



# Adenolipoma of the nose: a case report

## Burunda adenolipom: Olgu sunumu

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Adenolipoma is a rare benign neoplasm composed of both mature adipose tissue and glandular elements. In this article we report a case of 19-year-old woman, who had nasal blockage and deformity. On examination, a round, soft, nonpulsatile submucosal mass in the cartilagenous vault of the right nasal cavity was found. There was also alar rim notching, nostril asymmetry on the right side and septal deviation towards the opposite side. Computed tomography revealed a clearly demarcated dense mass located at the right submucopericondrial level obstructing the nasal passage. An open septorhinoplasty approach was preferred to remove the mass and also to correct the deformities caused by the mass. The histopathologic examination was reported as an adenolipoma. No recurrence was observed during postoperative two year follow-up. To our knowledge, this is the first case report of an adenolipoma of the nose in the English literature.

**Key Words:** Adenolipoma; nasal septum; nose; rhinoplasty.

Adenolipom nadir görülen, glandular elementler ve matür yağ dokusu içeren selim bir tümördür. Bu yazıda, burun tıkanıklığı ve deformitesi olan 19 yaşında bir kadın olgu sunuldu. Fizik muayenesinde sağ nazal kavite kartilajenöz çatıda yuvarlak, yumuşak, pulsasyon vermeyen submukozal kitle saptandı. Ayrıca sağ tarafta alar rim düzensizliği, nostril asimetrisi ve karşı tarafa septum deviyasyonu vardı. Bilgisayarlı tomografi incelemesinde sağ submukoperikondrial seviyede yerleşimli nazal pasajı kapatan düzgün sınırlı, yoğun içerikli kitle saptandı. Kitleyi çıkarmak ve neden olduğu deformiteyi de düzeltmek için açık septorinoplasti yaklaşımı tercih edildi. Histopatolojik inceleme sonucu adenolipom olarak bildirildi. Ameliyat sonrası iki yıllık takip süresince nüks görülmedi. Bildiğimiz kadarıyla, bu olgu İngilizce literatürde bildirilen ilk burunda adenolipom olgusudur.

**Anahtar Sözcükler:** Adenolipom; nazal septum; burun; rinoplasti.

Adenolipoma is a rare benign neoplasm composed of mature adipose tissue and glandular elements. In the head and neck region these lesions are mostly reported in thyroid and parathyroid glands, respectively.<sup>[1]</sup> To our knowledge, we report the first case of an adenolipoma occurring in the nose in the English literature.

### CASE REPORT

A 19-year-old woman presented with nasal blockage and a mass in the right nasal cavity. Physical examination revealed a round, soft, nonpulsatile submucosal mass between the right upper lateral cartilage and the nasal septum. Alar rim notching and nostril asymmetry were observed. The nasal



**Figure 1.** A coronal section computed tomography scan shows a demarcated dense mass located at the right submucopericondrial level obstructing the nasal cavity.

septum was deviated to left side. Besides these findings no abnormalities were detected in the head and neck region. Computed tomography scan revealed a clearly demarcated dense mass located at the right submucopericondrial level obstructing the nasal cavity (Figure 1). No connection between the mass and cranium was observed.

An open septorhinoplasty was performed not only for removal of the mass but also for correction



**Figure 3.** Dissection shows the location of the mass at the right septal region.

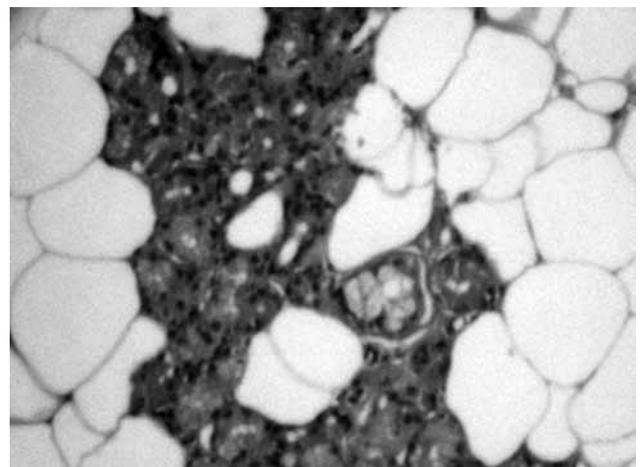


**Figure 2.** A mass was observed directly at the right alar region. The alar cartilage was rudimentary and the domal cartilage complex was absent.

of the secondary deformities. During the operation nasal skin was elevated with transcolumellar and infracartilagenous incisions. A mass was observed directly at the right alar region. The alar cartilage was rudimentary and the domal cartilage complex was absent (Figure 2). The mass was finely elevated and dissection showed that the mass was actually originating from the cartilagenous vault (Figure 3). Dissection proceeded and the mass was completely excised. Defective alar cartilage was reconstructed with septal cartilage graft. Histopathologic examination revealed an adenolipoma (Figure 4). After 18 months follow-up no recurrence was observed.

#### DISCUSSION

The differential diagnosis of midface lesions include lipoma, dermoid tumor, teratoma, glioma,



**Figure 4.** Photomicrograph shows seromucous glands surrounded by mature adipose tissue (H-E x 400).

encephalocele or meningocele.<sup>[2,3]</sup> During embryologic development a small gap between the dura and nasal skin is present. As the nasal bone grows, the dura closes. A persistent connection may remain between both structures, therefore ascertaining possible intracranial communication is essential for planning surgery and predicting the outcome.

The adenolipoma is termed as a benign lesion because of the presence of adipose and glandular tissue. It probably represents only a histological curiosity in which the eccrine glands are entrapped by the adipose proliferation. It is rarely seen in the head and neck region, and only a few cases were reported in the thyroid, parathyroid and parotid gland.<sup>[1]</sup> Computed tomography and magnetic resonance imaging are useful tools for preoperative diagnosis.<sup>[4,5]</sup>

The adenolipoma is presented as an non-encapsulated, non-invasive well demarcated homogeneous mass that may be differentiated from other mid-facial lesions. On the other hand, it may resemble lipomas grossly, but differs from them histologically.<sup>[1,2]</sup> Histopathologic examination of the mass revealed seromucous glands surrounded by mature adipose tissue.

In conclusion, we presented a case of an uncommon neoplasm with an unusual location. Preoperative imaging aids in distinguishing the mass from other midfacial lesions while histopathological examination provides the definitive diagnosis. Total resection of the adenolipoma resulted in considerable improvement in nasal airway passage with enhanced cosmetic appearance. Adenolipoma should be kept in mind in the differential diagnosis of masses in the nasal septal region.

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