The Efficacy of Combined Popliteal and Ankle Blocks in Forefoot Surgery

Reference:

Scientific Literature Reviews

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Podiatric Relevance:
This study provides useful data for better postoperative pain management for patients undergoing forefoot surgery.

Methods:
Sixty-three patients were enrolled in a prospective, randomized, controlled single-blinded study from February 2005 and February 2006. All patients underwent elective osseous forefoot surgical procedure. The control group consisted of thirty-seven patients who had an ankle block alone preoperatively. The intervention group consisted of twenty-six patients who had a combined ankle and popliteal block preoperatively. The popliteal block was performed using a nerve stimulator and 20ml of 0.25% levobupivacaine, while the ankle block was performed using 20ml of 0.5% levobupivacaine. Postoperative pain was evaluated with use of a visual analogue scale and a verbal response form. Patient’s pain level was recorded following complete recovery from general anesthesia, six hours postoperatively, twenty-four hours postoperatively, and at time of discharge. Patient satisfaction was also recorded.

Results:
The patients who had the combined popliteal and ankle block had significantly less pain at six hours postoperatively (p = 0.011), twenty-four hours postoperatively (p < 0.001), and at discharge (p = 0.014). This group of patients also had higher satisfaction with pain relief. The patient group with the combined block did take less postoperative pain medication, however it was not statistically significant with the numbers studied.

Conclusions:
On the basis of these findings, in patients undergoing forefoot surgery a popliteal block in conjunction with an ankle block provides significantly better pain relief than an ankle block alone.