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The effect of preoperative hydrocortisone on the rate and severity of post anesthesia shiveringHosseinzadeh H.¹, Eidi M.¹, Kolahtouzan KH.^{2*}, Pessiahian I.² and Dadashzadeh S.¹¹ Imam hospital of Tabriz, ² Tabriz University of paramedical sciences

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OBJECTIVES: Perioperative hypothermia occurs due to dysfunction of thermoregulatory system because of anaesthetic drugs and patients contact with the cold environment of an operative room. It can produce some complications such as post anesthesia shivering. Post anesthesia shivering can produce adverse haemodynamic, metabolic sequelae and prolong hospital admission. This study was designed to evaluate the effect of hydrocortisone and dexamethasone pretreatment on the rate and severity of shivering. **Methods:** A randomized, double-blind, placebo-controlled study was done. 150 patients undergoing selective general surgery were studied. Patients were randomly divided into three equal groups. Patients of group I received dexamethasone, group II received hydrocortisone and group III received a placebo on normal saline before induction of anesthesia. The rate and severity of post anesthesia shivering and haemodynamic variables were recorded. **Results:** In this study, 58 patients experienced shivering. The rate of post anesthesia shivering recorded in group I (24%), group II (28%) and group III (64%) ($p < 0.05$). Also severity of shivering in both group I and II was mild but it was recorded moderate and severe in group III. **Conclusion:** The Results of this study showed that hydrocortisone and dexamethasone pretreatment could significantly decrease the rate and severity of post anesthesia shivering. The effects of these drugs are dispensed through anti inflammatory mechanisms and reduction of central and skin gradient.

Key Words: General anesthesia, Shivering, Hydrocortisone.

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| / | / | / | T ₁ | SBP (mmHg) |
| / | / | / | T ₂ * | |
| / | / | / | T ₁ | DBP (mmHg) |
| / | / | / | T ₂ * | |
| / | / | / | T ₁ | BT (C) |
| / | / | / | T ₂ * | |
| / | / | / | T ₁ | O ₂ Sat (%) |
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:T₁
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| / | / | / | T ₁ | HR |
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| / | / | / | T ₁ | SBP |
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| / | / | / | T ₁ | DBP |
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O₂Sat DBP SBP HR

mg/kg

.(% %)

O₂Sat

mg/kg

7- References:

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