

## Anatomy & Physiology: Muscles—Quadratus Lumborum.

### STRUCTURE.

- Origin: iliac crest, iliolumbar ligament.
- Insertion: 12th rib, transverse processes L2-L5.

### FUNCTION.

- Concentric action: spinal lateral flexion; pulls rib 12 inferiorly during forced exhalation; fix ribs to prevent elevation during deep inhalation; help lumbar extension. Anterior pelvic tilt and lower spine extension relative to upper spine.
- Reverse mover action: trunk lateral flexion; rib 12 depression; trunk extension.
- Eccentric action: controls/restrains/decelerates contralateral and lateral spinal flexion; rib 12 elevation; ipsilateral depression and posterior tilt of pelvis.
- Isometric action: stabilization of the lumbo-pelvic-hip complex.
- Innervation: spinal nerves T12-L3.
- Arterial supply: branches of subcostal and lumbar arteries; iliolumbar artery.

### CLINICAL SIGNIFICANCE.

## References

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