

ULTRASOUND-GUIDED GENICULAR NERVE BLOCK FOR CHRONIC KNEE OSTEOARTHRITIS PAIN: A CASE REPORT

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Background

Chronic knee osteoarthritis is a common cause of persistent pain and functional limitation. Genicular nerve blockade is a minimally invasive, motor-sparing technique that can provide both diagnostic and therapeutic pain relief.

Case Presentation

A 65-year-old woman with knee osteoarthritis and a body mass index of 46 kg/m² presented with persistent knee pain and functional limitation. Considering the chronic nature of her symptoms and the patient's significant obesity, an ultrasound-guided therapeutic genicular nerve block was performed. The superior medial, superior lateral, and inferior medial genicular nerves were targeted. At each target, 3 mL of 0.5% ropivacaine combined with 10 mg of triamcinolone was administered.

Following the procedure, the patient experienced a marked reduction in pain, with the pain score decreasing to 1/10. At four-week follow-up, the pain score remained low at 2/10, with the patient reporting sustained functional improvement. Clinically meaningful analgesia was maintained for approximately two months. No procedure-related complications were observed.

Conclusion

This case demonstrates the potential role of ultrasound-guided genicular nerve blockade as a therapeutic option for chronic knee osteoarthritis pain. The combination of local anesthetic and corticosteroid provided substantial and sustained analgesia, with clinically meaningful pain relief maintained for approximately two months. Genicular nerve blockade may represent a valuable minimally invasive component of multimodal interventional pain management, particularly in patients with significant obesity.

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