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PROGRAM KİTABI

P-011

Intraocular Pressure Changes after Spinal Anesthesia: Acute and Subacute Effects

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OBJECTIVES: Spinal anesthesia has become appropriate for many surgical procedures. Neuraxial anesthesia can result in acute and late complications like hypotension, bradycardia, local anesthetic toxicity, postdural puncture headache, backache, spinal nerve damages. Although body's physiological responses to spinal anesthesia are well-understood, it hasn't been mentioned about its effects on intraocular pressure (IOP) before. The aim of this study was to investigate possible effects of spinal anesthesia on IOP.
MATERIAL-METHODS: Forty patients receiving spinal anesthesia for subumblical surgery were recruited for the study, after ethics committee approval and patients' written informed consent. IOP was measured by Icare PRO tonometer (Icare, Finland) before spinal anesthesia (BS), immediately after spinal anesthesia (AS) and finally at the first postoperative day (PO1). Both eyes of the patients were participated in the study.
RESULTS: Thirty eight patients had completed the study. Mean BS, AS and PO1 intraocular pressures were 16.53 ± 3.17 (9.40 - 24.00), 17.08 ± 3.16 (10.00 - 24.00) and 16.76 ± 2.80 (10.20 - 23.00) mmHg, respectively. Mean IOP measurements were not statistically different among the three groups (P = 0.104).
CONCLUSION: Spinal anesthesia alone has no acute and subacute effects on IOP. Studies can be made to evaluate chronic effects. Further studies must be focused on the relationship between postdural puncture headache and intraocular pressure changes after spinal anesthesia.

Keywords: Spinal anesthesia, intraocular pressure, cerebrospinal pressure, glaucoma