Palatal perforation, the most rarely observed complication after deviated septum surgery
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Abstract
Numerous complications after septoplasty have been identified in the literature. Blindness and palatal perforation are among the rarest complications. The palatal perforation experienced by the presented patient was because he was not thoroughly examined before surgery. Secondly, we wanted to emphasize the fact that care must be taken during septoplasty operation, particularly while performing the intervention to the inferior septal area.

Keywords: Palatal, Perforation, Septoplasty.

Introduction
Surgical intervention is required on the patients with septal deviation and difficulty in breathing. Otolaryngologists and plastic/cosmetic surgeons have used numerous techniques. Several complications may develop in septoplasty surgery. Among these complications, the most frequently observed ones to be considered are bleeding, septal /septum perforation, adhesions, septal haematoma, "saddle nose" deformity, columellar retraction and losses in the tip projection.1,2 Blindness or palatal perforation after septoplasty are rare complications.3,4

Palatal fistula is most frequently seen in the wake of cleft palate repair. Less frequently, on the other hand, it is seen after trauma, tumour, radiation and infectious diseases.5-7

Palatal fistulas, regardless of their place of location /settlement and size, may occur along with various symptoms.6,8,9

We present here a case of palatal perforation quite rarely observed after nasal septoplasty surgery.

Case Report
A 34-year-old male patient applied to our clinic due to a palatal perforation in the wake of nasal septoplasty. The patient, having undergone a nasal septoplasty surgery under general anaesthesia six months back, had increasing breathing problems and suffered from hypernasal speech (rhinolalia aperta) and difficulty in eating. During his examination, a perforation of 0.7 cm. diameter in the hard palate was observed (Figure). Also the palatine vault of the patient was observed to be high. He was subjected to surgery under general anaesthesia. The repair was performed using a mucoperiosteal flap removed from the nasal cavity to fix the defect in the nasal section and from the fistula medial to fix the defect in the oral mucosa. In the subsequent follow-ups of the patient, it was observed that the fistula did not recur in the perforation area, and that the problems of nutrition, hypernasal speech and breathing receded.

Discussion
Following septoplasty, complications as poor quality of sleep, difficulty in breathing, decreased oxygen concentration and toxic shock syndrome can be encountered. Other possible complications include haemorrhage, vestibulitis, haematoma, adhesions and septal cartilage perforation.2,10,11

To reduce the complications after septoplasty, the methods used are transfixation suture to the septum and...
Palatal perforation is considered a rare complication and literature review shows very few published cases.\(^4\)

Ersoy et al. reported that their patient had a submucous cleft palate prior to septoplasty and that the diagnosis for this cleft palate was made after septoplasty.\(^4\)

Balmor et al., on the other hand, observed that due to the renal cell carcinoma, the patient receiving biophosphonate treatment had sleep apnoea. Nasal surgery was performed for a nasal polyp with recurrent bleeding and the patient developed palatal perforation after the surgery. It was postulated that the palatal fistula was caused by the osteonecrosis which developed due to the biophosphonate treatment.\(^12\)

In the literature, it was emphasized that the local flaps could be sufficient in small defects, while in larger defects, a multidisciplinary approach should be used.\(^13\)

In our case, the fistula was repaired with a local flap and the palatal perforation developed as a complication after the septal surgery. It was observed during the examination of the patient that his palatine vault was high and of a concave nature. It is advisable to perform a detailed examination prior to surgery to avoid such complications. This will call for caution in excising the Vomer and septum to avoid palatal perforation.

**Conclusion**

Palatal perforation is a rare complication of septal surgery and can be avoided by a good pre-operative examination of the patient.

**References**