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Short Communication

INTRATHECAL CLONIDINE VERSUS FENTANYL ADJUVANT FOR SPINAL ANESTHESIA CESAREAN SECTION BABY DELIVERY

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ABSTRACT

Introduction: The use of adjuvants in spinal anesthesia has gained popularity in recent times. Fentanyl and clonidine both prolong sensory and motor block and duration of postoperative analgesia when used as an adjuvant with bupivacaine. Both of them are able to relieve visceral pain. We found that 50 µcgr of intrathecal clonidine is sufficient to achieve adequate analgesia along with hemodynamic stability in parturients.

The aim of study: Revealing of effects of adjuvants in co-administration with bupivacaine during spinal anesthesia, regarding the onset and regression of motor and sensory block, postoperative analgesia. Duration, height of the block, per and postoperative side effects. Hemodynamic status, per and postoperative outcome, cardiorespiratory stability in parturients. Monitoring of gas status and Apgar score in newborns.

Materials and methods: A prospective randomized study was carried out among two groups of 50 patients undergoing cesarean section. Spinal anesthesia was administered to both groups through L3/L4 or L2/L3 level at spinal column. Patients were given 2.0 ml of isobaric bupivacaine 0.5% with either 50µcgr of clonidine or 20µcgr of fentanyl, intrathecally. Complete and continuous hemodynamic monitoring was performed. Duration of effective analgesia, onset, peak and duration of sensory and motor blockade, VAS and Bromage scale, the sedation level. The severity of pain score and analgesic requirements were recorded in the postoperative period. Postoperative incidence of the common side effects, like hypotension, respiratory depression, nausea and vomiting. Use of drugs of side effects treatment.

Results: Demographic profile of parturients, a duration of cesarean section. The systolic arterial pressure ratio was 12 ± 7%, diastolic and mean arterial pressure ratio were measured, too. Parturients in the clonidine adjuvant group (group I) were more drowsy than those in fentanyl one (group II). Duration of anesthesia was 185 ± 18 minutes in group II and 210 ± 34 min in group I. The postoperative analgesia was better in group I, as observed by a significant delay in the first request for analgesia, less analgesic requirement and lower VAS and Bromage scores and higher level of sedation and drowsiness. Comparable Apgar score in both groups signifies with no deleterious effect on neonates. Lower incidence of postoperative common side effects in group I as compared with group II, except hypotension. In both groups, hypotension was mild to moderate and did not affect maternal and neonatal outcome. Less use of drugs for side effects treatment in group I

Conclusion: Intrathecal clonidine improves the duration and quality of spinal anesthesia, longer duration of postoperative analgesia, without significant side effects. Clonidine is a safe adjuvant to improve spinal anesthesia for cesarean section and also augments postoperative anesthesia. Clonidine causes more perioperative sedation and extended time to motor block recovery.

Biography

Dr. Churlinov K.University Clinic of Gynecology & Obstetrics; Department of Anesthesiology, Reanimation & Republic of North Macedonia Worked well on my own and as part of a team for tutorial work; set my own deadlines and managed my time effectively under pressure. Developed time-management and multi-tasking skills as well as tolerance and patience in stressful and time dependent situations .

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