The Incidence of Post-septoplasty Bleeding in Patients without Nasal Packing

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Objective: To evaluate the incidence of post-septoplasty hemorrhage and hematoma formation in patients without anterior nasal packs.

Design: A Retrospective Study.

Setting: ENT Department, Salmaniya Medical Complex, Kingdom of Bahrain.

Method: Fifty-one patients with a symptomatic deviation of nasal septum who had septoplasty with/without inferior turbinoplasty were included in the study from August 2008 to April 2015. Patients who underwent septoplasty combined with endoscopic sinus surgery were excluded. Septoplasty was performed without postoperative anterior nasal packing, and the patients were assessed for postoperative bleeding and hematoma formation. All patients were followed-up for 4 weeks.

Result: Two (3.9%) patients had postoperative bleeding on the day of operation. Forty-nine (96.1%) patients had no nasal bleeding during the hospital stay and no patient had hemorrhage after discharge. No patients had septal hematoma during the follow-up period.

Conclusion: Incidence of bleeding following septoplasty without anterior nasal packing is very low and nasal packing should not be routinely used for this procedure.


History of nasal packing after nasal surgery dates back to 1847, the time of Gustav Killian and Otto Tiger Freer, yet systematic submucosal resection (SMR) and nasal packing started in 1882 by Ephraim and Peterson. Different packing methods have been used, such as paraffin gauze, Vaseline gauze, bismuth iodoform paraffin paste, glove fingers and merocel. The use of nasal packs after septoplasty is based on the assumption that nasal packing decreases postoperative hemorrhage and septal hematoma formation, supports septal flap apposition and prevents synechiae. However, there is no evidence to support these benefits. Although, it was found that nasal packing is not innocuous. The morbidities associated with the use of nasal packs include compromised nasal breathing, dryness of mouth, nasal valve narrowing, vestibulitis, crusting, synechiae formation, headache, watering from eyes, ear blockage, throat irritation, difficulty in swallowing, hypoxia, hypoxemia, secondary infection, increased hospital stay, increased blood pressure, toxic shock syndrome and death. Nasal obstruction is one of the most common presenting complaints in otolaryngology clinics, and it could have a significant impact on an individual’s quality of life. The causes of nasal obstruction are deviated nasal septum (DNS), rhinitis, adenoid hypertrophy, turbinate hypertrophy, sinonasal polyps and tumors. DNS is a common disorder that is present in up to 64% of the population, but not all would need septoplasty. Various reasons have been postulated to play part in the development of DNS including racial factors, birth molding of the septum during parturition, trauma and developmental deformities of septum. In addition to nasal blockage, DNS could cause many other symptoms such as sinusitis, facial pain, epistaxis and smell disturbance; septoplasty is used to treat these patients. It can be done alone or in combination with other procedures such as rhinoplasty, inferior turbino-plasty and endoscopic sinus surgery.

Most of the patients in our center are routinely packed following septoplasty. This practice is not evidence-based; to our best knowledge, no previous study was performed in Bahrain or

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