



Original Research Article

Preventive Effects of Dexamethasone on Reducing Edema and Bleeding Rate after Rhinoplasty

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ABSTRACT

The anti-inflammatory effect of these drugs by interrupting the macrophage inhibitory factor phase and preventing the accumulation of macrophages, reducing the dilation and permeability of inflamed capillaries and adhesion of white blood cells to the capillary wall, and finally, causing edema and migration of white blood cells. it is possible. The aim of this study was to determine the effect of dexamethasone with two therapies in reducing edema and ecchymosis around the eye and intraoperative bleeding. This descriptive cross-sectional study was performed in parallel with the participation of 90 rhinoplasty patients at Tabriz University of Medical Sciences. Dexamethasone was injected intravenously for patients before surgery; For group B, dexamethasone was injected every eight hours after surgery, and for group A, it was injected only before surgery. Finally, the amount of ecchymosis and edema and the amount of bleeding between the study groups were compared with Chi-square, Mann-Whitney U and T-tests. The degree of lower eyelid edema on the first day after surgery was significantly different in comparison with groups A and B and group C ($P=0.001$). On the second day after surgery, the degree of lower eyelid edema was higher in group C compared to groups A and B ($P=0.001$). The degree of upper eyelid ecchymosis was equal between groups A and B on the first day after surgery. And group C patients had significantly more upper eyelid ecchymosis ($P=0.001$). Use of a single dose of dexamethasone (8 mg) before rhinoplasty reduces edema and ecchymosis of the upper eyelid and edema of the lower eyelid in the first 48 hours after surgery and reduces ecchymosis of the lower eyelid in the first 24 hours after surgery. There is no improvement in reducing the volume of bleeding during the operation and the length of the period.

Keywords: Rhinoplasty, Dexamethasone, Edema, Bleeding