Comparison of Dexametazone 8mg with Diclophenac 75mg to prevent headaches after spinal anaesthesia.

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Background and Goal of Study: Postdural puncture headache (PDPH) is a relatively common complication after regional anesthesia, especially in younger people, bothersome to patients and needs prophylaxis to prevent this complication.

- The incidence of PDPH is highest between 18 and 30 years of age .

The aim of this study was to determine the preventive effect of dexamethasone 8mg or Diclofenac 75 mg on relative frequency and intensity of PDPH after spinal anesthesia.

Materials and Methods: In this study are included 180 patients (ASA) physical status I-II patients, aged 18-45 years, scheduled for urologics procedures under spinal anesthesia participate in this double-blind, randomized, controlled study.

- The patients with history of migraine or other type of headache, previous intolerance to the Diclofenac or dexamethasone administration, or who had received any analgesic within 24 h before surgery were not included in this study.

- After the patients arrived to the operating room, noninvasive arterial blood pressure, heart rate, respiratory rate and (SpO₂) level were monitored.

- Patients were divided into 3 groups with 60 patients each; G1 control group, (didn't take anything). G2 (which took Dexametazon 8 mg), and G3 (which took Diclofenac 75 mg).

- All procedures were performed in sitting position by same anaesthesiologist with enough experience.

- The subarachnoid space was punctured with a 26 G Whitacre needle at L2/L3, with Bupivacaine 0.5%-3ml(15mg). Bradycardia or hypotension that happens is fixed with Ephedrine or Atropine. Before surgery, the patients were informed about using visual analog scale (VAS), ranging from 0 (none) to 10 (worst possible pain), for evaluation of their headache. By using VAS score, PDPH was evaluated at 6-48 h after arrival to the ward.

- Chi-square test was applied to compare the mean values of Postdural puncture headache (PDPH) between the two groups P value ≤ 0.05 was considered statistically significant.

Results and Discussion: All patients were male patients. Mean age was 27(range 18-45 yr). Mean (SD) duration of surgery was 60 min (range 45 min -120 min).

- There were no differences between the two groups regarding age (P <0.8), BMI (P <0.6), intervention type (P <0.8), intervention duration (P <0.8), shivering (P <0.6) hemodynamic changes(P <0.8) after spinal anaesthesia of the used amount of Effedrina and even Atropina, Petidina.

- Number of patients who had a headache in G3 was only 3 patients (5%) out of them.

- In G2 the patients with headache were nine patients (15%).

- While in G1 the patients with headache were 11 patients (18% out of them), with a statistically significant difference between the G3 and G2 and G1 groups (P < 0.05).

- There were also noticed differences regarding VAS between the two groups (G3/G1 and G3/G2). In G3 VAS was 2.3 ± 0.7 , while in G2 VAS was 6.3 ± 0.7 . In G1 VAS was 6.7 ± 1.2 , (P < 0.05).

- But it didn't have a statistically difference between G1 and G2. In G1 VAS was 6.7 ± 1.2 , while in G2 VAS was 6.3 ± 0.7 (P < 0.8).

Conclusion(s): We came to the conclusion that the prophylactic use of Diclofenac 75 mg before spinal anesthesia, plays a role in reducing headaches after spinal anesthesia in the new ages (P < 0.05).

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