

# Quadratus Lumborum Syndrome and Counternutation

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Nutation and counternutation have been described previously by Kapandj in *Psychology of the Joints, Volume 3*. Nutation is the anterior inferior motion of the sacral base accompanied by posterior motion of the ilium. Counternutation is the opposite: The sacral base moves posteriorly and superiorly, while the ilium moves (rotates, swivels) anteriorly and superiorly. (PSIS is the reference point for describing ilium motion.)

In the process of correcting anterior superior motion of the ilium during counternutation, the *quadratus lumborum* muscle is regarded as one of the (if not the primary) prime movers of this AS ilium motion. Occasionally, especially on the right side during an AS ilium fixation in combination with L-5 dysfunction, or with an AS fixation alone, broad, right-sided lumbar pain and spasm can arise as a result of quadratus lumborum contraction. Intense quadratus lumborum contraction also can be seen with lumbar disc problems, because of AS ilium compensations. The concept here is that the quadratus lumborum is involved in some level of increased contraction whenever an AS ilium fixation is taking place. Naturally, other muscles, such as the sacrospinalis, will be recruited to some level of activity during AS ilium fixation processes.

In these cases, treatment requires elimination of the AS ilium fixation - usually by way of lumbar and thoracic corrections, and less often, by direct ilium adjusting. Muscle therapy is a secondary option, not the primary treatment.

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