

Comparison of Ondansetron and Pethidine for Prevention of Shivering after Spinal Anesthesia

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ABSTRACT

Shivering is one of the most common problems after anesthesia and spinal anesthesia. Though it occurs as a result of temperature reduction, it may occur in patients with a postoperative normal body temperature. Shivering can cause serious complications such as delay in recovery, increased blood pressure, increased effect of drugs, increased oxygen consumption, or haemostatic dysfunction especially patients with low cardiac reserve. The aim of this study is to determine and compare the effects of pethidine, ondansetron and placebo in prevention of shivering after spinal anesthesia in patients undergoing cesarean section. Sixty ASA I and II female patients were randomly selected. Patients were randomly divided into three groups of ondansetron (O), pethidine (P) and placebo (N).

All patients were given spinal anesthesia. All patients were hydrated with 500cc normal saline 30 minutes before spinal anesthesia. Immediately after spinal anesthesia, 4 mg ondansetron was administered intravenously to Group I, 25 mg pethidine was administered intravenously to Group II, 2cc normal saline as placebo was administered intravenously to Group III. The incidence of shivering was recorded 5 minutes prior to anesthesia and 5, 10, 15 and 30 minutes after anesthesia. The collected data was analyzed using SPSS 21, ANOVA and chi-square. There was no significant difference between the three groups in terms of age and mean duration of the surgery (p value > 0.05). No significant difference was found in incidence of postoperative shivering in ondansetron and pethidine groups. Therefore, ondansetron is as much effective as pethidine in preventing postoperative shivering.