

Genicular Nerve Block for Painful Knee Osteoarthritis

This procedure provided short-term pain relief that diminished gradually over 12 weeks.

Given the potential adverse effects of many oral analgesics, patients with painful knee osteoarthritis (OA) often require other interventions. One option, provided at some pain treatment centers, is radio-frequency ablation of the genicular nerves innervating the knee (*NEJM JW Gen Med* Nov 1 2020 and *Br J Bone Joint Surg* 2020; 102:1501); to predict whether this procedure is likely to help, it often is preceded by genicular nerve block with short-acting anesthetic. Another option, examined in this Australian randomized trial, is genicular nerve block as the sole procedure — using both steroid and anesthetic.

Fifty-nine patients with painful knee OA underwent ultrasound-guided genicular nerve block (with the steroid betamethasone plus the anesthetic bupivacaine) or a placebo procedure (with saline). At 2 and 4 weeks, mean reductions in pain were significantly greater with active treatment than with placebo — by 2 points on a 10-point scale. At 8 weeks, the difference remained statistically significant but had decreased to 1 point; at 12 weeks, a smaller difference was no longer significant. Several other measures of pain and function paralleled the pain-scale findings. No adverse events were reported.

COMMENT

Genicular nerve block might have a role for patients in whom other pharmacologic remedies are contraindicated or ineffective and who wish to avoid knee replacement. However, the pain relief is relatively short term, and we don't have data on the safety and efficacy of repeating the procedure at several-month intervals. — **Allan S. Brett, MD**

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