The Efficacy of Combined Popliteal and Ankle Blocks in Forefoot Surgery

Reference:

Scientific Literature Review

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Podiatric Relevance:
This randomized prospective single-blind study provides insight on the effectiveness of a combined popliteal and ankle block versus an ankle block alone in postoperative pain relief following forefoot surgery.

Methods:
This study evaluated 63 patients, mean age of 51.6 with age range from 17 to 76, undergoing forefoot surgery. These patients were randomized into two groups, the first being an interventional group who received a combined popliteal and ankle block (27 patients) and the second, a control group who received an ankle block alone (36 patients). All patients were assessed postoperatively following forefoot surgery at the recovery room, six hours postoperatively, twenty-four hours postoperatively, and at time of discharge if the patient was observed more than twenty-four hours postoperatively. Utilizing the visual analogue scale and verbal response scale, a patient’s postoperative pain was measured and evaluated. Then at time of discharge, patient satisfaction was scored. Additionally, a standard analgesic regimen was made available to all patients, in which the dose of analgesia and initial time of analgesic administration were recorded and analyzed.

Results:
The visual analogue scale revealed lower pain scores for the combined popliteal and ankle block group versus the ankle block alone group. There was a noted significant difference between the two study groups at 6 hours (p=0.011), 24 hours (p<0.001), and time of discharge (p=0.014). However, there was no significant difference between the two groups when the verbal response scale was analyzed during the four different postoperative occasions. Satisfaction was found to be higher in patients in the combined popliteal and ankle block group (96%) versus the ankle block alone group (76%). Evaluating the use of postoperative analgesia, it was found that there was no significant difference in administered analgesic dose and mean time of analgesic administration between the two groups.

Conclusions:
From this study, a combined popliteal and ankle block significantly increases postoperative pain relief for patients recovering from forefoot surgery.