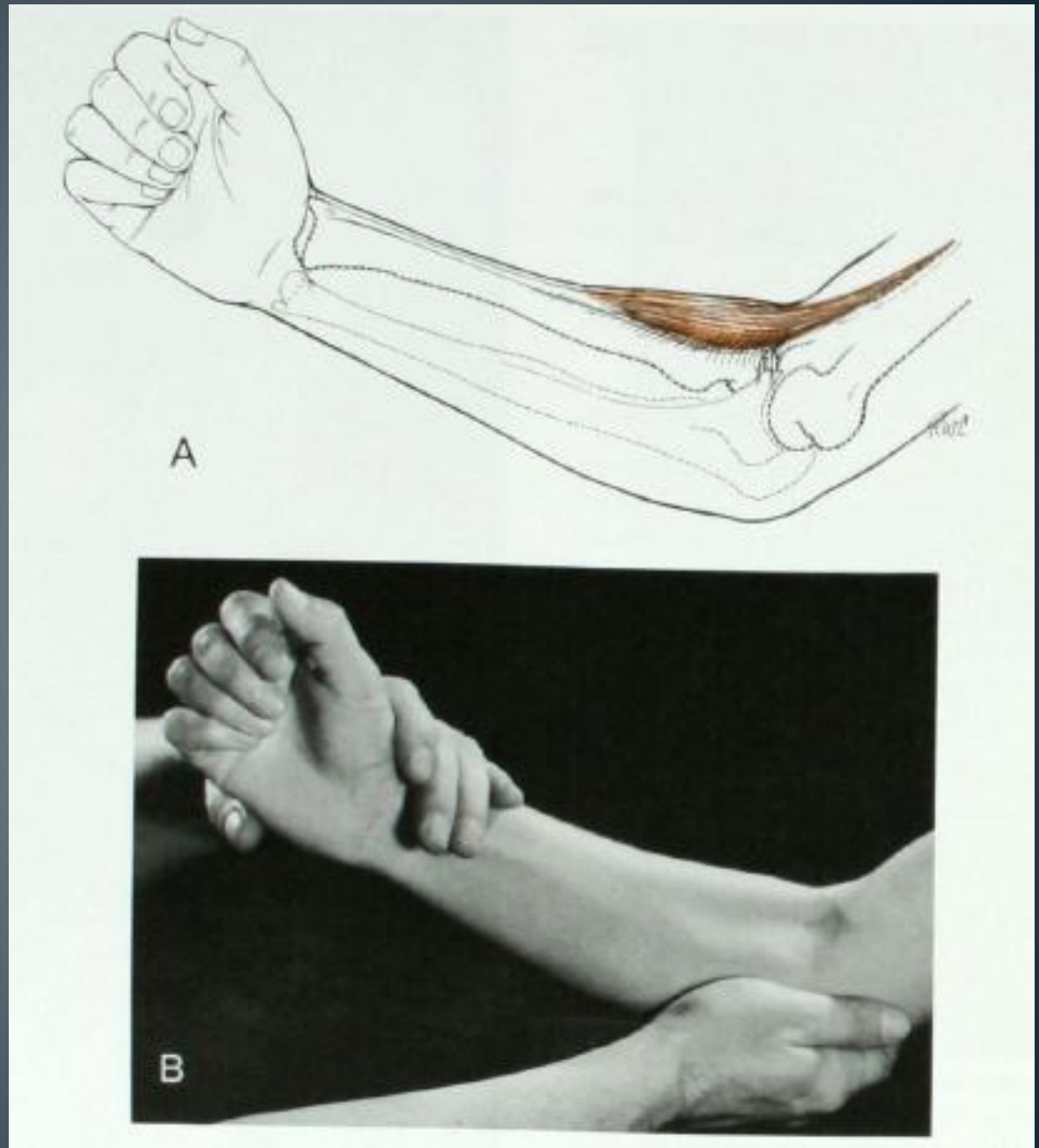
Triceps Brachii And Anconeus



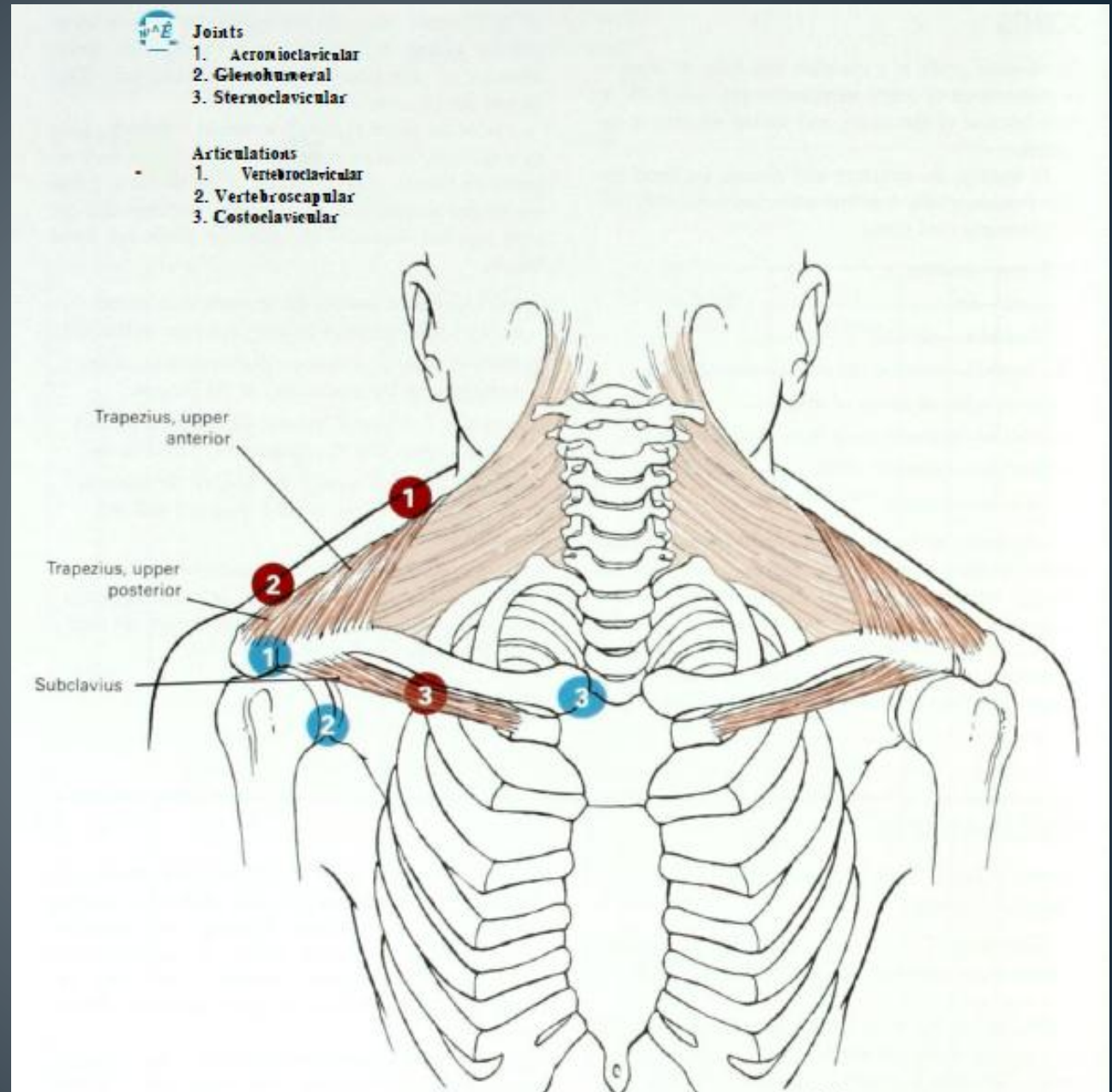
Triceps Brachii And Anconeus



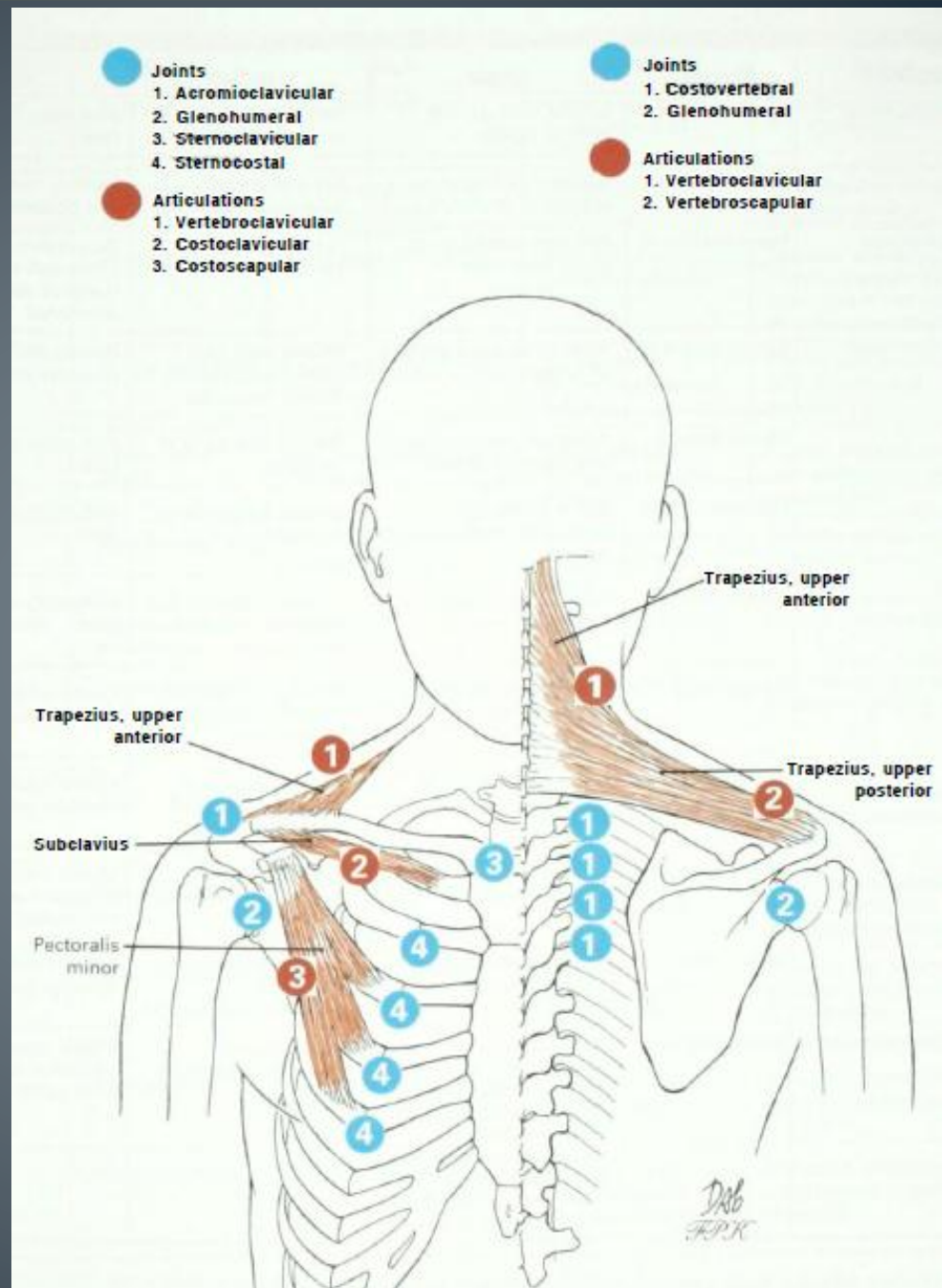
Brachioradialis



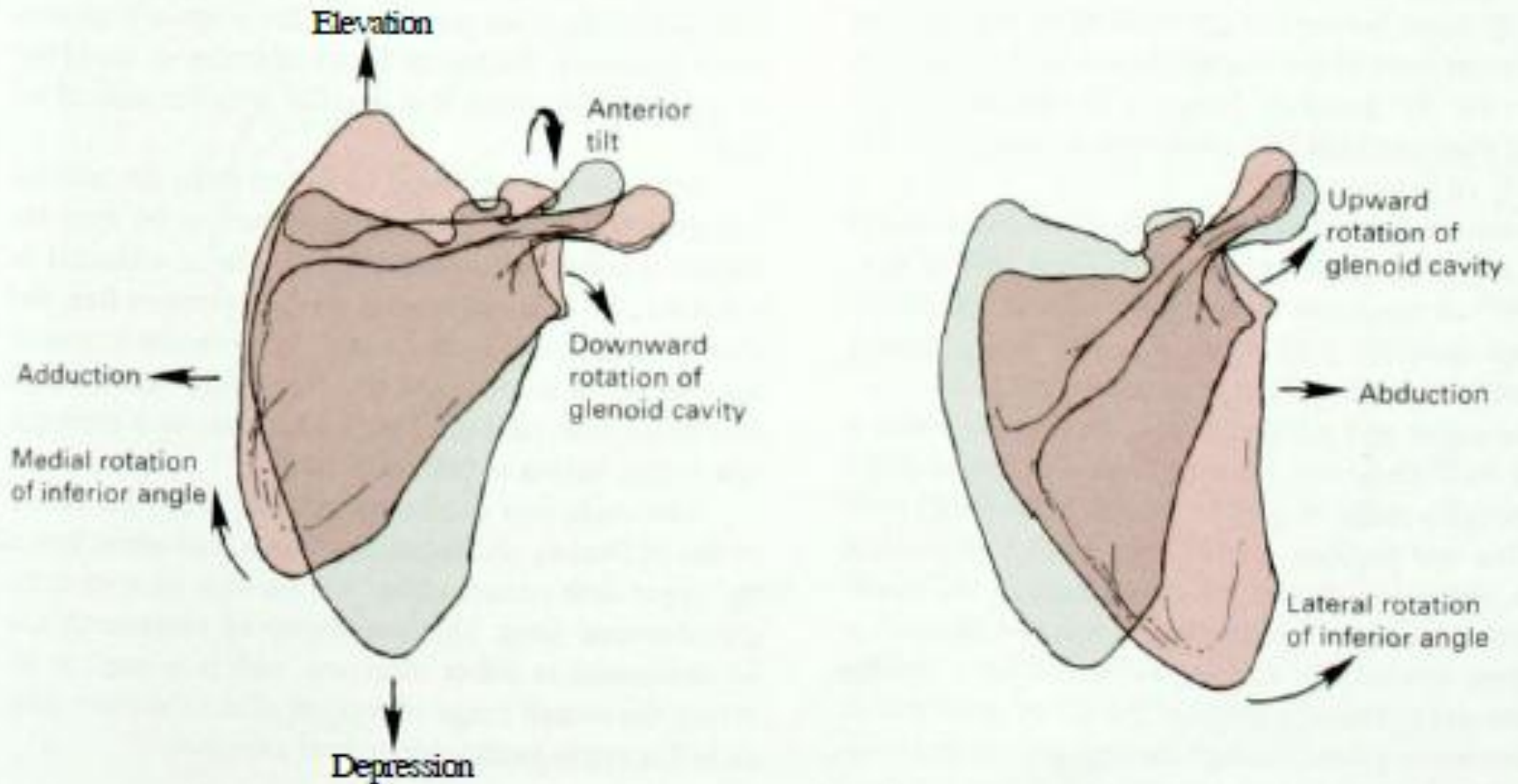
Joints And Articulations Of Shoulder Girdle



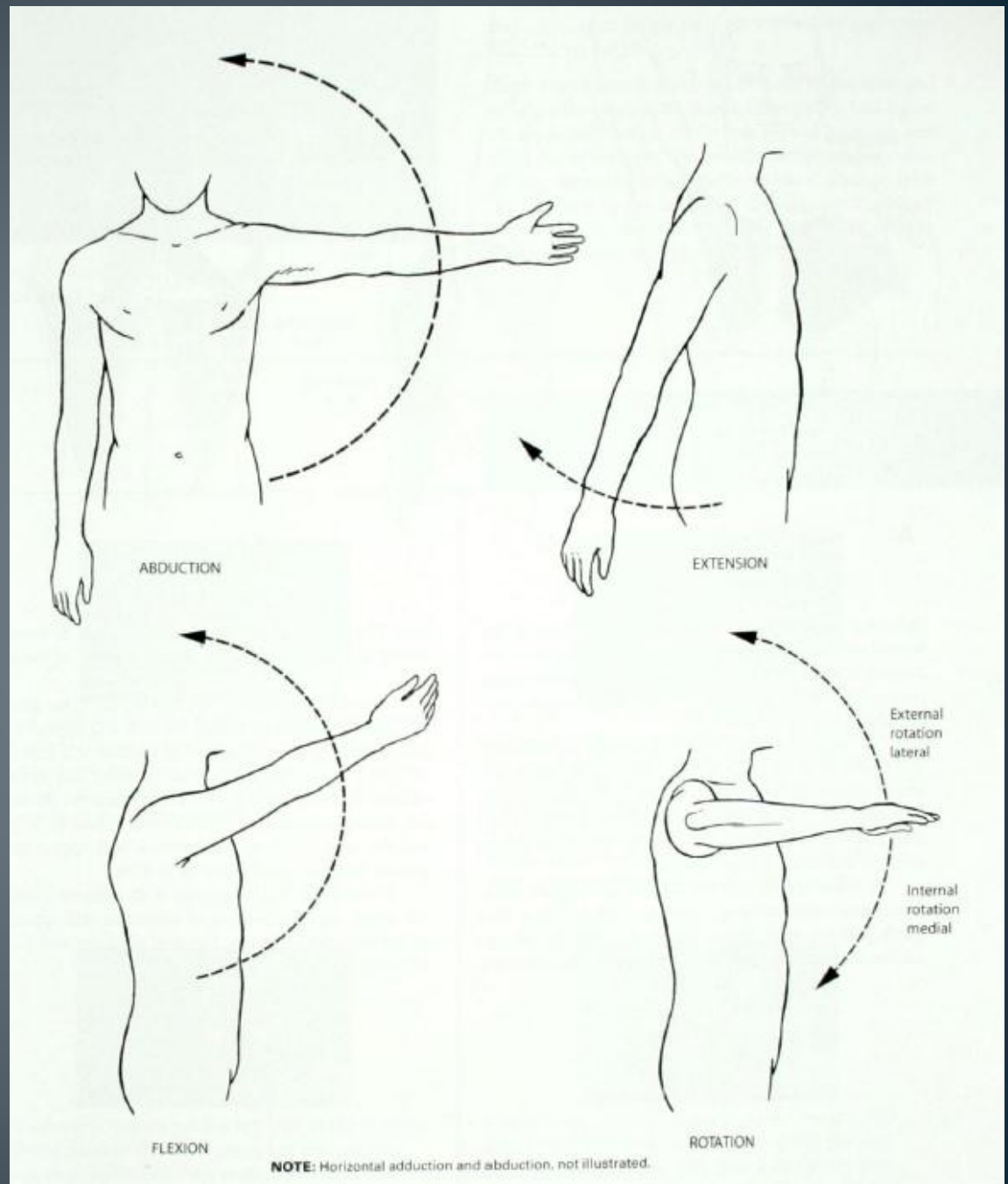
Joints And Articulations Of Shoulder Girdle



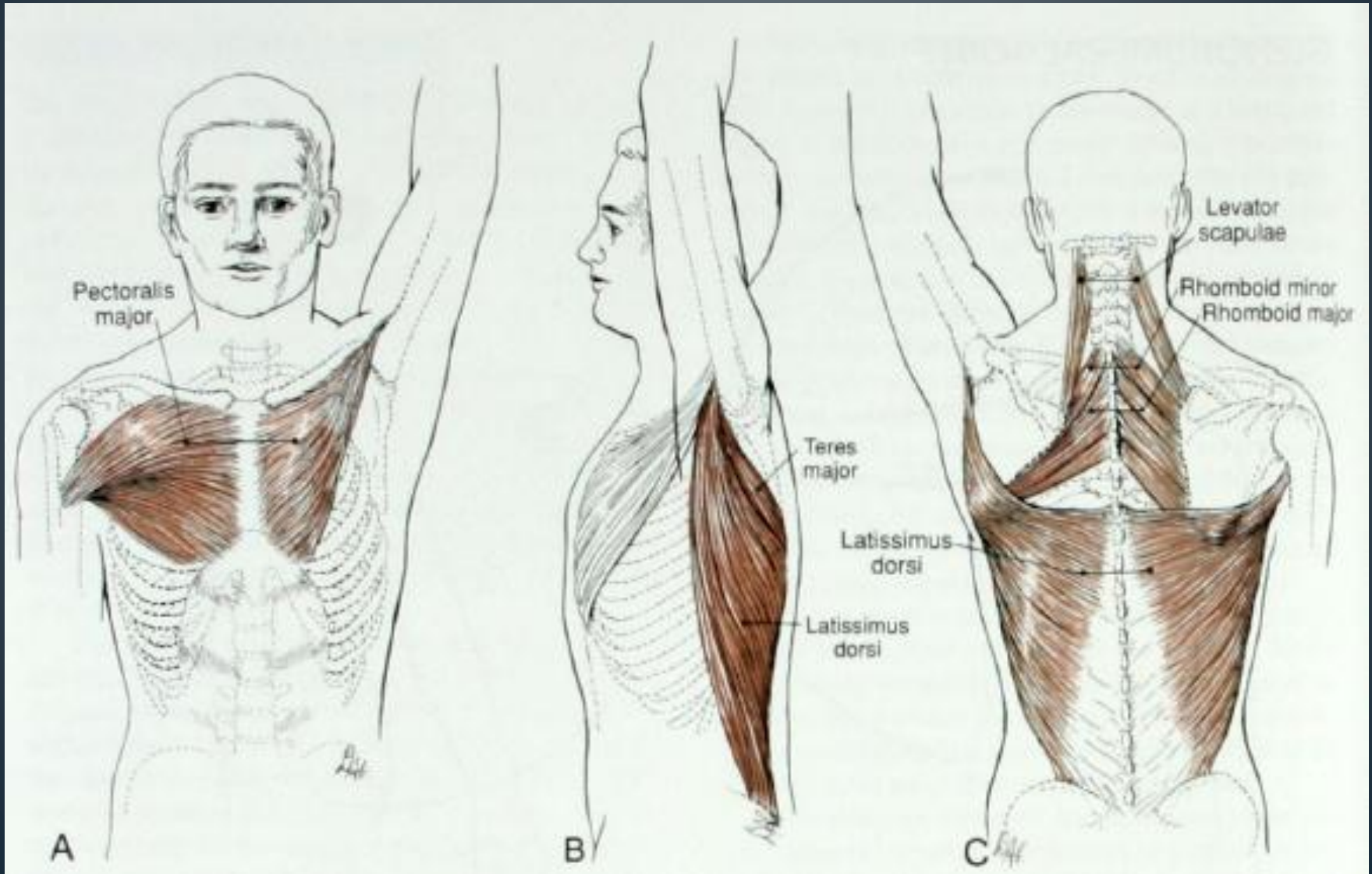
Sternoclavicular Joint And Scapula



Movements Of Glenohumeral Joint



Length Of Humeral And Scapular Muscles



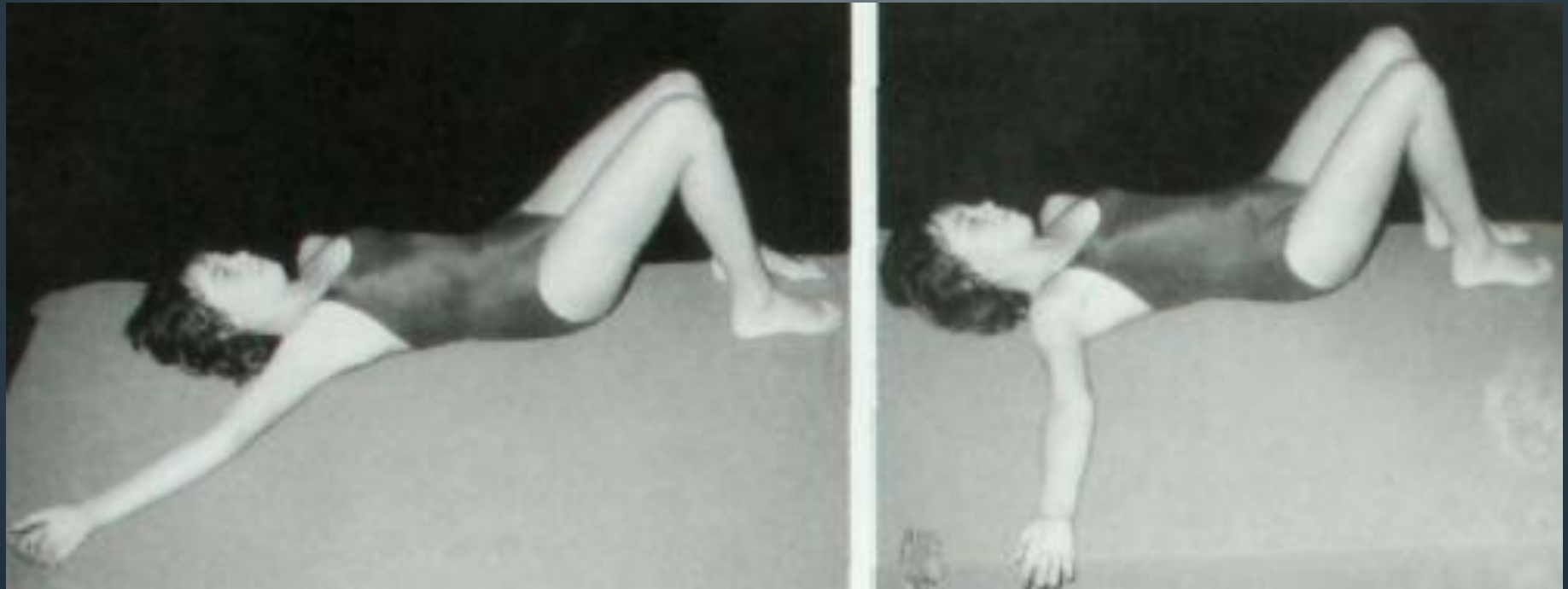
Test For Length Of Pectoralis Minor



Test For Tightness Of Muscles That Depress The Coracoid Process Anteriorly



Test For Length Of Pectoralis Major



Test For Excessive Length



Test For Length Of Teres Major, Latissimus Dorsi, And Rhomboids



Normal length



Short

Test For Length Of Shoulder Rotators

MEDIAL ROTATORS



LATERAL ROTATORS



Test For Excessive Range Of Motion In Lateral Rotation



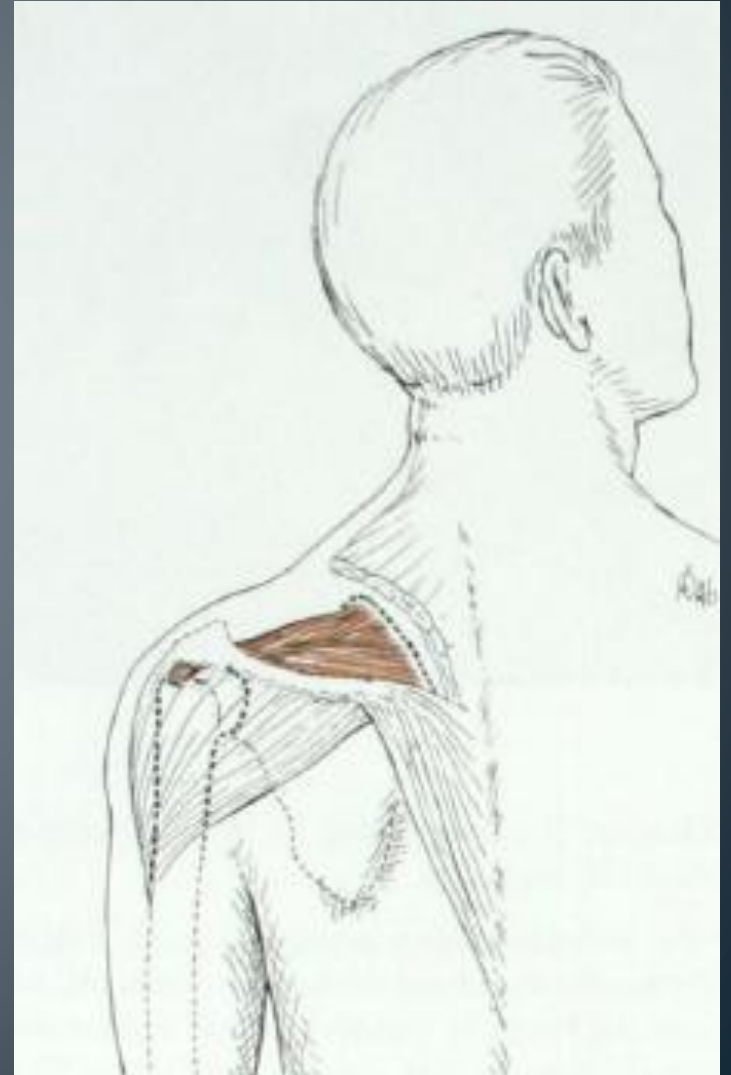
Test For Length Of Shoulder Rotation



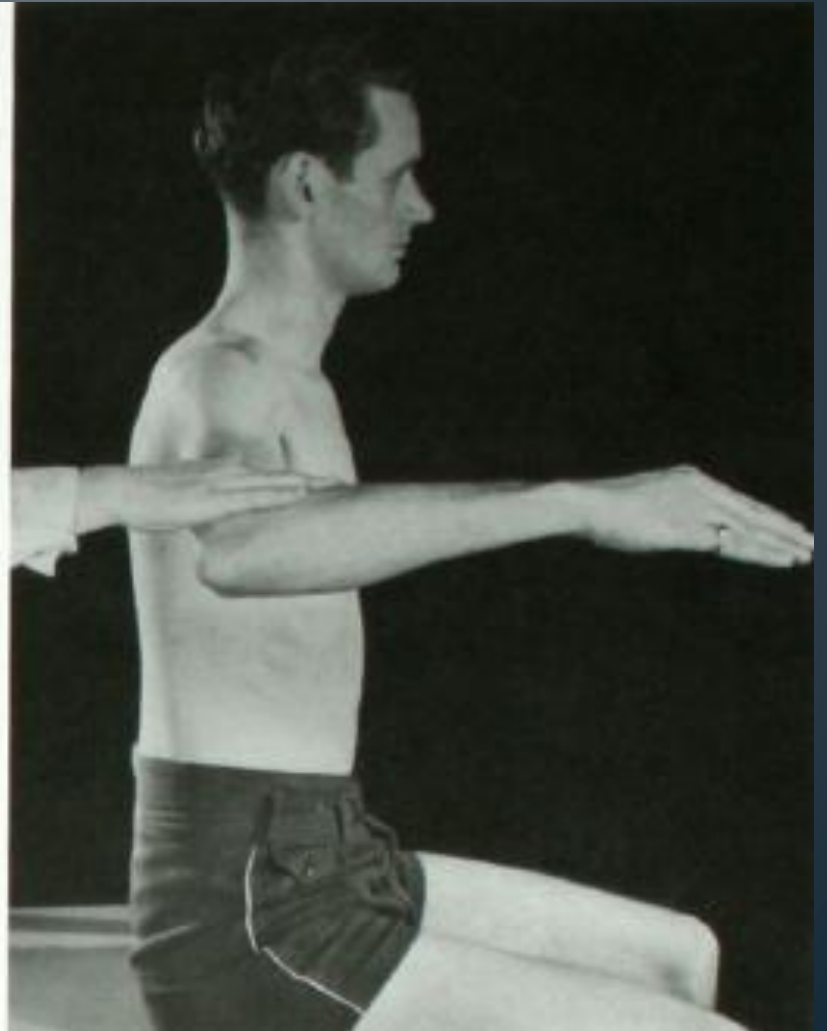
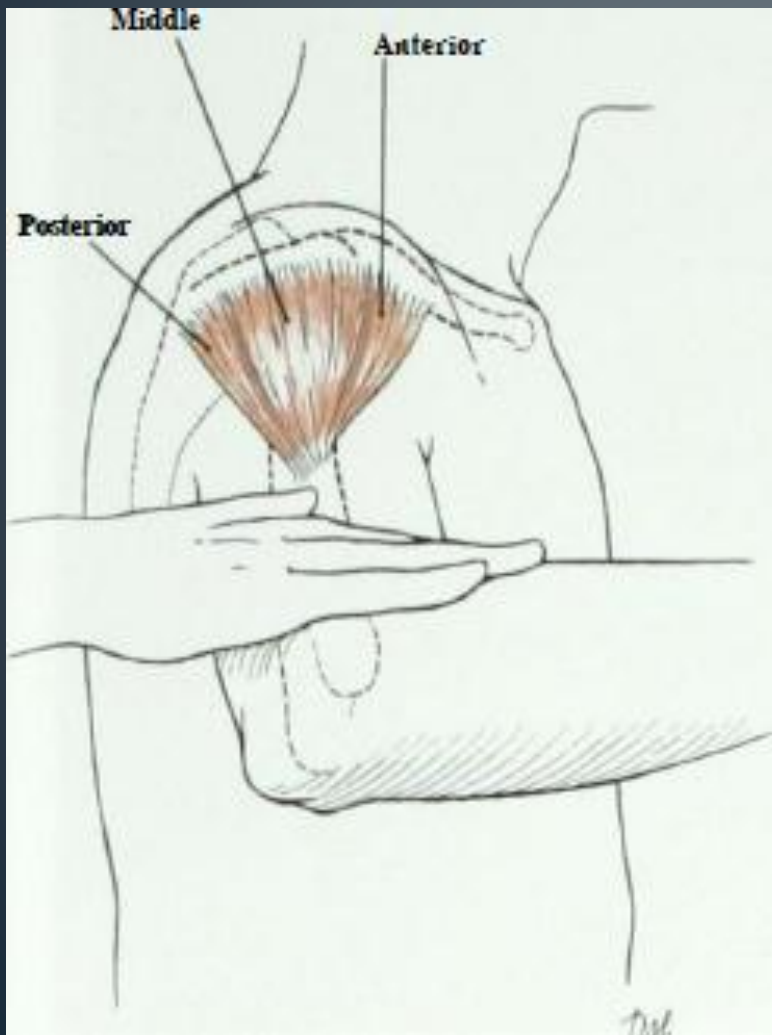
Strength Testing



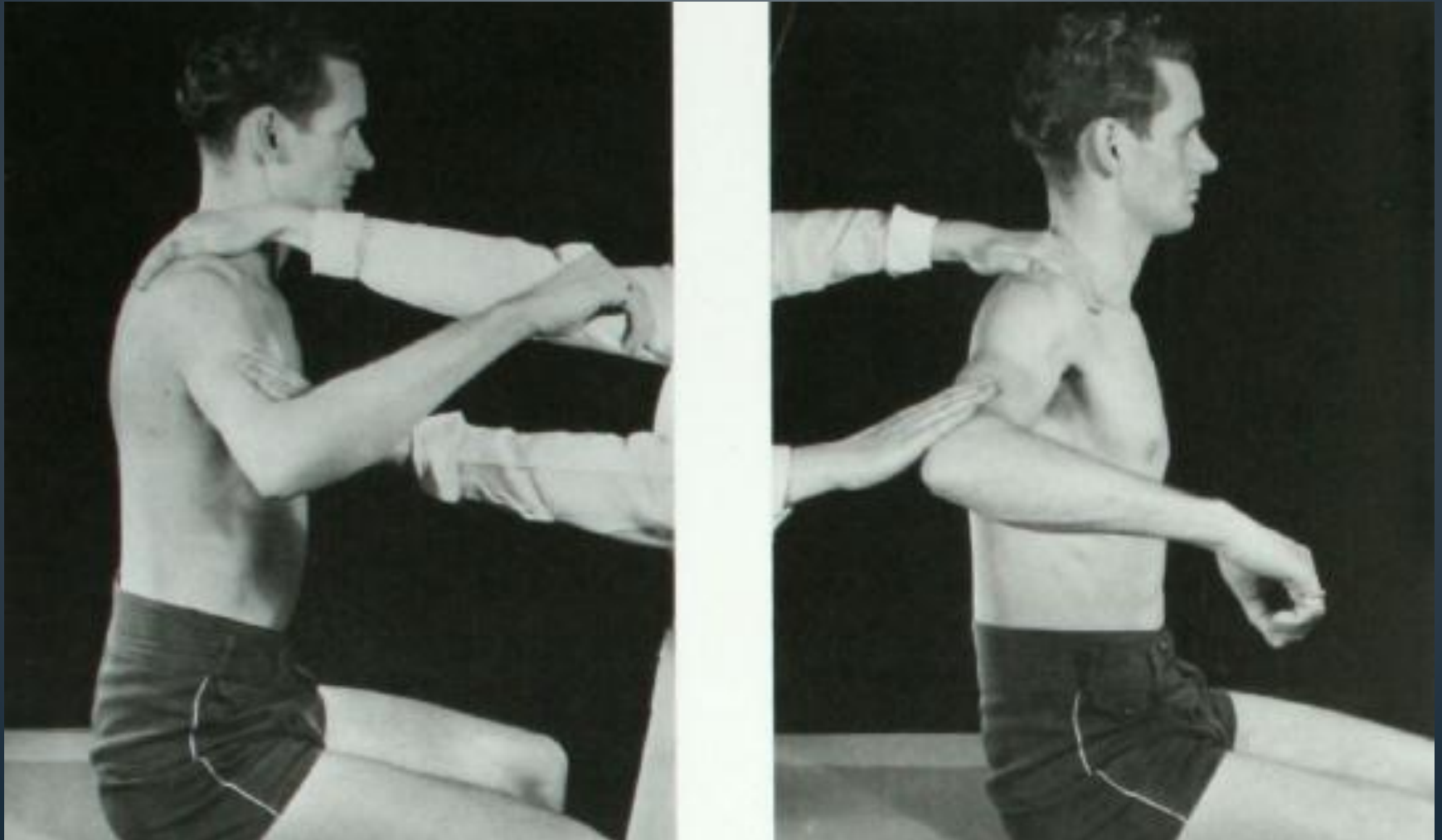
Supraspinatus



Deltoid



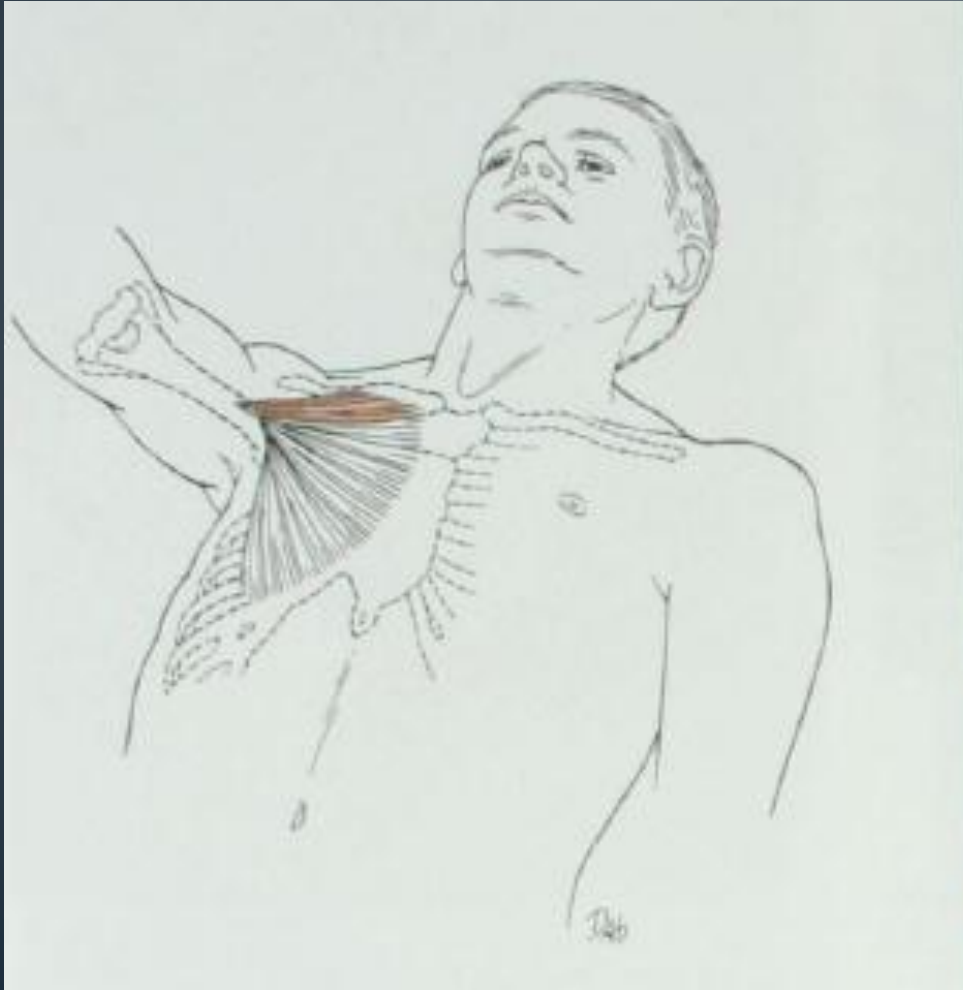
Deltoid: Anterior And Posterior (Sitting)



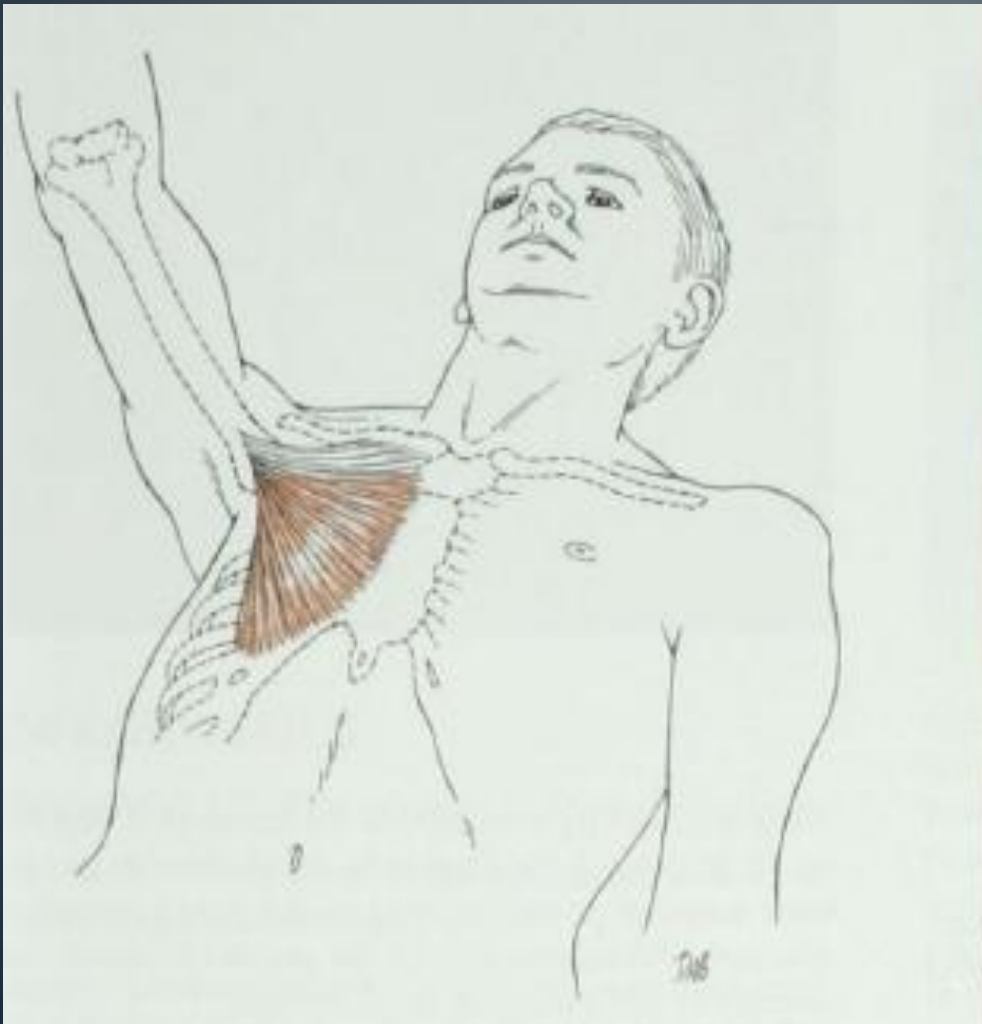
Deltoid: Anterior (Supine) And Posterior (Prone)



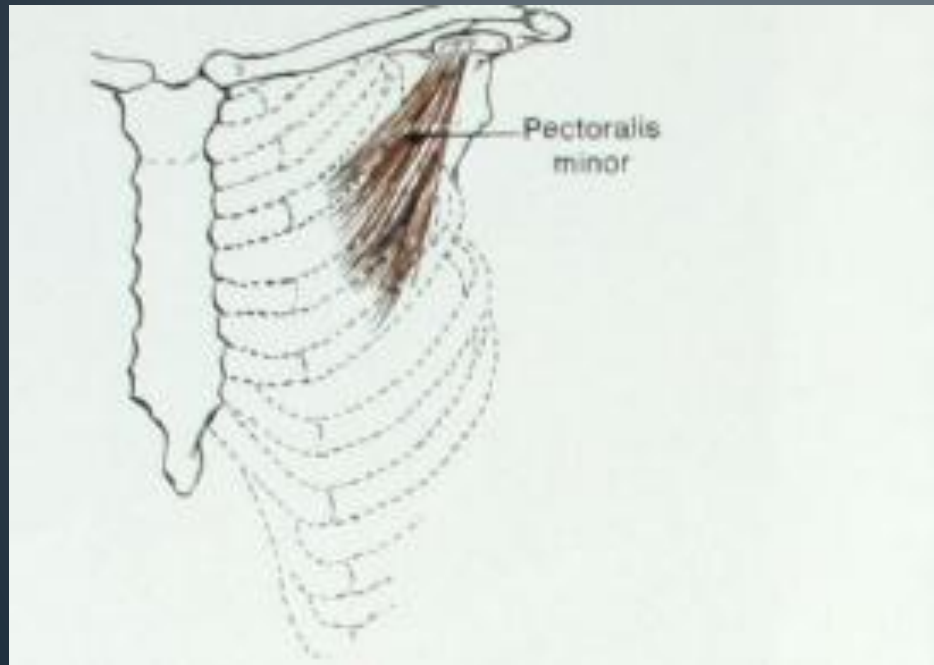
Pectoralis Major, Upper



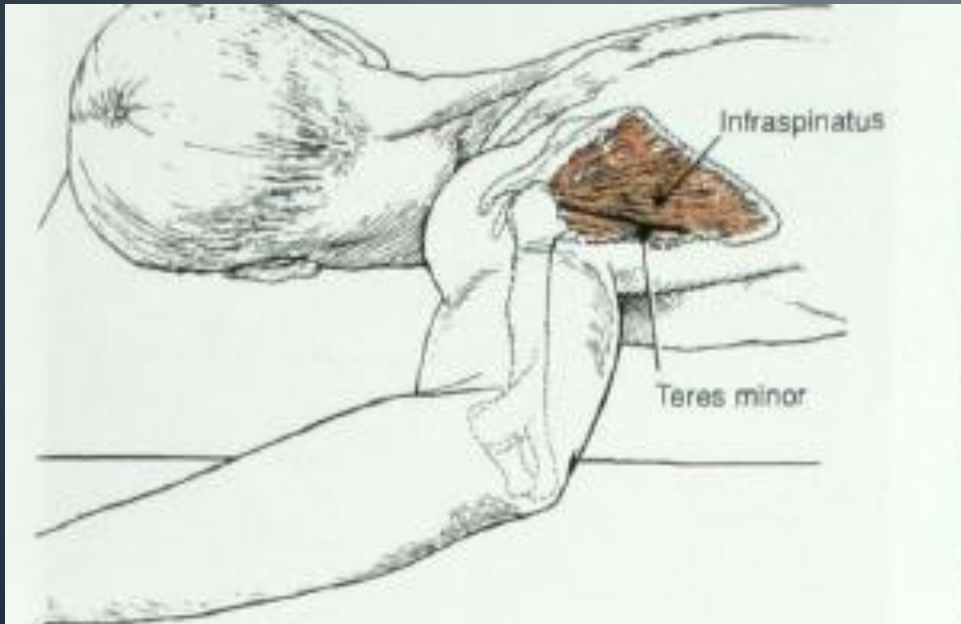
Pectoralis Major, lower



Pectoralis Minor

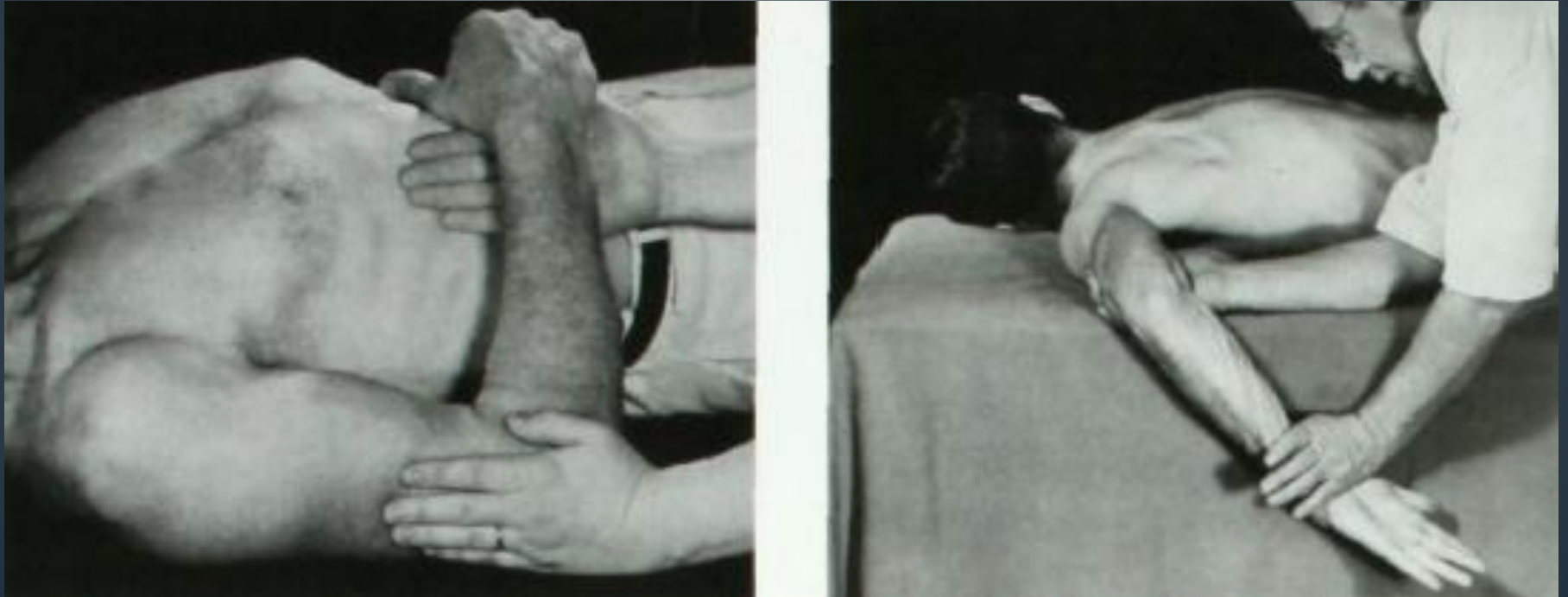


Shoulder Lateral Rotators (Group Test)

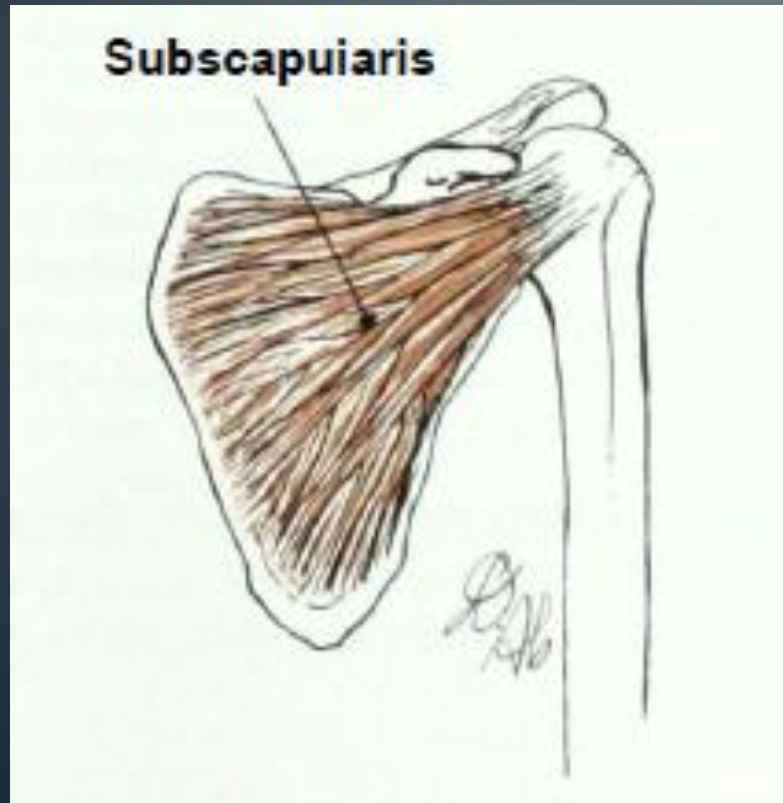




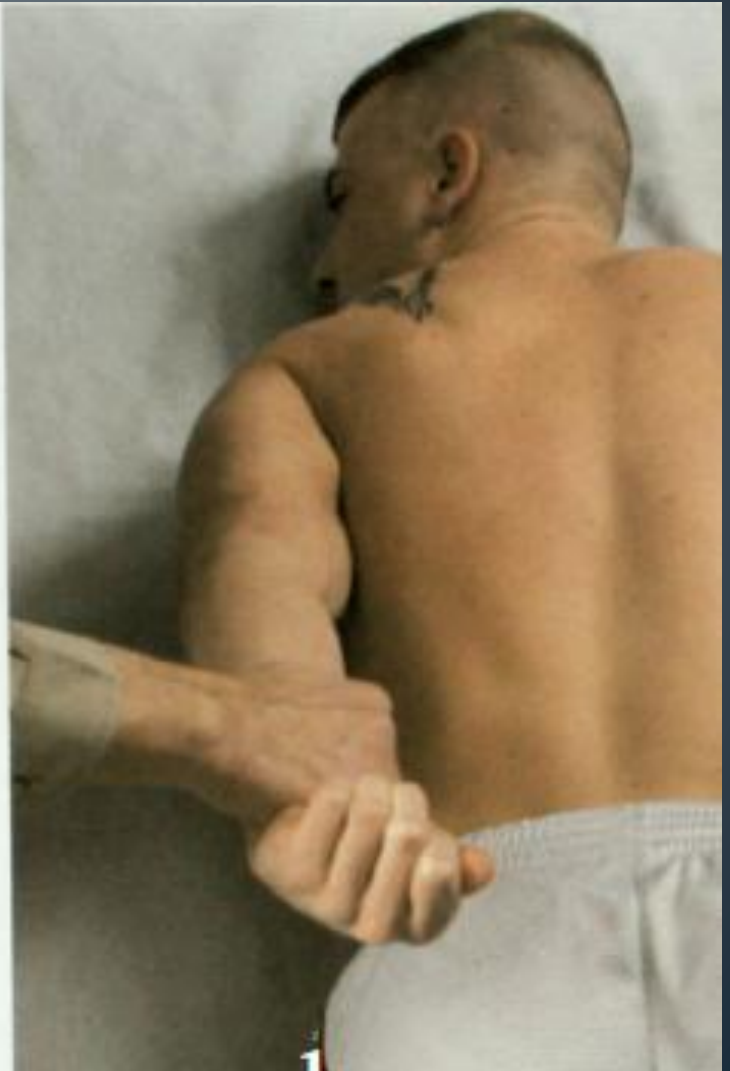
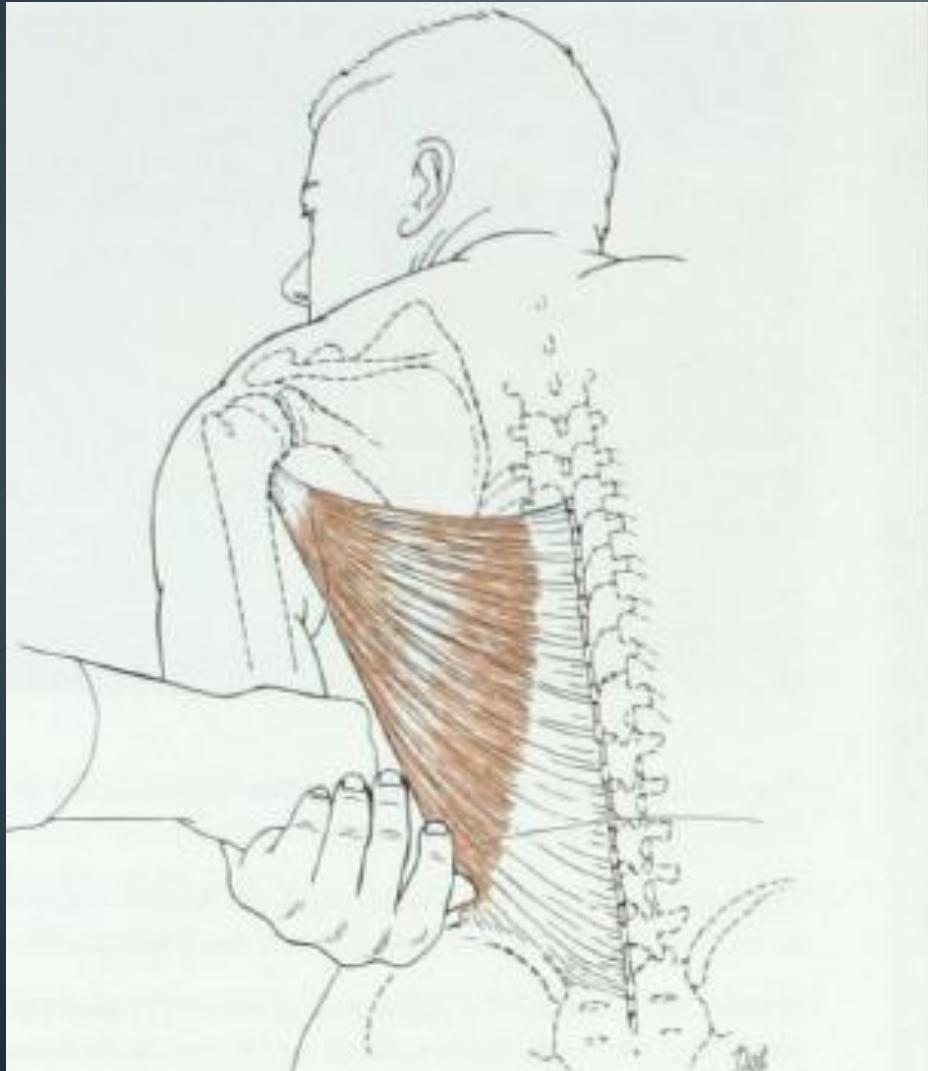
Shoulder Medial Rotators (Group Test)



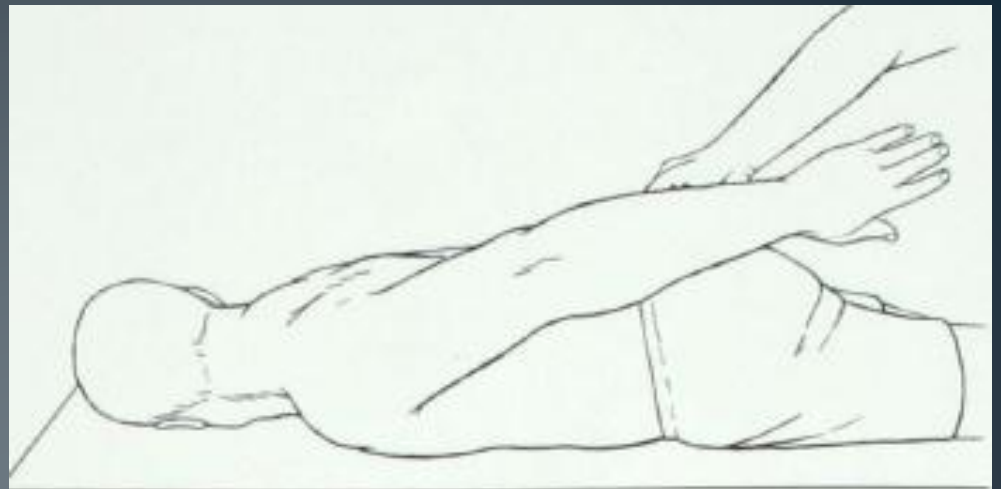
Teres Major And Subscapulars



Latissimus Dorsi



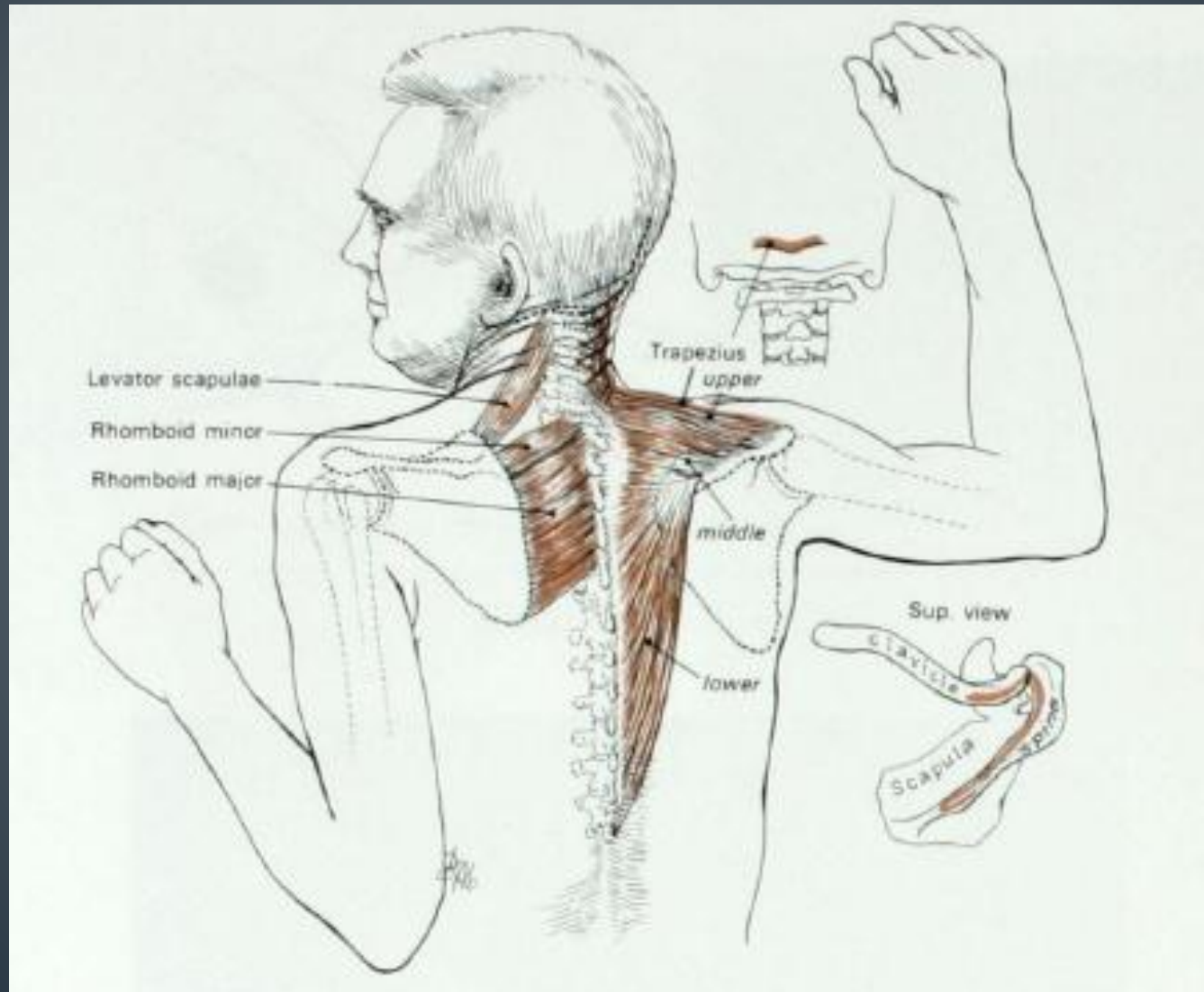
Latissimus Dorsi



Side view of test position.



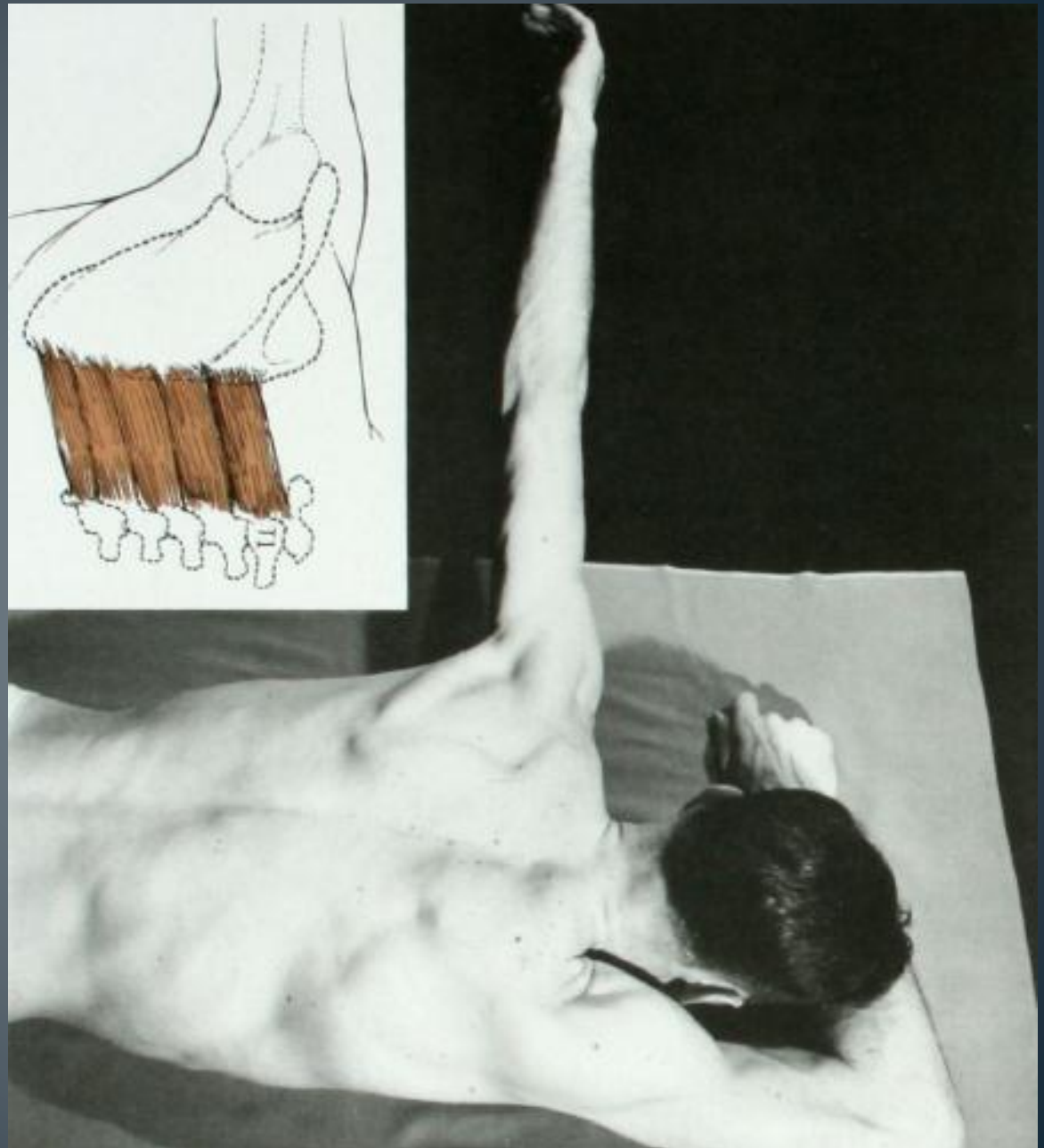
Rhomboids, Levator Scapulae, And Trapezius



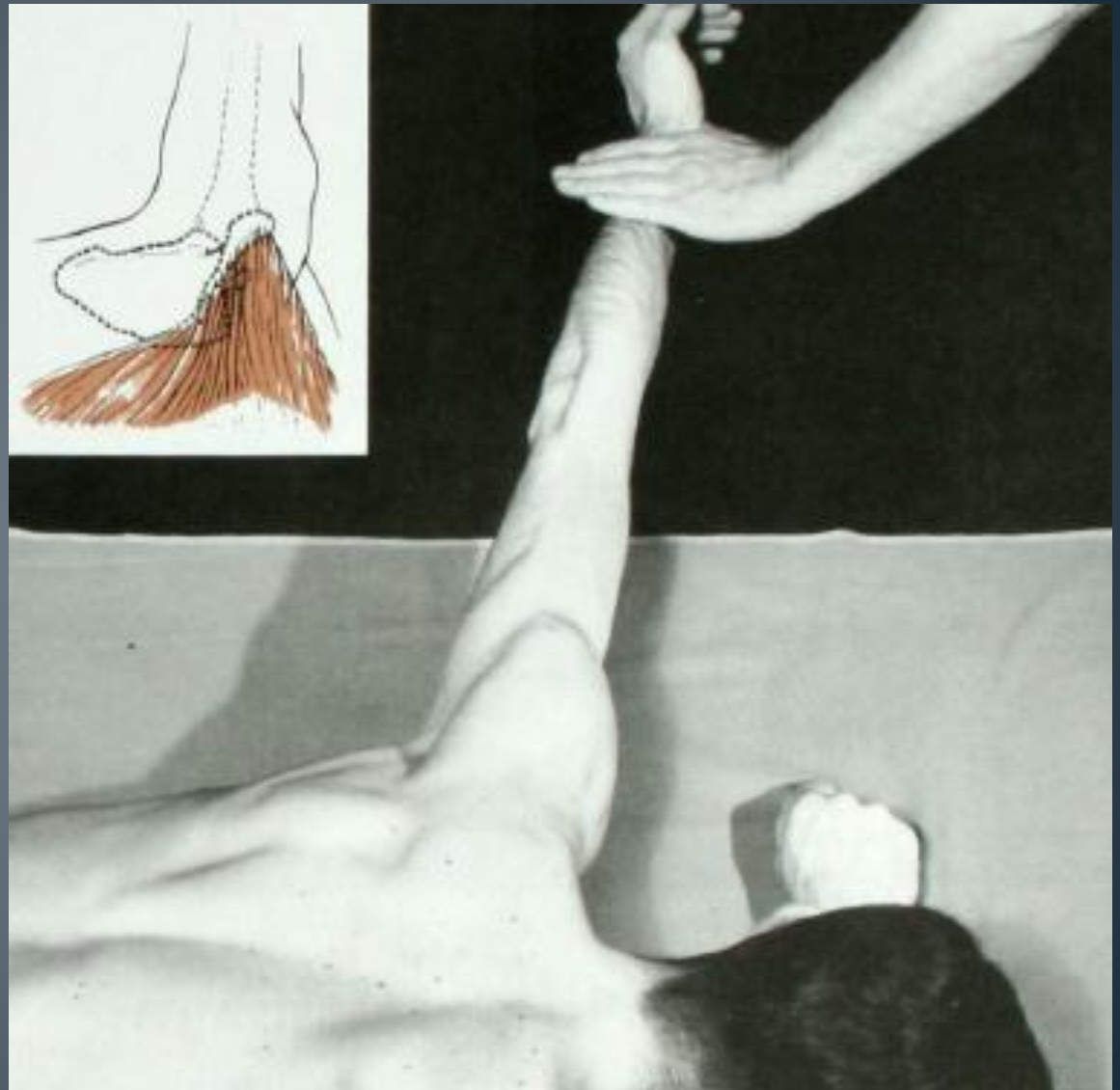
Rhomboids, Levator Scapulae



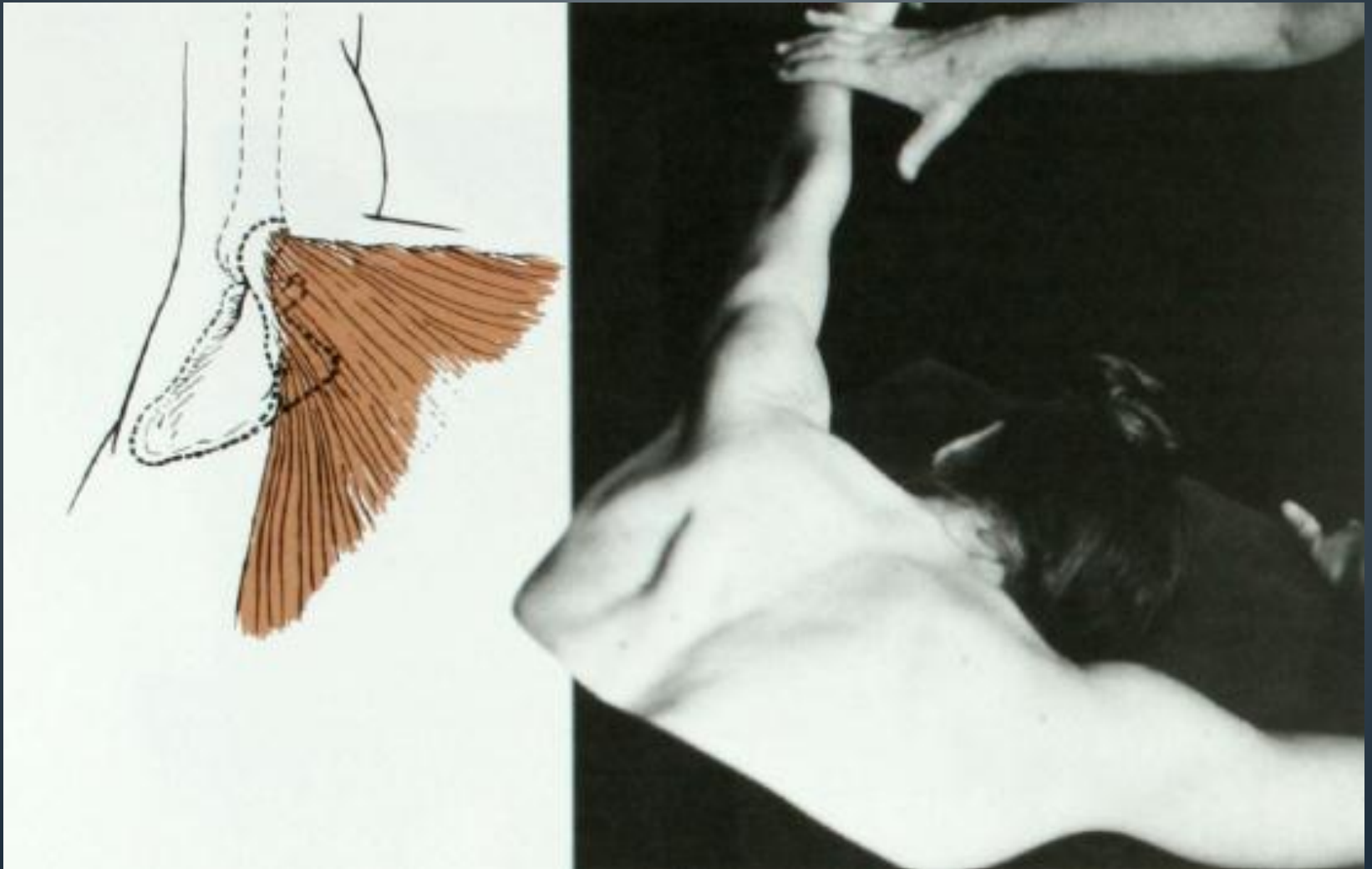
Alternate Rhomboid Test



Middle Trapezius



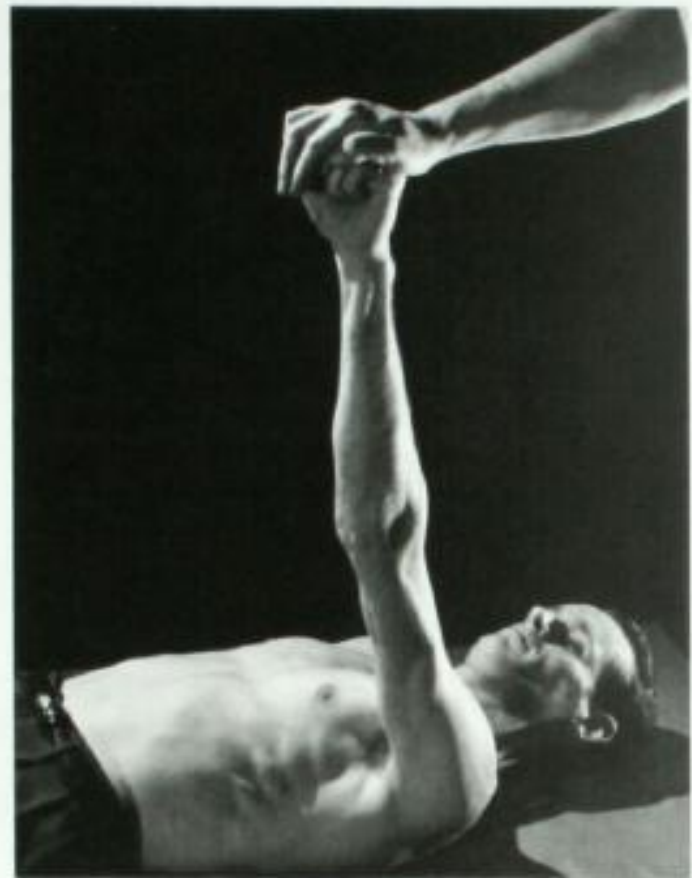
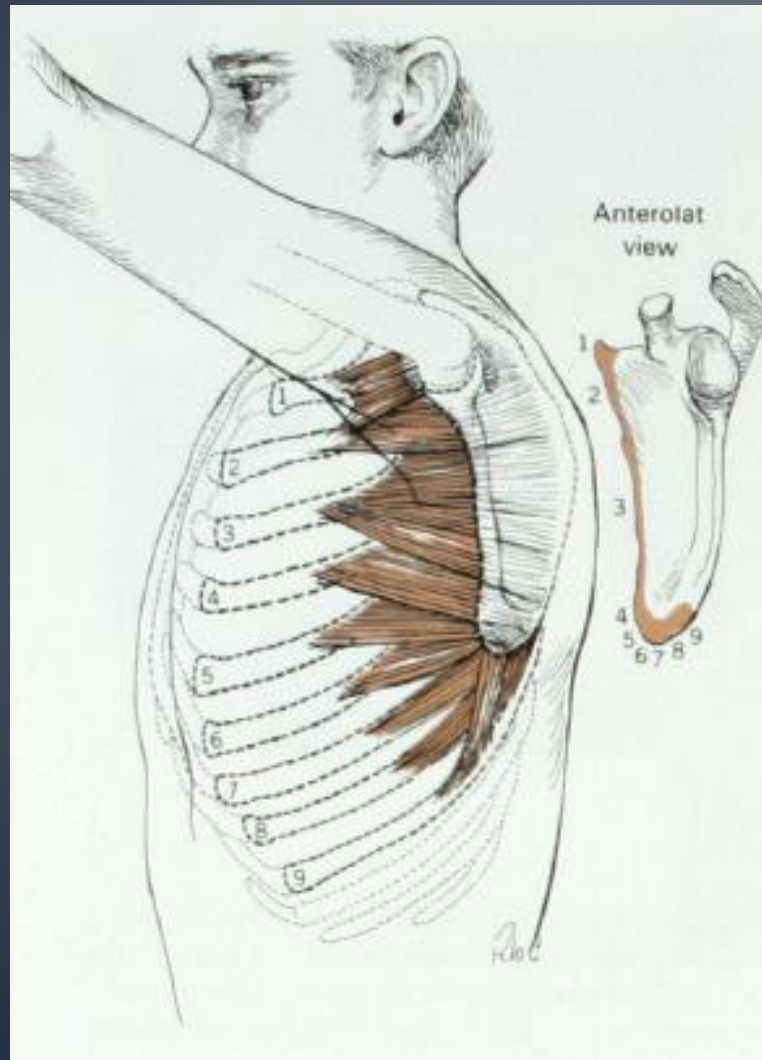
Lower Trapezius



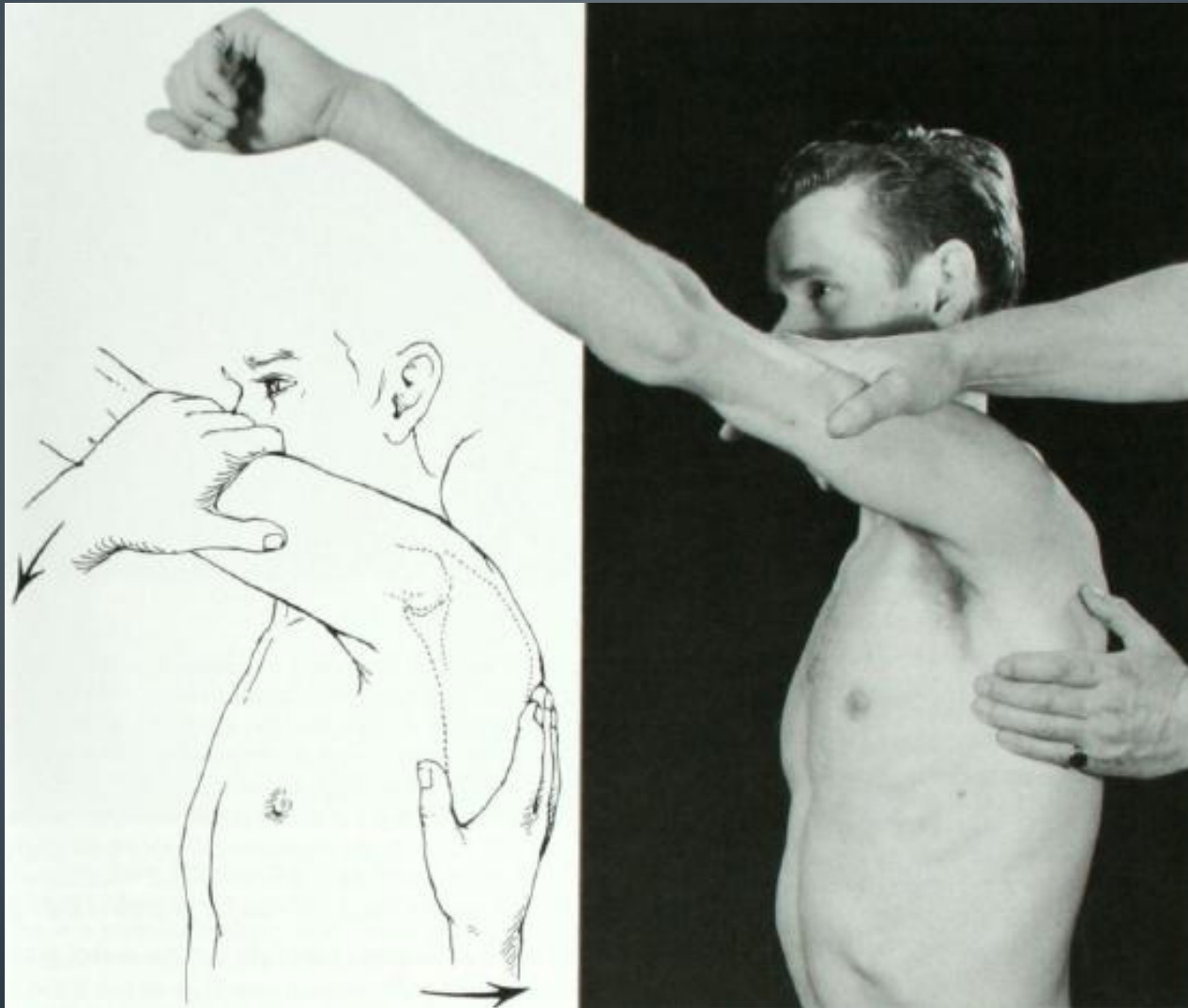
Upper Trapezius



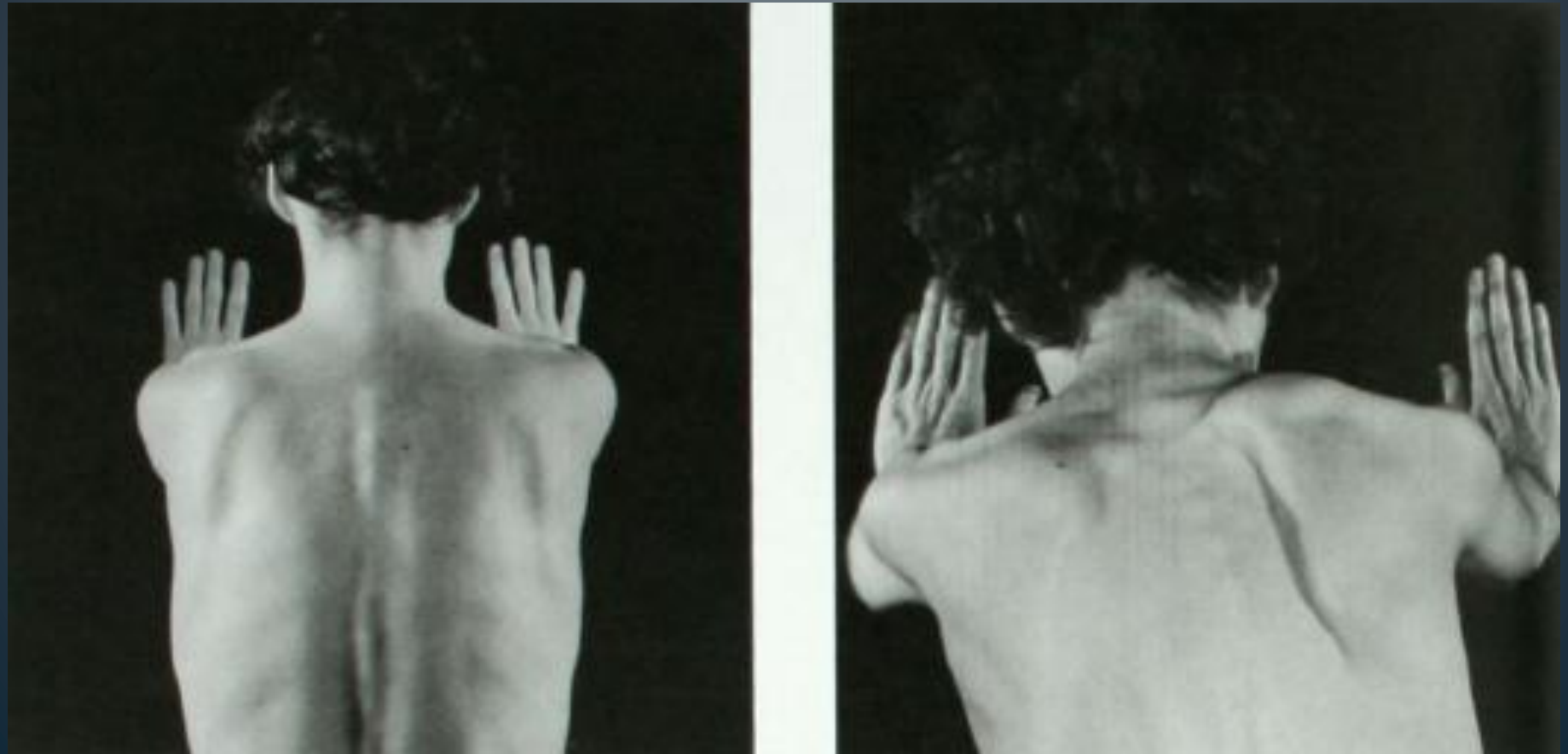
Serratus Anterior

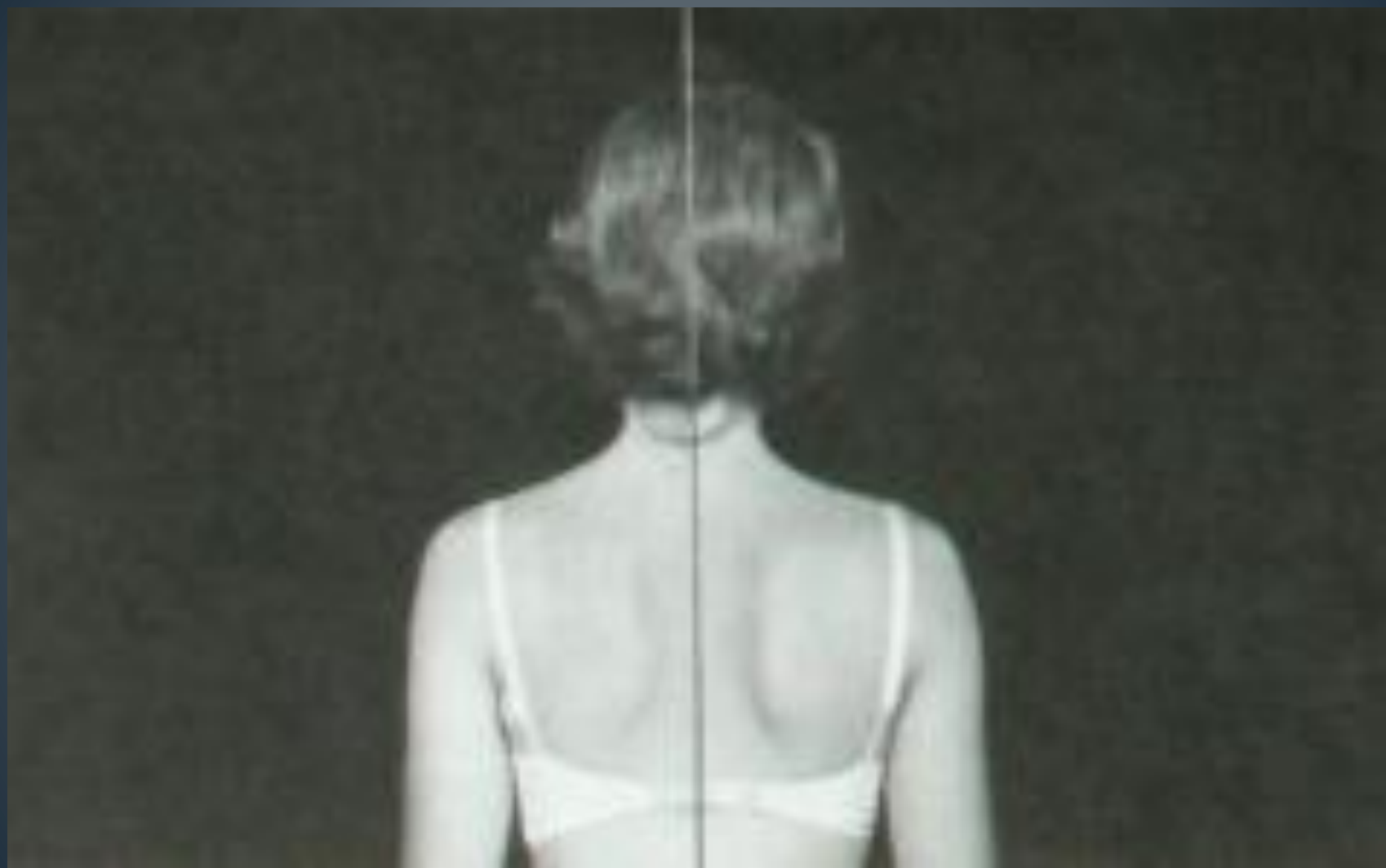


Serratus Anterior

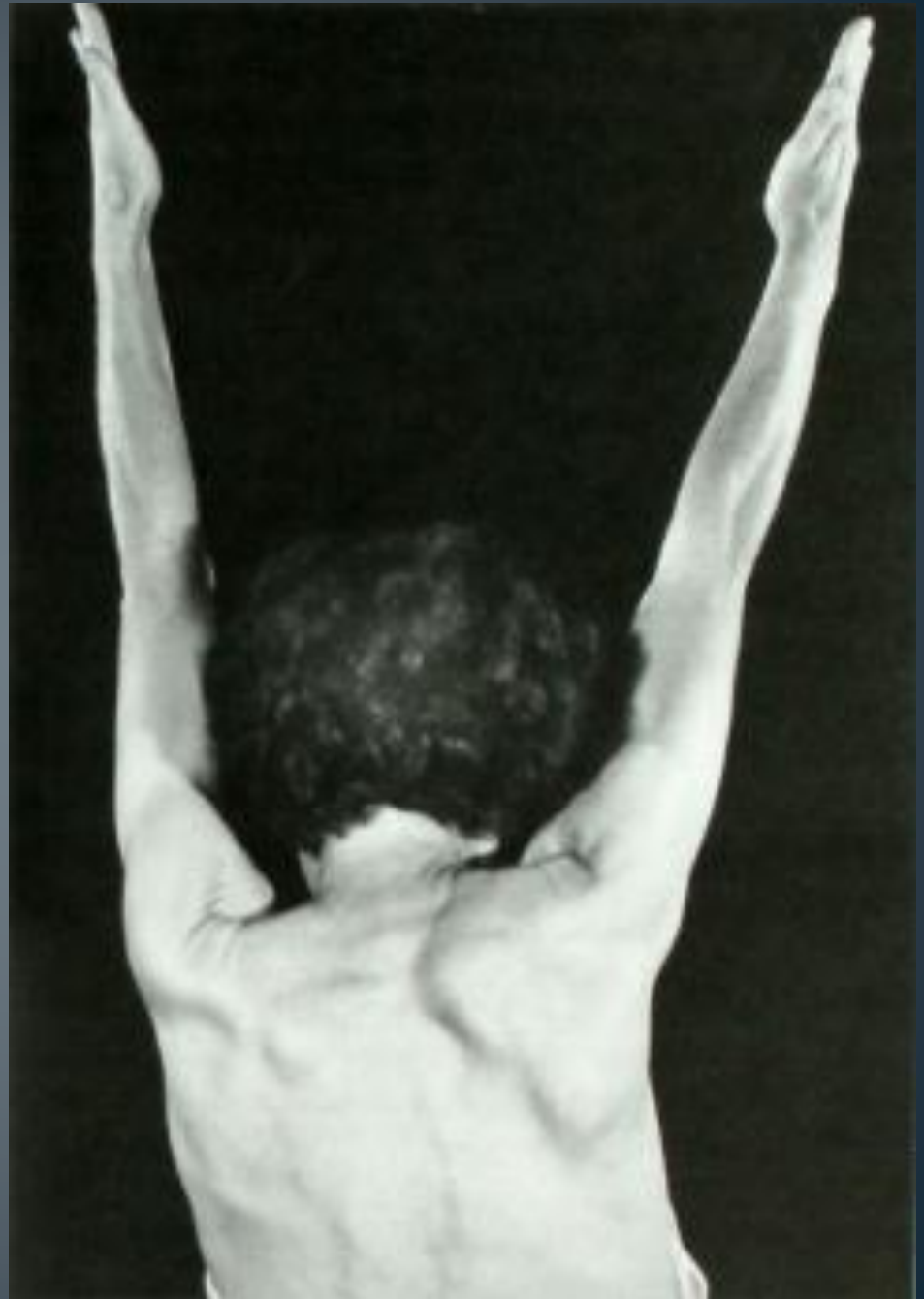


Serratus Anterior

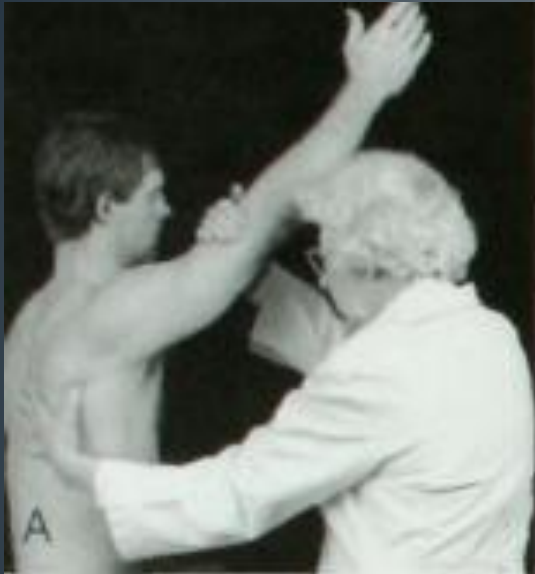




Serratus Anterior

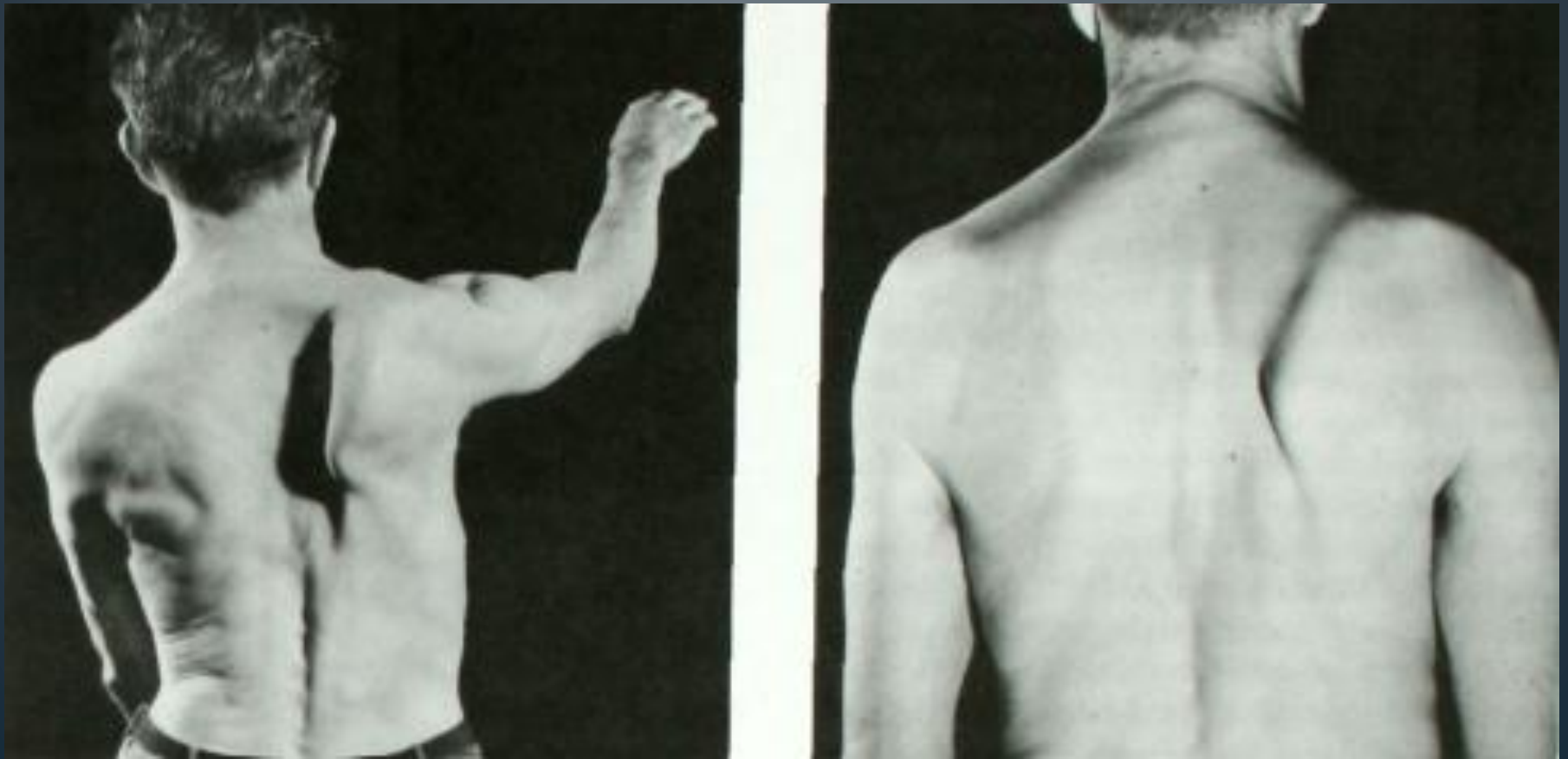


Serratus Anterior





Paralysis Of Right Trapezius And Serratus Anterior



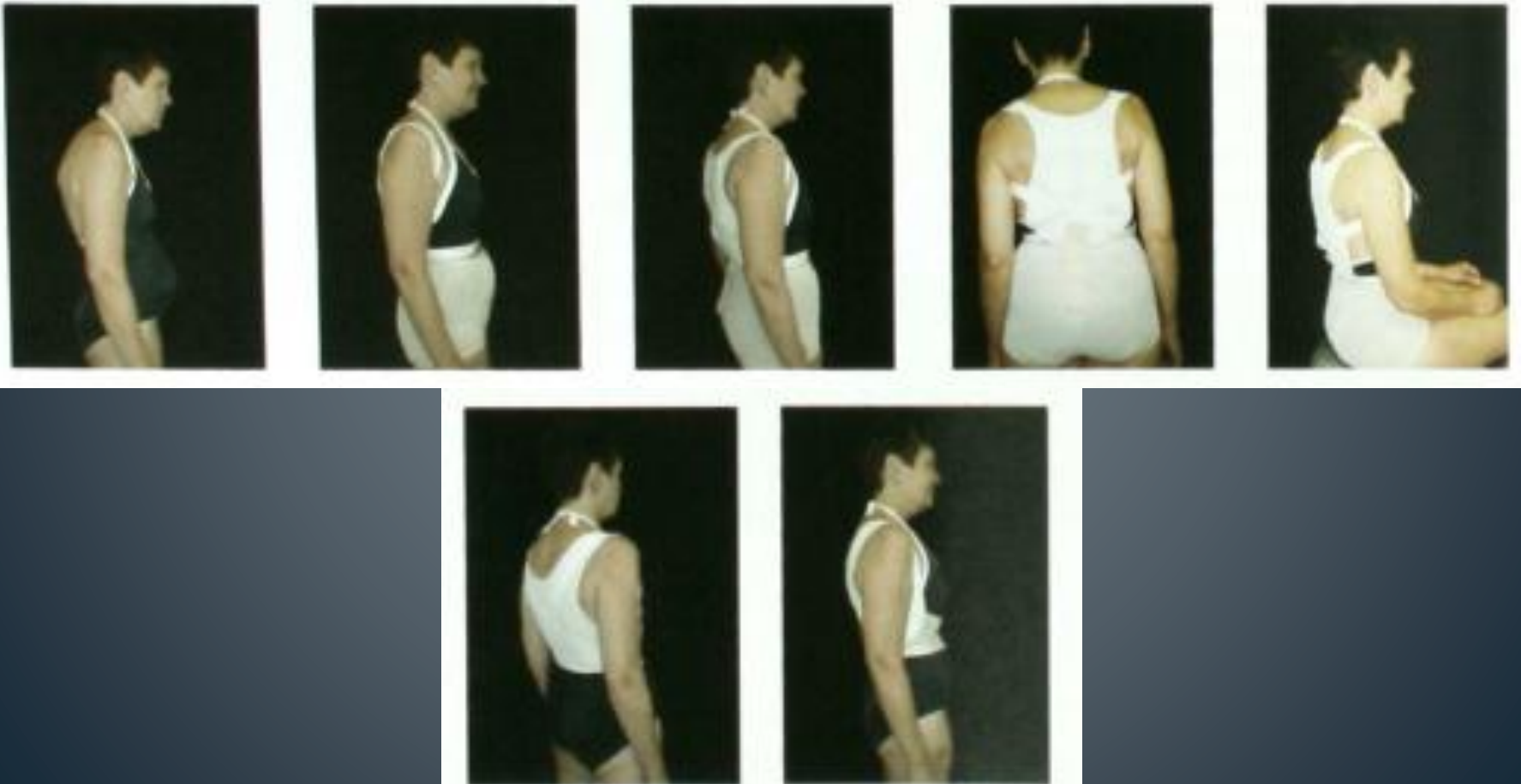
Paralysis Of Right Trapezius And Normal Serratus



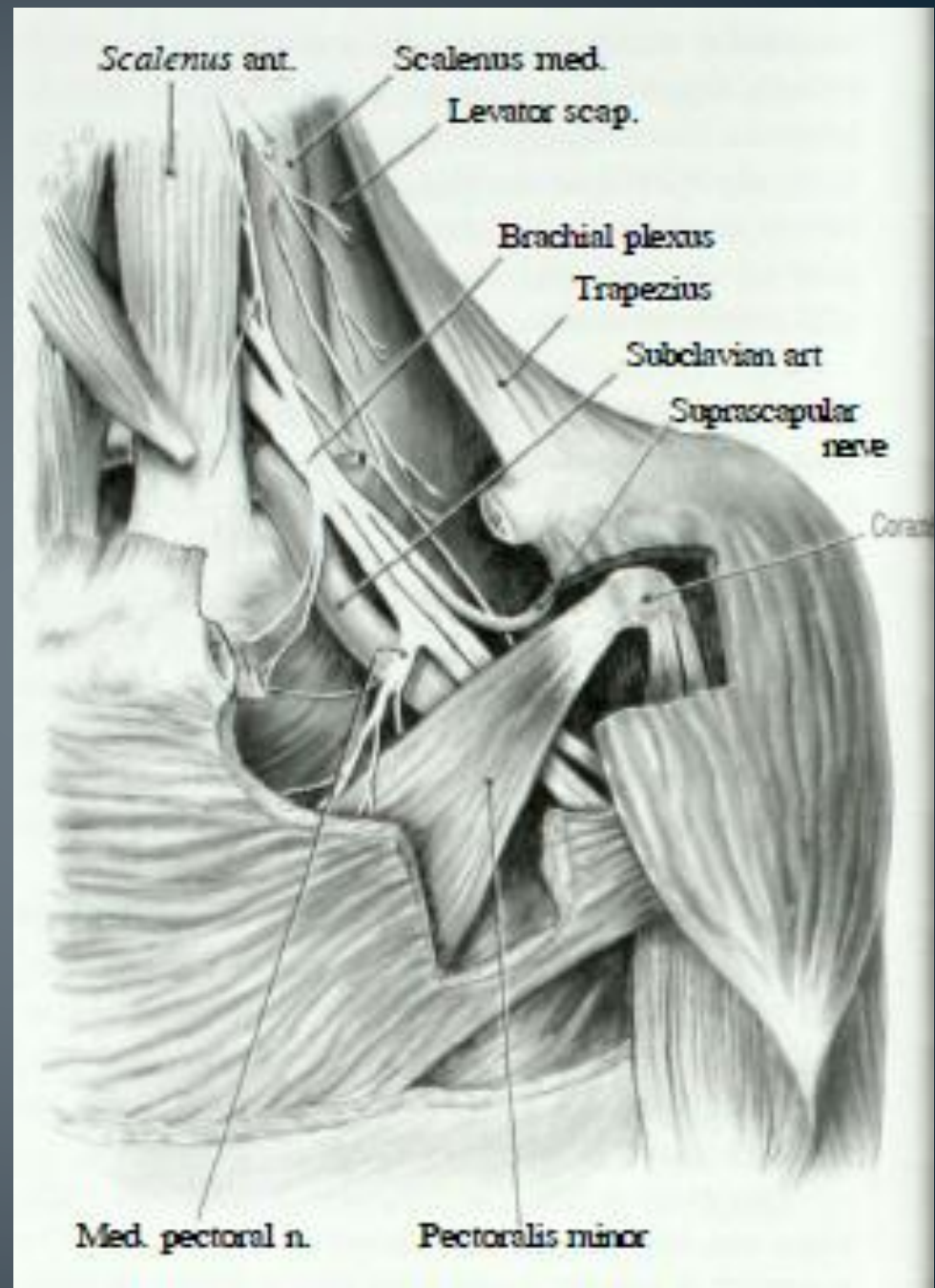
Middle And Lower Trapezius Spain



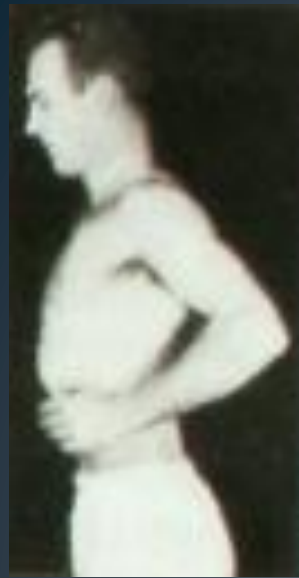
Painful Conditions Of The Upper Back



Painful Conditions Of The Arm



Painful Conditions Of The Arm



Bra—inadequate support



Regular posture bra
(front view)

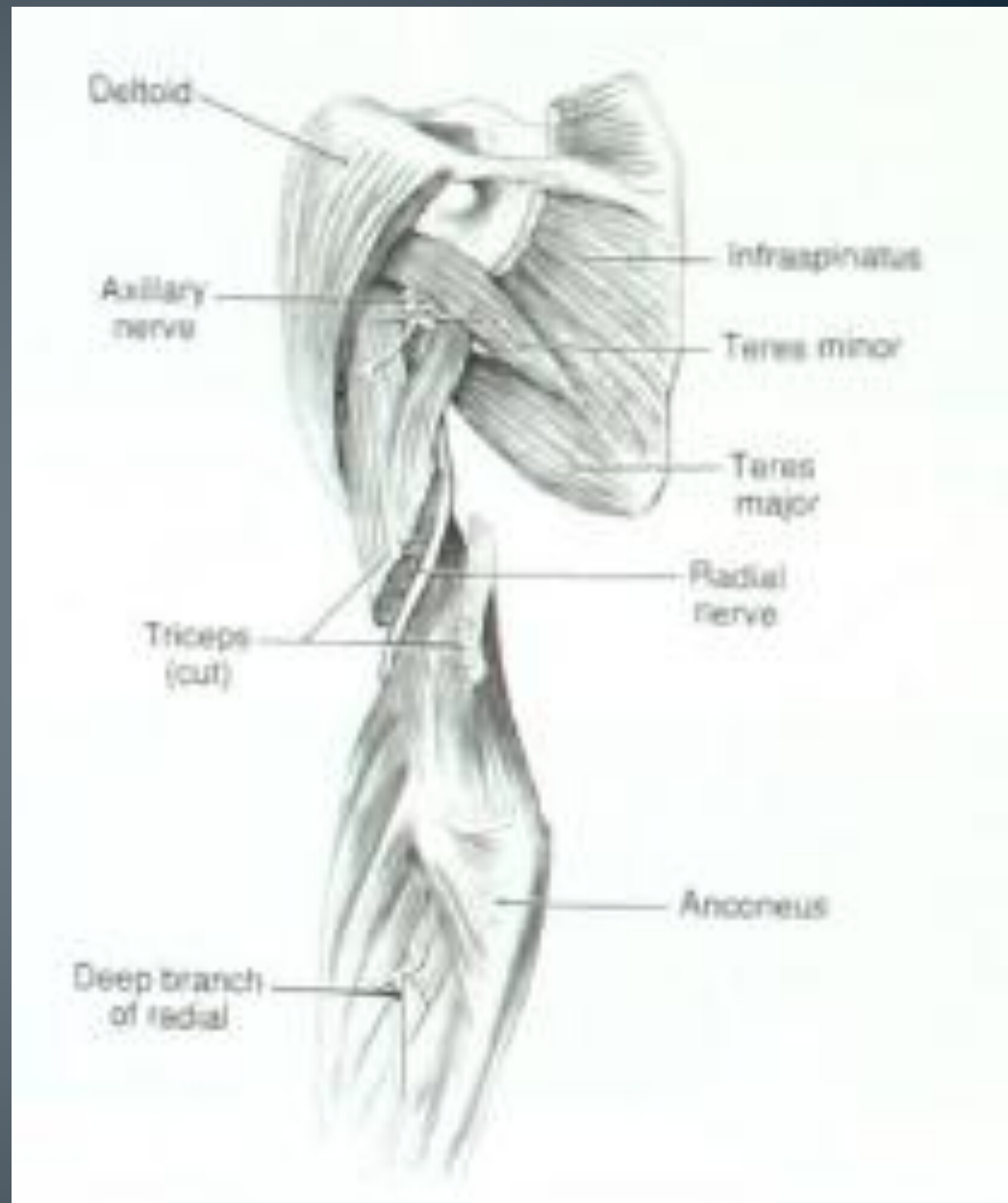


Long-line posture bra



Regular posture bra
(back view)

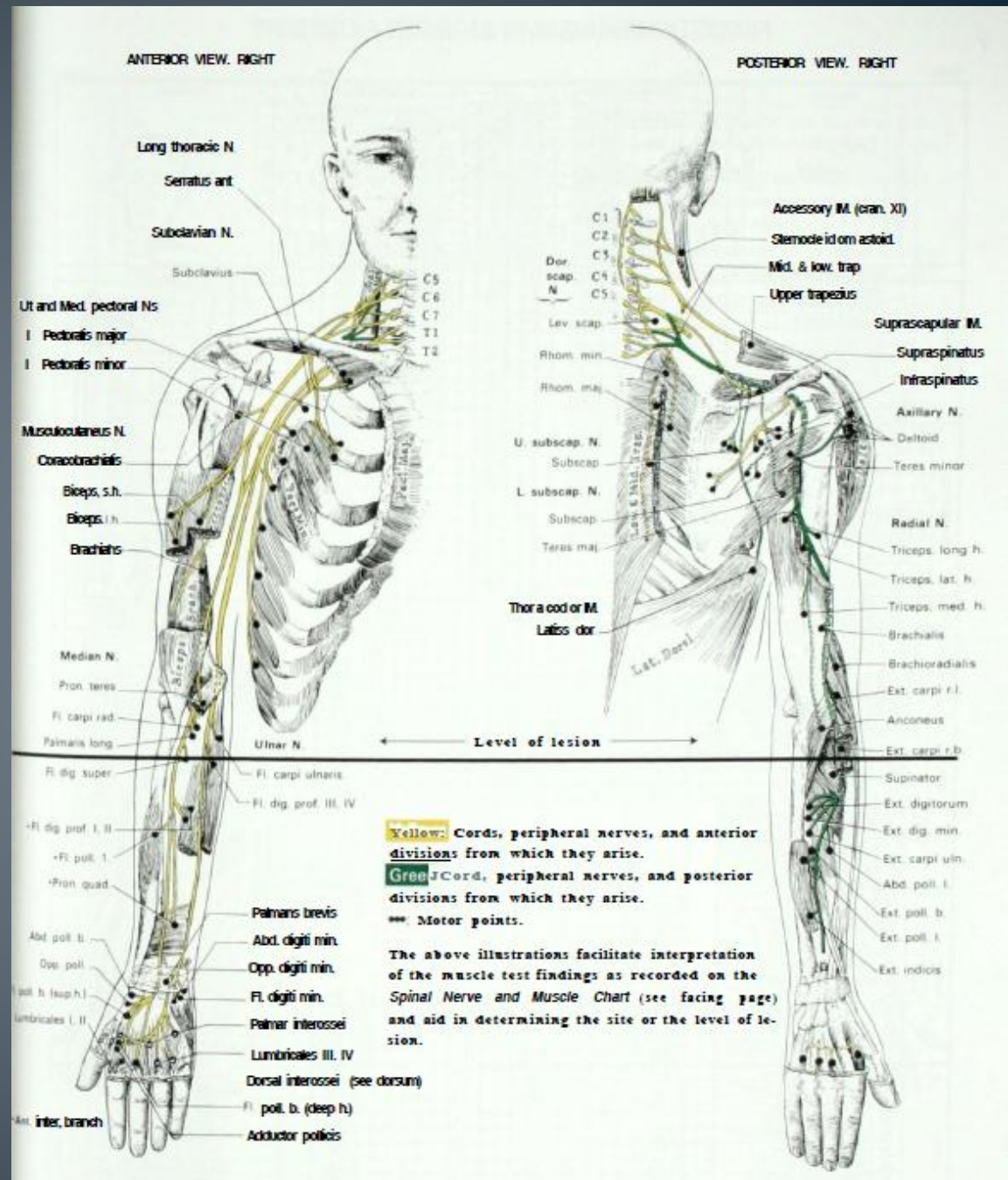
Painful Conditions Of The Arm



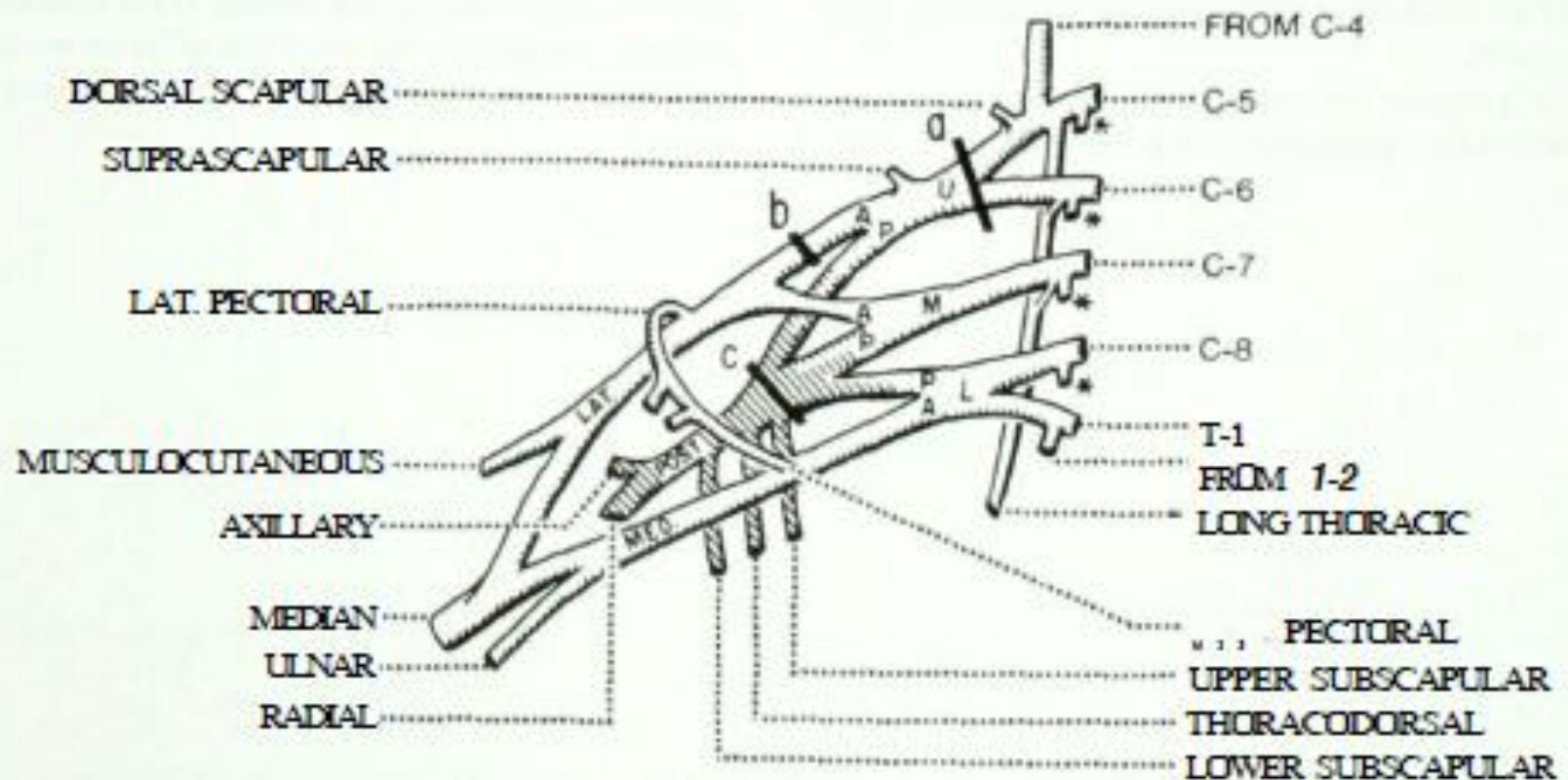
Painful Conditions Of The Arm



Case 2: Radial, Median, And Ulnar Nerve Lesion

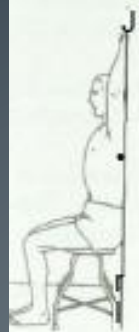


Case 5: Partial Brachial Plexus Lesion

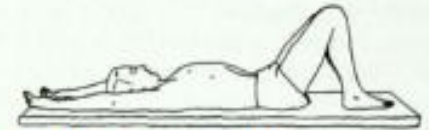


Brachial plexus with possible sites of lesions (a, b, and c). U = upper; M = middle; L = lateral trunks; A = anterior divisions; P = posterior divisions; * = to longus coli and scaleni; LAT = lateral cord; MED = medial cord; POST = posterior cord. Reprinted from (33); with permission.

Corrective Exercises: Upper Extremity



Wall-Sitting Postural Exercise
Sit on a stool with back against a wall. Flatten low back against wall by pulling up and in with lower abdominal muscles. Place hands up beside head. Straighten upper back by pulling shoulder blades down and back and pull elbows back against wall. Keep arms in contact with wall and slowly move through the patterns below.



Shoulder Adductor Stretching

With knees bent and feet flat on table, tilt pelvis to flatten low back on table. Hold the back flat, place both arms overhead, and try to reach arms to the table with elbows straight. Bring upper arms as close to sides of head as possible. (Do NOT allow the back to arch.) Progress to other movement patterns below.



Assisted Stretching of Pectoral is Minor
With subject in back-lying position (knees bent, feet flat), assistant stands on side of shoulder to be stretched and places cupped hand between the neck and the shoulder joint. Press shoulder back and down with firm, uniform pressure that helps to rotate the shoulder back. Hold for 60 seconds.



Stretch Upper Trapezius by Strengthening Latissimus Dorsi

Sit on table with padded block beside hips. Keep body erect with shoulders in good alignment. Press downwards, straightening the elbows, and lift buttocks directly upward from the table. Return slowly to starting position.