Efficacy of Ketamine as an Adjunct to Lidocaine in Intravenous Regional Anesthesia

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Abstract:

Background: This study aims to compare and evaluate the effect of adding ketamine as an adjunct to lidocaine for intravenous regional anesthesia (IVRA) on intraoperative and postoperative analgesia, the onset and recovery times of sensory and motor block, and tourniquet pain. Methods: Forty patients undergoing surgery of the hand or forearm under IVRA were randomly assigned to receive lidocaine 3 mg/kg (group 1) or lidocaine 3 mg/kg plus ketamine 50 mg (group 2) diluted to 40 mL with normal saline. Assessment parameters included the onset and recovery times of sensory and motor block, tourniquet pain, intraoperative hemodynamics, surgeon and patient satisfaction, postoperative pain, time of first analgesic request, total analgesic consumption, and adverse effects in the first 24 hours postoperatively. Results: Groups 1 and 2 were comparable in demographic and surgical parameters. There were no differences between groups in intraoperative hemodynamics, onset and recovery times of sensory and motor block, or surgeon satisfaction index. Compared with group 1, group 2 patients showed less tourniquet pain, prolonged time to first request for postoperative rescue analgesia (5.5 ± 1.3 vs 20.4 ± 3.7 hours, P

Published In:

Regional Anesthesia and Pain Medicine , Vol.39, No.5 , PP.418-422