

THE EFFECT OF CLONIDINE AND PREGABALIN IN REDUCING PREOPERATIVE ANXIETY AND POSTOPERATIVE PAIN IN PATIENTS UNDERGOING ORTHOPEDIC SURGERY OF THE LOWER LIMBS THROUGH SPINAL ANESTHESIA IN PEYMANIEH HOSPITAL IN 2015

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Abstract

Introduction: Preoperative anxiety plays a very critical and important role in the control of postoperative pain response events. So far through the conducted research, it has been found that there is a relationship between preoperative anxiety and postoperative pain. If postoperative pain is not controlled, it may lead to many side effects, including increased blood pressure, increased heart rate and reduced capacity of breathing for patients. So, the present study aims to examining the effect of clonidine and pregabalin in reducing preoperative anxiety and postoperative pain in patients undergoing orthopedic surgery of the lower limbs through spinal anesthesia in Peymanieh hospital in 2015.

Methods: In this randomized, double-blind clinical trial, patients undergoing orthopedic surgery of the lower limb in the operating room of Peymanieh Hospital were studied. The sampling method was done through the easy method and patients were divided into three groups by simple random sampling. Inclusion criteria: patients undergoing orthopedic surgery of the lower broken limbs in Jahrom Peymanieh Hospital, patients who are under spinal anesthesia. Exclusion criteria included: more than Kg100 weight, age over 75 years or less than 15 years, patients in ASA class 2, but getting down with hemodynamic instability, bradycardia or tachycardia and other complications. So that if they remain in the study, this may cause likely life-threatening perils, therefore they are excluded from the study. The first group received (preGoblin) and Group II received (clonidine) to 2 hours before spinal anesthesia, as an advance anesthesia, the third group would be the (control group). Statistical data obtained from this study were analyzed by descriptive statistics tests and analytical statistics tests including KruskalWallis, Mann-Whitney and Friedman and ANOVA by statistical software SPSS v17.

Results: The mean age of the patients participating in the study was 17.24 +/- 42.76. The majority of patients in the three groups were male. Kruskal-Wallis test results showed that there was a statistically significant difference in pain level at 6 and 8 hours after surgery in

the control group, clonidine and pregabalin groups (p -value < 0.05). That is, the pain threshold was lower in pregabalin group than in clonidine and control groups. The Mann-Whitney test results showed that the mean of anxiety was lower in the pregabalin group than in the control group and clonidine group and that there was a significant difference between the pregabalin group and the control group in terms of anxiety mean (p -value > 0.05). ANOVA test results showed that there was a significant difference between the pregabalin group and the control group and the clonidine group in systolic blood pressure in 10 and 20 minutes after surgery ($p < 0.05$).

Conclusion: These findings suggest that both pregabalin and melatonin can play a role in preoperative sedation and postoperative analgesia in patients undergoing orthopedic surgery of the lower limbs and ultimately keep the overall hemodynamic status of patients.

Key words: CLONIDINE, PREGABALIN, REDUCING, PREOPERATIVE, ANXIETY, POSTOPERATIVE, PAIN, PATIENT