

9th Article:

Effect of Adding of Dexmedetomidine to Local Anesthesia in External Dacryocystorhinostomy Patients

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Abstract:

Aim: To study efficacy and safety of addition of dexmedetomidine to local anesthesia for patients undergoing external dacryocystorhinostomy (DCR). **METHODS:** Seventy adult patients presented for external DCR were included in this prospective double-blinded study. They were randomly distributed into two equal groups. All patients received local anesthesia with 8 ml mixture composed of 3.5 ml of lidocaine 2% without epinephrine and 3.5 ml of plain bupivacaine 0.5%. Either one ml normal saline (0.9%) or that containing 20 µg dexmedetomidine was added to the mixture for each group. The onset and the duration of sensory blockade as well as perioperative sedation were verified. Visual analogue score (VAS) was evaluated in the postoperative period till 12 hours postoperatively. Anesthesia related perioperative complications and the patient's satisfaction were also reported. **RESULTS:** Dexmedetomidine added to a local anesthetic block in external DCR significantly decreased the onset of anesthesia to 2.23 ± 2.11 min ($P = 0.015$) and increased the duration of sensory block to 200.45 ± 37.98 min ($P = 0.0001$). Also, it significantly decreased the postoperative pain score 6-8 h postoperatively ($P < 0.05$). Moreover, increased sedation level and patients' satisfaction was noted ($P < 0.05$) without significant increase in the incidence of side effects or complications. **CONCLUSIONS:** Addition of low dose dexmedetomidine to local anesthetic infiltration in external dacryocystorhinostomy hastens the onset and prolongs the effective period of the sensory block. Enhancement of postoperative analgesia, increased perioperative sedation and improved satisfaction of the patients were achieved without significant complications.