

PD-43. A DOUBLE-BLIND COMPARISON OF LEVOBUPIVACAINE AND ROPIVACAINE FOR SCIATIC NERVE BLOCK

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PURPOSE: The aim of this prospective, randomized, double-blind study was to compare intraoperative and postoperative clinical properties of levobupivacaine and ropivacaine for sciatic nerve block.

METHODS: With ethical committee approval and patient's written consent, 50 ASA physical status I ñ II patients undergoing hallux valgus repair received a femoral nerve block with 15 mL of 2% mepivacaine, then were randomly allocated in a double-blind fashion to receive a sciatic nerve block with 20 ml either 0.5% levobupivacaine (n = 25) or 0.5% ropivacaine (n = 25). An independent blind observer evaluated the onset time of surgical anesthesia, as well as the quality of surgical block and duration of postoperative analgesia.

RESULTS: No differences in demographic variables were reported between the two groups. The median (range) onset time of surgical block at the sciatic nerve distribution was 30 min (5 ñ 60 min) with levobupivacaine and 15 min (5 ñ 60 min) with ropivacaine (P = 0.63). Four patients (two in each group) received supplementary ankle block during surgery. In 6 patients of group levobupivacaine (24%) and 5 patients of group ropivacaine (20%) IV fentanyl supplementation was required to complete surgery (P = 0.99). However, in 7 of these patients fentanyl supplementation was required during surgery because of pain at the thigh tourniquet even though no pain was reported on the operated foot [4 in group Levobupivacaine (16%) and 3 in group Ropivacaine (12%) (P = 0.99)]. No differences in the time to recovery of sensory and motor function were observed between the two groups, while median (range) duration of postoperative analgesia was 16 h (8 ñ 24 h) with levobupivacaine and 16 h (8 ñ 24 h) with ropivacaine (P = 0.83).

CONCLUSIONS: We conclude that 0.5% levobupivacaine provides a similar surgical anesthesia and postoperative analgesia as that provided by 0.5% ropivacaine in patients receiving sciatic nerve block for hallux valgus repair.