



AESTHETIC AND COSMETIC DERMATOLOGY (LASERS SEPARATE CATEGORY)

NASAL RESHAPING: MAXIMIZING SAFETY WITH THE USE OF ANESTHETIC AND VASOCONSTRICTOR AGENTS

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Background: Rhinoplasty with the use of fillers, mainly with hyaluronic acid-based ones, is a procedure with a high satisfaction rate, and is daily practice for the dermatologist. Despite their relative simplicity, reports of severe vascular complications such as cutaneous necrosis and blindness are well documented.

Observation: A review of the literature reported 98 cases of altered visual acuity due to the use of facial fillers, with the nasal region accounting for 25% of the cases. The use of sympathomimetic vasoconstrictors associated with local anesthetic agents is well defined in the medical literature, reducing the absorption and the systemic effect of anesthetics. Epinephrine has an agonist action in α and β adrenergic receptors, with vasoconstriction in the smooth muscle of arterioles, and reduction of cutaneous perfusion. Because the diameter reported in anatomical dissections of nasal arteries varies from 0.4 to 1mm, the use of 22-G microcannulas, with 0.7mm in diameter, allows accidental injuries, and embolization of the filler, with serious ophthalmological complications and neurological disorders. The addition of epinephrine at a concentration of 1:100,000 or 1:200,000 to 1% lidocaine leads to a maximum reduction in facial cutaneous blood flow of 56% after 8 minutes, which is maintained for 60 to 120 minutes, with a large reduction in arterioles diameter of 32% being expected. Fifty-two patients with aesthetic complaints of the nasal dorsum and tip were treated with local anesthesia 0.3ml of lidocaine with epinephrine hemitartrate at a concentration of 1:200,000, at the apex, nasal dorsum and nasal root. All patients returned for reassessment in the proposed period, with no vascular complications observed.

Key message: Given the relevance and severity of ophthalmological and neurological complications, the use of previous local anesthesia with a vasoconstrictor to fill the nasal dorsum has a high potential to minimize such severe complications.

