

STRUCTURAL OVERVIEW

www.thebodyguild.org - Better body care through shared expertise

PECTORALIS MAJOR

OVERVIEW

The pectoralis major is a broad, fan shaped muscle made of flat overlapping strips that covers the anterior ribs. Many books describe the attachments of this muscle differently. Travell and Eisler describe this in a way that most directly match cadavers although Cummings illustrates the muscle with more extensive muscle fibers and less extensive fascial sections than appears in the examined cadavers.

It has 4 major sections and one of the sections (costal) twists nearly 180 degrees as it wraps around the other sections near the attachment. These sections have overlapping strips.

INNERVATION

It is innervated via the brachial plexus. The lateral pectoral nerve innervates the clavicular and sternal sections. The medial pectoral nerve innervates the costal and abdominal sections. The spinal segments descend in accordance with the sections that they innervate; C5-6/clavicular, C6-7/sternal, C7-8, costal, C8-T1, abdominal.

ATTACHMENTS

The pectoralis major originates in an arc that extends from the medial half of the clavicle around the manubrium and sternum, along the lower costal cartilages and into the fascia of the abdominals. The origins along the sternum and costal cartilages attach in overlapping layers so that the deep bellies are hidden under the superficial bellies.

The insertion occurs in two tendons that fuse as they attach to the lateral lip of the bicipital groove. The sections that do not twist attach in a superficial section of the insertion tendon. The twisting sections attach in the deep portion of the insertion tendon.

FUNCTION

The pectoralis major draws the humerus toward the ribs and clavicle. Depending on the position of the humerus, this can be called many things. When the elbow is overhead, the lateral pecs and lateral compartment of the lats work together to depress the humerus as the pec draws it more anteriorly and the lat draws it more posteriorly. When the elbow is alongside the body, these muscles work as antagonists that flex or extend the humerus. When the humerus is extended behind the ribs the pectoralis major flexes the humerus.

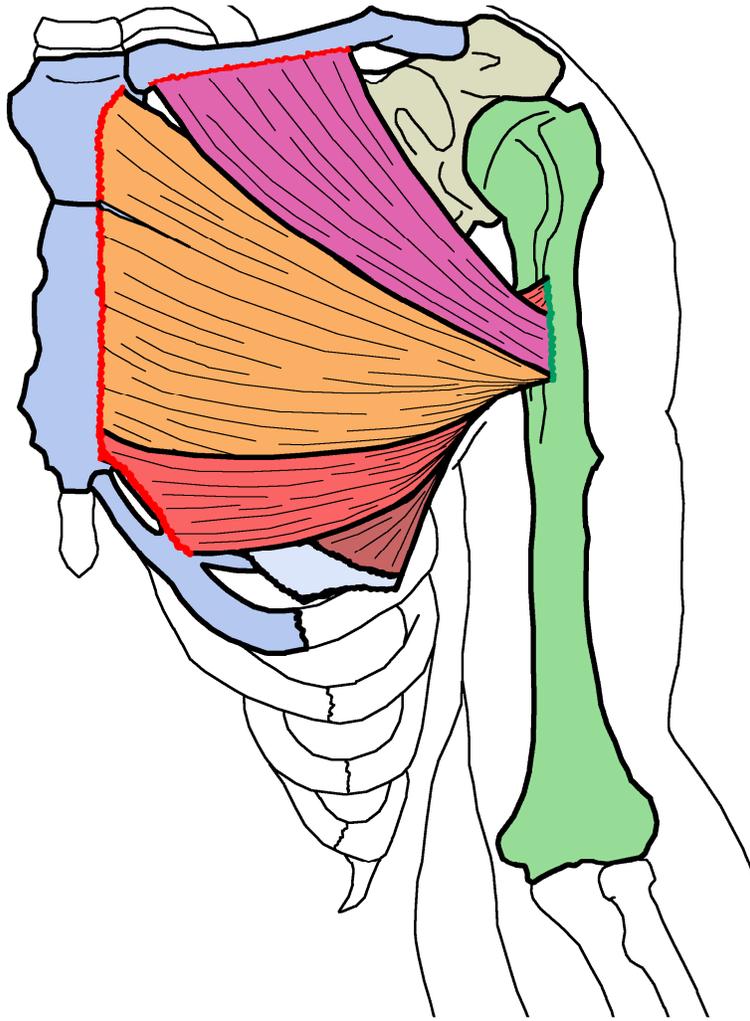
NEUROMUSCULAR CONSIDERATIONS

Pecs are often the victim of cervical problems. They are innervated by the brachial plexus and are intertwined with THORACIC OUTLET SYNDROME. They also perpetuate THORACIC OUTLET SYNDROME by holding pectoralis minor short, which entraps the brachial plexus. Thorough treatment of the neck and thorax is often needed to produce longer lasting results.

Pectoralis major produces symptoms when short and strong as well as when they are overstretched. They are seldom seen as overstretched as extension postures are often not recognized for their impaired functions. The trigger points produce issues with anxiety, breathing and heart related symptoms, which are not often conveyed to the bodyworker as part of musculoskeletal problem. Many things make this muscle difficult to treat. It is a pit of emotional issues. It presents issues with modesty. It is usually very sensitive physically. Breast tissue is often in the way of treatment. Its relationship to THORACIC OUTLET SYNDROME is often misunderstood. Anatomy books are seldom accurate in describing the twisting costal layer and therefore make for confusing palpation. Clients and therapists often don't connect many of the indications with this muscle.

STRUCTURAL OVERVIEW

www.thebodyguild.org - Better body care through shared expertise



○ PECTORALIS MAJOR

ORIGIN

Clavicular

- **Medial half of clavicle**

Sternal

- **Sternum & manubrium**

Costal

- **Costal cartilages of ribs 2-7**

Abdominal

- **Aponeurosis of the external obliques**

INSERTION

- **Lateral lip of the bicipital groove of the humerus**

FUNCTION

- **Adduction of the humerus**
- **Horizontal adduction of the humerus**
- **Medial rotation of the humerus**

Clavicular head

- **Flexion of the humerus**

Sternal head

- **Extension of the humerus from a flexed position**