

**Perioperative
Intravenous
Corticosteroids Reduce
incidence of Atrial
Fibrillation Following
Cardiac Surgery - A
randomized, double
blinded placebo-
controlled study**

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Objective: Corticosteroids decrease side effects after noncardiac elective surgery. We designed this randomized, double blinded, placebo- controlled study to test the hypothesis that standard doses of dexamethasone (6×2) would decrease the incidence of atrial fibrillation (AF) following cardiac surgery.

Methods: A total of 185 patients undergoing coronary revascularization surgery were enrolled in this clinical study. The anesthetic management was standardized in all patients. Dexamethasone (6mg/mL) or saline (1mL) was administered after the induction of anesthesia and a second dose of the same study drug was given on the morning after surgery. The incidence of (AF) was determined by analyzing the first 72 h of continuously recorded electrocardiogram records after cardiac surgery, to determine the incidence and severity of postoperative side effects.

Results: The incidence of 48 h postoperative AF was significantly lower in the Dexamethasone group (21/92 [37.5%]) than in the placebo group (35/92 [62.5%]), adjusted hazard ratio, 2.07; 95% confidence interval, 1.09-3.95; p= (P<0.05). Compared with placebo, patients receiving hydrocortisone did not have higher rates of superficial or deep wound infections, or other major complications.

Conclusions: prophylactic short- term dexamethasone administration in patients undergoing coronary artery bypasses grafting significantly reduced postoperative atrial fibrillation.