

Quadratus lumborum is a large flat quadrilateral muscle of the posterior abdominal wall, lying deep to erector spinae and lateral to psoas major. Anteriorly lies the kidney, psoas major the diaphragm and the subcostal, iliohypogastric and ilioinguinal nerves.

Proximal Attachment

It arises inferiorly by aponeurotic fibers from the iliolumbar ligament and adjacent posterior part of the iliac crest.

Distal Attachment

It passes slightly supero-medially to attach to the medial half of the lower border of the twelfth rib; during its course it also attaches by small tendons to the apex and lateral part of the anterior surface of the transverse processes of L1 to L4. The muscle is enclosed between the anterior and middle layers of the thoracolumbar fascia.

Nerve Supply

Quadratus lumborum is supplied by ventral rami of the subcostal (T12) and the upper three or four lumbar nerves (L1-L3/L4).

Action

Individually, quadratus lumborum laterally **flexes the trunk to the same side**, when standing on one leg it acts to help prevent the pelvis dropping on the unsupported side. When both sides work together they help extend the lumbar spine. By holding down the last rib it assists in stabilizing the lower attachments of the diaphragm, allowing it to contract more effectively.