

The Comparison effect of intravenous Ibuprofen and Tramadol in prevention of post-operative shivering after laparotomic abdominal surgery, with general anesthesia in Ardabil Fatemi hospital in the year 96-97.

Abstract:

Background and Objective:

Postoperative shivering is a common complication after general anesthesia, that recently, it is declining due to the use of opiates and the maintenance of patients in the state of the terotermic.

But due to the side effects of opioids, particularly in the elderly, the present study was designed aimed to evaluate the effect of prophylactic intravenous ibuprofen on shivering compared to tramadol (opioid agonist), in the early minutes after surgery. So that if the results are acceptable, it can use ibuprofen as a suitable substitute for opiates (tramadol) to control postoperative shivering.

Methods:

This study was conducted as a randomized, triple Blind clinical trial. For this study, 90 patients with ASA physical status I and II, between 20-70 years old, who underwent abdominal laparotomy surgery with general anesthesia, were studied. Patients were randomly divided into three groups of 30. To each group one of the (1) 800mg of intravenous ibuprofen, (2) tramadol 1mg / kg and (3) 100cc placebo (normal saline) were injected intravenously. Then, in a recovery period, at different times the degree of shivering of patients, pain, nausea and vomiting, and sedation of patients were evaluated.

Results:

Demographic data, duration of surgery, age, sex, weight and ASA of patients were not significantly different in the three groups ($P > 0.05$). In the tramadol group, 3 patients (10%), in the intravenous ibuprofen group, 7 patients (23.3%) and in the placebo group, 18 patients (60%), had post-anesthetic shivering ($P < 0.0001$). At all times, pain in the tramadol group was lower than other two groups, and in the intravenous ibuprofen group less than placebo ($P < 0.0001$). Post operative pain in three groups over time, initially rised and then had a downtrend after 15 minutes.

Nausea and vomiting were not significantly different between the three groups at any time interval ($P > 0.05$), but in the all one-hour study period, the incidence of nausea and vomiting, in the tramadol group 30%, in the intravenous ibuprofen group 6.7% and in the placebo group 10% had significantly differed ($P < 0/05$). In three time of 0,5,10 minutes, in sedation between the three groups there was a significant difference and in all moments, the degree of sedation in the intravenous ibuprofen group was lesser than other groups and in the tramadol group was more than the other groups. study of deep sleepiness and Get a 4 score and up, showed the tramadol group had more drowsiness compared to the other two groups, although it had not shown significant difference between them ($P > 0.05$).

Conclusion:

Considering that, intravenous Ibuprofen had not Significant difference with Tramadol, in shivering control ($p=0/166$), and the Complications of nausea, vomiting and severe sleepiness (sedation) were lower in the intravenous ibuprofen group, so it can be a good alternative to tramadol.

Keyword: general anesthesia, shivering, Ibuprofen, Tramadol