

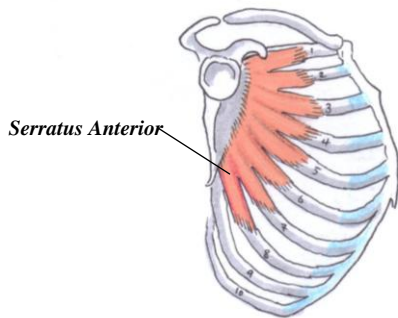
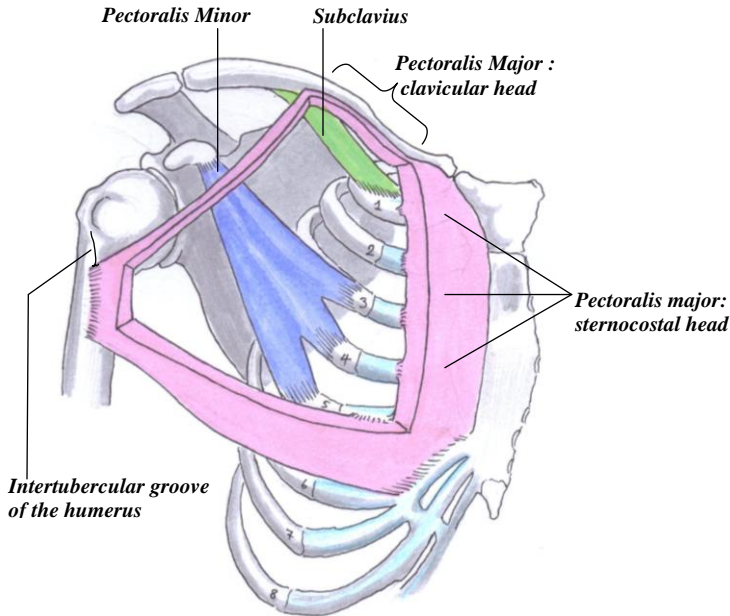
Anterior Axioappendicular Muscles of the Shoulder

There are 3 distinct groups of shoulder muscles:

ANTERIOR AXIOAPPENDICULAR MUSCLES – 4 muscles which move the pectoral girdle

POSTERIOR AXIOAPPENDICULAR MUSCLES – 4 muscles which attach the upper lumb to the skeleton of the trunk

SCAPULOHUMERAL MUSCLES – 6 muscles which act on the glenohumeral joint



Anterior Axioappendicular muscles

All supplied by stupidly different nerves.

No pattern whatsoever.

Pectoralis Major

Two heads:

- **CLAVICULAR HEAD:** ← lateral pectoral nerve
 - o Originates from the medial half of the anterior clavicle
- **STERNOCOSTAL HEAD:** ← medial pectoral nerve
 - o Originates from the anterior surface of the sternum, and the first 6 costoclavicular cartilages
 - o Also originates from the aponeurosis of the external oblique muscle of the abdomen
- **INSERTS INTO THE LATERAL LIP OF THE INTERTUBERCULAR GROOVE OF THE HUMERUS**
- Its inferior border forms the **anterior axillary fold**
 - o Abducts and medially rotates the humerus
 - o Draws scapula anteriorly and inferiorly by pulling on the humerus
- The heads can act independently:
 - o Clavicular head alone acts to flex the humerus
 - o When flexed, the sternocostal head extends it from its flexed position.

Pectoralis Minor ← medial pectoral nerve

- Originates at the 3rd, 4th and 5th ribs near the costal cartilages
- Inserts into the medial border and superior surface of the coracoid process of scapula
- Its job is to stabilize the scapula by pulling it anteriorly and inferiorly against the chest wall
- It also assists in elevating the ribs when breathing
- All the vessels and nerves to the arm travel under the pectoralis minor.

Subclavius ← nerve to subclavius

- Originates at the junction of the 1st rib and its costal cartilage
- Inserts into the “groove for subclavius” on the inferior surface of the middle third of the clavicle
- Depresses and anchors the clavicle
- Protects the subclavian vessels when the clavicle is fractured

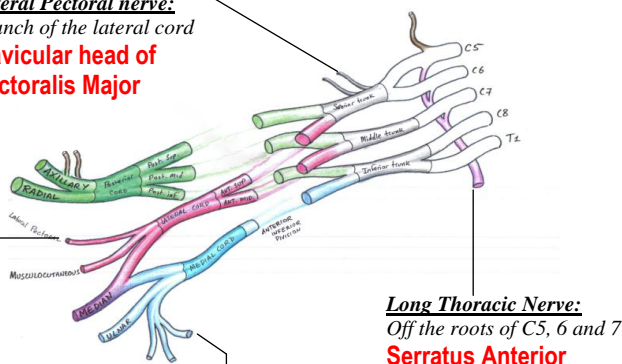
Serratus anterior ← long thoracic nerve

- Originates from the lateral surfaces of the first 8 ribs
- Inserts into the medial border of scapula
- Protracts the scapula, holds it against the chest wall, and rotates it superiorly (eg when reaching for something up high). **THE MAIN PROTRACTOR OF THE SCAPULA**
- One of the most powerful muscles in the pectoral girdle.
- Its paralysis causes a winged scapula. Also, the arm cannot be abducted past the horizontal position (the scapula doesn't rotate upwards anymore)
- If you insert your chest drain **BELOW** the mid-axillary line, you will cause this sort of paralysis, which is embarrassing.

Innervation

Lateral Pectoral nerve:
Branch of the lateral cord
clavicular head of Pectoralis Major

Nerve to Subclavius:
Off the superior trunk
Subclavius



Medial Pectoral nerve:
Branch of the medial cord

Pectoralis Minor; sternocostal head of Pectoralis Major