Latissimus dorsi is a large, flat, triangular muscle, which passes between the lumbar and lower thoracic regions of the trunk to the humerus, acting on both the shoulder joint and the shoulder girdle.

Proximal Attachment

It arises deep to trapezius by tendinous fibers from the spinous processes and supraspinous ligaments of T7 to T12, the posterior layer of the thoracolumbar fascia, by which it is attached to the spines of all lumbar and sacral vertebrae, the posterior part of the iliac crest and by muscular fibers from the outer lip of the iliac crest lateral to erector spinae and the lower four ribs interdigitating with external oblique.

Distal Attachment

The fibers pass laterally, converging to a narrow flat tendon; the upper fibers almost overlap the inferior angle of the scapula horizontally, where it may receive additional fibers. The middle fibers pass obliquely and the lower fibers pass almost vertically. The tendon passes anterior to that of teres major, the lower border of the tendon unites with the tendon of teres major for a short distance and a bursa lies between the two. The fascicles of the tendon rotate around each other, to attach to the floor of the intertubercular sulcus (groove) of the humerus. Due to the rotation of the fascicles, the lower fibers attach highest on the humerus and the upper fibers lowest. Latissimus dorsi and teres major form the posterior fold of the axilla

Between the inferior border of latissimus dorsi, the iliac crest and the posterior border of external oblique, is the lumbar triangle. Between the superior borders of latissimus dorsi, the medial border of the scapula and the inferior border of trapezius is the triangle of auscultation, which has part of rhomboideus major as its floor.

Nerve Supply

It is supplied by the thoracodorsal nerve, which is derived from the posterior cord of the brachial plexus (C6 to C8).

Action

Latissimus dorsi extends, adducts and medially rotates the arm at the shoulder joint, being most powerful when the arm is flexed and/or abducted. With the humerus fixed it retracts the pectoral girdle. With the arms raised above the head it pulls the trunk upwards and forwards. It aids deep inspiration and is active towards the end of forced expiration and in all violent expiratory efforts, such as in coughing and sneezing.