

Mucous cyst of the alar base: a rare complication following rhinoplasty

C. Raine FRCS, S.L.H. Williamson* MRCPATH and N.R. McLean MD, FRCS

*Department of Plastic & Reconstructive Surgery, Royal Victoria Infirmary, Queen Victoria Road, Newcastle-upon-Tyne, and *Department of Histopathology, Queen Elizabeth Hospital, Sheriff Hill, Gateshead, UK*

SUMMARY. Mucous cyst formation following rhinoplasty is a rare complication and typically presents late. Previously reported cases invariably involve the dorsum of the nose or nasal tip. We present a case where this unusual lesion was found to involve the alar base. © 2003 The British Association of Plastic Surgeons. Published by Elsevier Science Ltd. All rights reserved.

Keywords: mucous cyst, rhinoplasty, complication.

Case report

A 58-year-old female presented with a ten year history of a slowly enlarging mass related to the base of the left nostril. On examination a rounded swelling, 2 cm in diameter, was noted deep to the left alar base, indenting the left nasal passage and found to be firm and non-tender when palpated bimanually through the mouth. The patient had previously undergone a closed aesthetic rhinoplasty including dorsal hump excision and bilateral maxillary infractions, some 20 years previously without complication with no other relevant findings in the past medical history. The differential diagnosis included an inclusion cyst, an osteoma or a pleomorphic salivary adenoma.

A CT scan was reported as showing a $20 \times 18 \times 12 \text{ mm}^3$ soft tissue mass inferolateral to the left nostril (Fig. 1). The lesion was well defined with no bony elements and was thought most likely to be fibrous in origin.

Excision was undertaken through an upper buccal sulcus approach and the findings were of a pale, smooth walled cyst that was easily separated from surrounding structures. There was no evidence of a communication with the lining of the nose. On histological examination the cyst was found to be lined with respiratory epithelium containing numerous mucin glands. The features were those of a benign mucous cyst (Fig. 2).

The patient made an uneventful recovery and there has been no evidence of recurrence of the problem with a follow up time of 12 months.

Discussion

Mucous cyst formation following rhinoplasty is a rare complication and when encountered is most frequently seen in relation to the dorsum of the nose along the line of the nasal osteotomy.¹⁻⁶ Karapantzos has previously described a post rhinoplasty mucous cyst occurring paranasally,⁷ along the line of the maxillary osteotomy, making our case only the second reported instance in this rare location.

The most likely explanation for the development of these lesions is the subcutaneous entrapment, and subsequent encystation, of nasal mucosal epithelium displaced at the time of surgery.^{1,2,6} As pointed out by

Karapantzos, however, other factors are likely to be important when one considers there have been only a dozen reported cases of this complication in contrast to the large numbers of rhinoplasties performed worldwide each year. To this we would add the observation that to our knowledge, all reported cases, including our own, have described only solitary lesions that were successfully

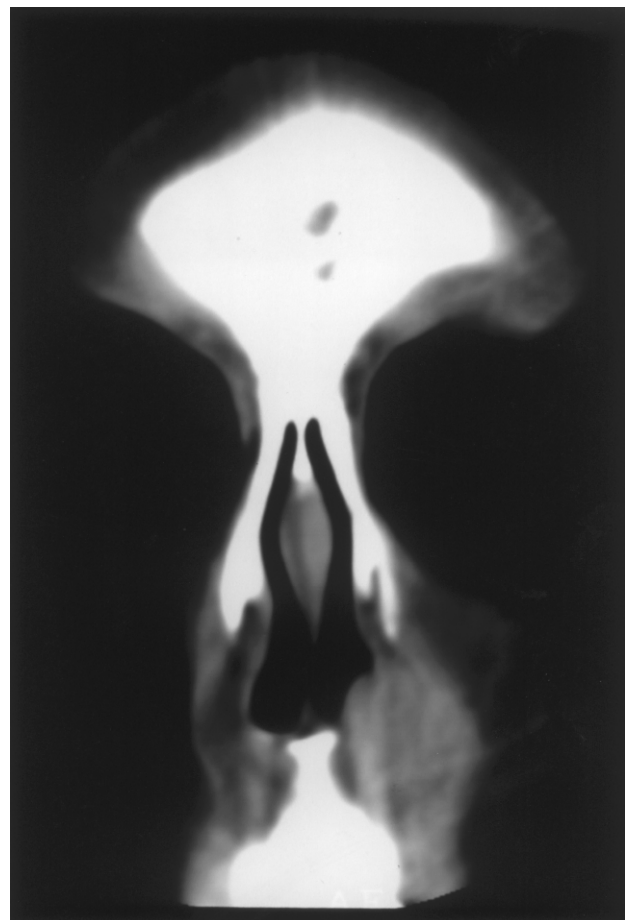


Figure 1—Preoperative CT scan showing a mass at the left alar base indenting the nasal aperture.

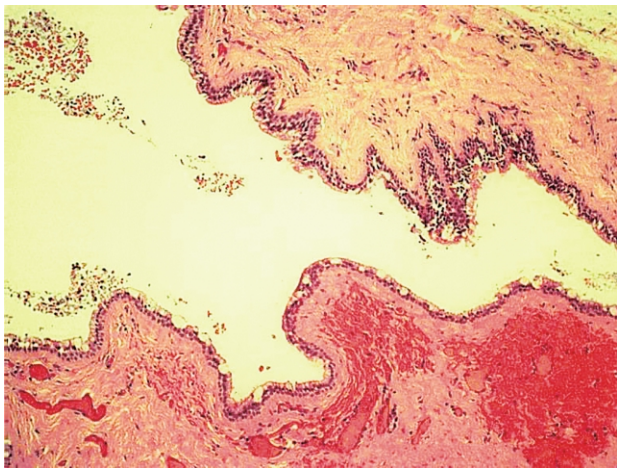


Figure 2—Histological section through the wall of the cyst demonstrating pseudostratified ciliated columnar epithelium with numerous goblet cells, as typically seen in the respiratory tract (Haematoxylin & eosin).

eradicated following a single surgical procedure. There are no reports of patients either presenting with multiple mucous cysts or going on to develop a second lesion following excision of the first. We find this surprising if one accepts the proposed explanation. Both these observations make it likely that specific local conditions must exist before a mucous cyst may be expected to develop and one important factor is likely to be the size of the displaced epithelial fragment. Interestingly there have been two reports of respiratory implantation cysts of the mandible following combined rhinoplasty and genioplasty, where the chin augmentation is achieved using osteocartilagenous grafts harvested from the nasal dorsum in a method first described by Aufrecht in 1934.^{8–10} It is unknown as to how the grafts were prepared in these cases and in particular whether attempts were made to remove the respiratory epithelium prior to implantation as is recommended.¹⁰

Although the exact sequence of events that lead to the

development of this rare complication remain unclear, we agree with previous authors that the careful removal of all mucosal fragments from the osteotomy sites at the time of primary surgery is likely to be preventative. If treatment of such a lesion is required, however, then excision is recommended.

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*Correspondence to Mr C. Raine, Specialist Registrar, Department of Plastic & Reconstructive Surgery, Royal Victoria Infirmary, Queen Victoria Road, Newcastle-upon-Tyne NE1 4LP, UK

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Massive osteolipoma of the skull

Daniel Marchac and Eric Arnaud

Craniofacial Unit, Hôpital Necker-Enfants-Malades, 130 Rue de la Pompe, 75116 Paris, France

SUMMARY. Osteolipoma is a very rare condition, and only a few cases affecting the head were found in the literature. None can be compared with the giant lesion of the side of the head developing in the left temporo-parietal region of an 8-year-old boy from Central Africa. Under a huge lipoma, an irregular bony mass was found. Contouring resection was performed with an uneventful recovery. Technique and pathology are discussed. © 2003 The British Association of Plastic Surgeons. Published by Elsevier Science Ltd. All rights reserved.

Keywords: lipoma, osteolipoma, bony tumors, scalp, cranium.