

## Recurrent Adult Nasal Dermoid Cyst

Sir,

Dermoid cyst is a rare developmental anomaly that often arises in lines of embryologic fusion. It is a subcutaneous cyst that is originated in ectoderm. It contains multiple ectodermal structures and also mesodermal elements.<sup>[1]</sup> Nasal dermoid cysts usually present in children and are diagnosed in the first 3 years of life; however, some lesions progress to adulthood.<sup>[2]</sup> A 21-year-old male admitted to our clinic with a chronic exudative ulcer at the bridge of the nose [Figure 1]. The lesion had started as a small subcutaneous mass when the patient was 3 years old. The lesion had been operated by another surgical clinic when the patient was 12 years old. It has been exudative and foul-smelling since then. It did not recover and was treated with topical and systemic antibiotherapies by various clinics. Physical examination revealed an exudative ulcer, 8 mm in diameter in the midline of the nose skin. On palpation, the underlying nasal bone appeared normal. The nasal septum was in the midline. Craniofacial abnormalities, including craniosynostosis, hemifacial microsomia, bilateral lacrymal duct cyst, and cleft lip/palate, were not found. No abnormality was found on systemic examination. Surgical excision was performed with 6× loop magnification. Many terminal hairs were seen in macroscopy [Figure 2]. Histopathological examination of biopsy sample showed that the cyst is lined by keratinizing squamous epithelium with attached pilosebaceous structures. Histopathological examination of biopsy was assessed as dermoid cyst. The surgical wound healed uneventfully. No recurrence was seen during the follow-up period [Figure 3].

The incidence of dermoid cyst is estimated at 1:20,000 to 1:40,000 births.<sup>[1]</sup> They may be seen on the outer third of eyebrow (external angle dermoid), the midline of scalp (the occipital area), the midline of nose, the submental area, the anterior neck, and the anterior chest wall. The management of dermoid cysts requires complete surgical excision without rupture. However, not uncommonly, ruptures occur, and incomplete removal may lead to recurrence.<sup>[3]</sup> Recurrence rate of dermoid cyst is approximately 20%. The use of microsurgical instruments and microscope or endoscope to aid in total excision is recommended.<sup>[3]</sup> We used 6× loop for surgical intervention. Preoperative computerized tomography/magnetic resonance imaging evaluation must be done to identify intracranial extension of nasal dermoid cyst and for preoperative planning.<sup>[4,5]</sup> After he had admitted to our clinic, computerized tomography imaging was



Figure 1: A 21-year-old male admitted to our clinic with a chronic exudative ulcer at the bridge of the nose



Figure 2: Intraoperative view of the operating site and lesion



Figure 3: Early and late postoperative view of the operating site. Patient healed without problem

performed to further evaluate the mass. Intracranial extension was not seen.

In conclusion, nasal dermoid cyst is very rare pathology in adulthood and physicians should be aware. Complete excision is necessary to avoid future recurrences.

**Hamza Yıldız, Yakup Cil<sup>1</sup>,  
Hasan Aktug Simsek<sup>2</sup>, Tamer Erginay<sup>3</sup>**

*Departments of Dermatology, <sup>1</sup>Plastic Surgery, <sup>2</sup>Pathology and  
<sup>3</sup>Neurosurgery, Eskisehir Military Hospital 26020 Eskisehir, Turkey.  
E-mail: yakupcil@yahoo.com*

4. Van Aalst JA, Luerssen TG, Whitehead WE, Havlik RJ. "Keystone" approach for intracranial nasofrontal dermoid sinuses. *Plast Reconstr Surg* 2005;116:13-9.
5. Jansen LA, Yong-Hing CJ, Bhargava R. Dermoid cyst presenting as congenital midline nasal mass in 6-month-old infant. *Can Assoc Radiol J* 2009;60:223-5.

**REFERENCES**

1. Rahbar R, Shah P, Mulliken JB, Robson CD, Perez-Atayde AR, Proctor MR, *et al.* The presentation and management of nasal dermoid: A 30-year experience. *Arch Otolaryngol Head Neck Surg* 2003; 129:464-71.
2. Post G, McMains KC, Kountakis SE. Adult nasal dermoid sinus cyst. *Am J Otolaryngol* 2005;26:403-5.
3. Lee S, Taban M, Mancini R, Chong K, Goldberg RA, Douglas RS. Endoscopic removal of nasoglabellar dermoid cysts. *Ophthal Plast Reconstr Surg* 2010;26:136-9.

Access this article online	
<b>Quick Response Code:</b> 	<b>Website:</b> <a href="http://www.jcasonline.com">www.jcasonline.com</a>
	<b>DOI:</b> 10.4103/0974-2077.85046