

## Evaluation of the Effect of Intravenous Dexamethasone on Hemodynamic Variables and Hypotension in Female Undergoing Cesarean Section With Spinal Anesthesia

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**Abstract :** Background: In this study, we compared the effect of intravenous dexamethasone with placebo on hemodynamic variables and hypotension in patients undergoing cesarean section under spinal anesthesia. Materials and methods: This double-blind, randomized clinical trial was conducted with the approval of the university ethics committee. Written informed consent was obtained from all participating patients. Before spinal anesthesia, patients were randomly assigned to receive either dexamethasone (8 mg IV) or placebo (normal saline). Hemodynamic variables, including systolic, diastolic, and mean arterial blood pressures, as well as heart rate, were measured before drug administration and every 3 minutes until the birth of the neonate and then every 5 minutes until the end of surgery. Side effects such as hypotension, bradycardia, nausea, and vomiting were assessed and recorded for all the patients. Results: There were no significant differences in mean systolic, diastolic, and mean arterial blood pressures before and after administration of the studied drugs in both groups (P.Value>0.05), but heart rate and the incidence of hypotension in the dexamethasone group were less than placebo significantly. Conclusions: Intravenous administration of 8 mg dexamethasone before spinal anesthesia in females undergoing cesarean section can reduce the incidence of post-spinal hypotension without causing serious side effects.

**Keywords :** cesarean section, hypotension, spinal anesthesia, dexamethasone

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