Muscles of the Neck, Shoulders, Chest and Thorax

- Deltoid
- Pectoralis major
- Biceps brachii
- Serratus anterior
- External oblique
- Internal oblique
- Transversus abdominus
- Rectus abdominus
- Linea alba
- Sternocleidomastoid
- Trapezius
- Subscapularis
- Pectoralis minor
- Coracobrachialis
- Serratus anterior
- External oblique
- Rectus abdominus
- Linea alba
- Platysma

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Muscles of the Neck, Shoulders, Chest and Thorax

1. Superficial Muscles of the Neck, Shoulders and Upper Arm

1) Platysma (grimace muscle):
   a. **Actions**: helps depress the mandible
   b. **Innervation**: Facial Nerve (VII)
   c. **Origin**: from skin over clavicle and fascia of pectoral and deltoid muscles
   d. **Insertion**: to margin of mandible

2) Sternocleidomastoid:
   a. **Actions**: head flexion and rotation
   b. **Innervation**: Accessory Nerve (XI)
   c. **Origin**: from top of sternum (manubrium) and medial end of clavicle
   d. **Insertion**: to mastoid process of skull (temporal bone)

3) Trapezius (posterior):
   a. **Actions**: stabilizes, raises, retracts and rotates scapula
      abducts upper limbs
   b. **Innervation**: Accessory Nerve (XI)
   c. **Origin**: from occipital bone down spinous processes through the thorax (ligamentum nuchae)
   d. **Insertion**: along the acromion and spine of the scapula and later end of clavicle

4) Deltoid (antagonist of Pectoralis major and Latissimus dorsi) (arm swinging):
   a. **Actions**: anterior fibers flex and medially rotate arm, posterior fibers extend and laterally rotate arm
   b. **Innervation**: Accessory Nerve (XI)
   c. **Origin**: from the lateral end of the clavicle and the acromion and spine of scapula
   d. **Insertion**: to deltoid tuberosity on the humerus

5) Biceps brachii
   a. **Actions**: flexes and supinates forearm (supinate rotates forearm laterally) – these act together for pulling tissue from tissue box, also a minor arm flexor
   b. **Innervation**: Musculocutaneous nerve
   c. **Origin**: from coracoid process and supraglenoid tubercle on scapula
   d. **Insertion**: through intertubercular groove of humerus to insert on radial tuberosity
1. Muscles of the Shoulders and Chest

6) Serratus anterior (boxer's muscle):
   a. Actions: holds scapula to chest wall and rotates it for arm abduction and forward motion (punching and pushing)
   b. Innervation: Long Thoracic Nerve (C5-7)
   c. Origin: from ribs 1-8
   d. Insertion: to anterior surface of inside border (vertebral) of scapula

7) Pectoralis major (climbing, throwing pushing, forcing inspiration muscle):
   a. Actions: arm flexion, medial rotation, adducts arm (against resistance), pulls ribcage down
   b. Innervation: Pectoral Nerve
   c. Origin: from clavicle, sternum, costal cartilage of ribs 1-6
   d. Insertion: to greater tubercle of the humerus

8) Pectoralis minor:
   a. Actions: moves scapula down or ribcage up
   b. Innervation: Medial Pectoral Nerve (C6-8)
   c. Origin: from anterior of ribs 3-5 (beneath Pec. major)
   d. Insertion: to coracoid process of scapula

9) Coracobrachialis:
   a. Actions: flexion and adduction of humerus (like Pec. major)
   b. Innervation: Musculocutaneous Nerve
   c. Origin: from coracoid process of scapula
   d. Insertion: to medial surface of shaft of humerus

10) Subscapularis:
    a. Actions: medial rotator of humerus, stabilizes shoulder joint (holds the head of the humerus in the glenoid cavity)
    b. Innervation: Subscapular Nerve (C5-6)
    c. Origin: from subscapular fossa of the scapula
    d. Insertion: to lesser tubercle of the humerus
1. Muscles of the Chest and Thorax

11) External oblique (fibers run like hands in your pockets – down toward the center of the body):
   a. **Actions**: both sides together assists rectus abdominus in trunk flexion and compressing abdominal wall, individually does rotation and lateral flexion of trunk
   b. **Innervation**: Intercostal Nerves (T1-12)
   c. **Origin**: from outer surfaces of lower eight ribs
   d. **Insertion**: to linea alba via aponeurosis, pubic crest, tubercle, iliac crest

12) Internal oblique (fibers run opposite to External obliques):
   a. **Actions**: assists rectus abdominus in trunk flexion and compressing abdominal wall, acting alone rotates trunk
   b. **Innervation**: Intercostal Nerves (T1-12, L1)
   c. **Origin**: from iliac crest and inguinal ligament
   d. **Insertion**: to linea alba via aponeurosis and last 3 ribs

13) Transversus abdominus (fibers run horizontally):
   a. **Actions**: compresses abdominal cavity and organs inside
   b. **Innervation**: Intercostal Nerves (T7-12, L1)
   c. **Origin**: from inguinal ligament, iliac crest, lumbodorsal fascia and the cartilages of the last six ribs
   d. **Insertion**: to linea alba via aponeurosis and pubic crest

14) Rectus abdominus:
   a. **Actions**: trunk flexion (lumbar region), stabilizes pelvis during walking, increases intra-abdominal pressure, fixes and depresses ribs
   b. **Innervation**: Intercostal Nerves (T6-12)
   c. **Origin**: from pubic crest and symphysis
   d. **Insertion**: to xiphoid process, costal cartilages of ribs 5-7