Brian P. Kavanagh, M.B., F.R.C.P.C., Editor

Ultrasound-guided Lumbar Plexus Block in Supine Position

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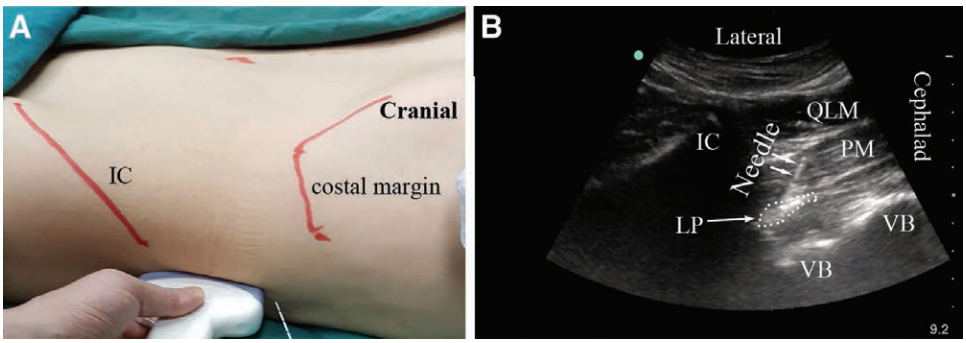

THE LUMBAR plexus lies in a fascial plane within the posterior one third of the psoas major muscle.[1] The quadratus lumborum muscle lies laterally to the psoas major muscle. It is possible to block the lumbar plexus with a lateral-to-medial trans-quadratus lumborum muscle approach in the supine position.

A 2 to 5 MHz curved array probe is placed at the posterior axillary line to perform a sagittal scan (panel *A*). Panel *B* shows the long axis of the quadratus lumborum muscle (QLM) and psoas major muscle (PM), the iliac crest (IC), the lumbar vertebral body (VB), and the long axis of the lumbar plexus (LP). The lumbar plexus is identified as longitudinal hyperechoic structures located lateral to the vertebral body and in the psoas major muscle. The lumbar plexus block can be successfully performed with the needle inserted in a cephalad-to-caudad direction passing through the quadratus lumborum muscle. This can be seen in the Supplemental Digital Content Video (http://links.lww.com/ALN/B551).

Compared with the classic approach,[2,3] this approach may offer several advantages. It allows the patient to remain supine and is especially useful for patients who are unsuitable for the lateral position. In addition, it may minimize the risk of intrathecal injection and allow subsequent quadratus lumborum blocks during withdrawal of the needle. Kidney and bowel injuries are potential complications for this approach. The longitudinal scanning technique facilitates identification of the lumbar plexus in long axis, which may be appropriate for placing a catheter along the lumbar plexus.

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Competing Interests

The authors declare no competing interests.

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