Comparing Dexamethasone and pethidine in prevention of post-operative shivering in Ardebil Imam Khomeini hospital

**Background:** Post-operative shivering is very common and followed by many problems such as increased oxygen consumption, blood pressure, intracranial and intraocular pressure, and post-operation pain. Therefore, prevention of shivering is important especially in elderly and ischemic heart disease patients. The goal of this study was comparing the effect of Pethedine (Meperidine) Dexamethasone and Placebo on prevention of shivering.

**Material and Methods:** This double blind clinical trial study -was carried out on 120 patients who were candidates for surgery under general anesthesia. The patients were randomly divided into three groups including those who received placebo (a) Dexamethasone (b) and pethedine (c). Induction and maintenance of anesthesia for all patients were similar. Temperature of patients was measured in 5 steps: before the surgery, after induction, end of the surgery, the beginning of recovery and the end of recovery. After induction saline 0.9%, Dexamethasone and Pethedine were injected to groups a, b and c respectively. In recovery all patients were controlled for visible Shivering: All data were statistically analyzed by SPSS software and ANOVA and chi square tests.

**Results:** There were no significant differences among three mentioned groups regarding of gender, age and duration of surgery.

Nine thin cases (47.5%) in group a had post-operative shivering. Whereas, in group b only 4 cases (10%) had shivering and the difference between 2 groups was significant. Also in group c, 15 cases (37.5%) had shivering that the difference with Placebo group was significant (P value = 0.001)

**Conclusion:** The present study showed that pethedine and dexamethasone are effective drugs for preventing of post-operative shivering in elective surgery. And the effect of dexamethasone in preventing the post – operative shivering is better than pethidine.

**KEYWORDS:** General anesthesia, Shivering, Recovery, Dexamethasone, Meperidine