CASE REPORT Rhinology, 37, 190-191, 1999

# Paranasal mucous cyst: a rare finding following septorhinoplasty\*

I. Karapantzos<sup>1</sup>, R. Behrmann<sup>1</sup>, N. Simaskos<sup>2</sup>

<sup>1</sup> E. N. T. Dept., Marienhospital Stuttgart, Germany

<sup>2</sup> Medical School, E.N.T. Department, Democration University of Thrace, Alexandroupolis, Greece,

#### **SUMMARY**

Postoperative niucous cysts of the facial soft tissue are a rare complication after septorhinoplasty. We present a case of postseptorhinoplasty mucous cyst with a paranasal localisation. According to the literature available to us this localisation is extremely rare and has not been described before. Aetiology and possibilities to decrease the risk of such complications are discussed.

Key words: complication, mucous cyst of the nose, septorhinoplasty

### INTRODUCTION

Postoperative mucous cysts of the facial soft tissue occur very seldom following septorhinoplasty. Only nine cases have been reported so far in the world literature available to us. In those cases the cysts were located on the dorsum of the nose, and developed slowly over the years (Flaherty et al., 1996; Harley and Erdman, 1990; Johnson and Anderson, 1977; Kotzur and Gubisch, 1997; Lawson et al., 1983; Mc Gregor et al., 1958; Mouly, 1970; Shulman and Westreich, 1983; Zjilker and Vuyk, 1993). We present a case of postseptorhinoplasty mucous cyst with a paranasal localisation, which occurred three months postoperatively.

### CASE REPORT

A 25 year old male patient underwent a septorhinoplasty in another hospital. Five years later he presented for the first time in our clinic. On examination we found a saddle nose with a ptotic, broad and flat nasal tip and a severe septal deviation; the endoscopic intranasal examination showed a regular mucous layer. The reconstruction of the nose was performed using the principles of endonasal osteotomy, preserving the mucosal layer and tunnelling under the periost layer and using cartilage of the septum and the ear to reconstruct the nasal pyramide and the nasal tip. During the procedure, scars from previous surgery were noted in the area of the osteotomy. At the end of the procedure we used tampograss for internal dressing and a plaster for external splinting. Three months after this Re-Septorhinoplasty the patient presented in our clinic with a persistent swelling mass in the left paranasal region (Figure 1). On examination we found a swelling mass measuring 1.5 x 1.0 cm in the region of the left nasolabial crease. The intranasal mucous layer

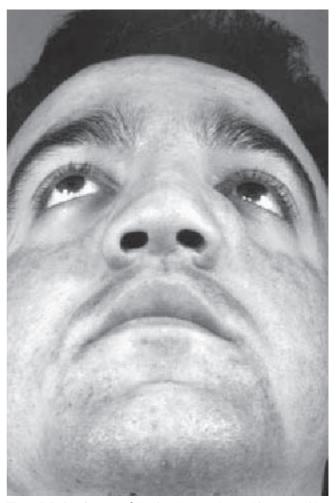


Figure 1: Patient 3 months following the second septorhinoplasty with a persistent mass in the left paranasal region.

<sup>\*</sup> Received for publication September 8, 1998; accepted March 8, 1999

Paranasal mucous cyst 191



Figure 2: The mucous cyst excised in toto.

in the area corresponding to this swelling mass appeared normal. Sonography suggested an inhomogenous, ill defined mass of unclear aetiology. The computed tomography showed a tumour-like swelling measuring  $1.5 \times 1.2$  cm in the soft tissues lateral to the insertion of the left ala of the nose. By a cutaneous incision in the nasolabial crease we could excise a cyst in toto (Figure 2). The intraoperative dissection of the cyst revealed no links to either the mucous nasal layer or the previous osteotomy site.

Histologically, there was a mucous, inflammatory cyst with colliquation and cicatricial tissue. The patient had an uneventful postoperative course and obtained a good nasal configuration.

## DISCUSSION

The development of a mucous cyst is one of the rare complications of septorhinoplasty. To our knowledge, a paranasal localisation of a postrhinoplasty mucous cyst has not yet been reported. In the literature available to us, nine cases have been reported. The localisation of these cysts was always in the region of the nasal dorsum, especially over the nasal bone, the nasal tip and over the alar cartilage (Flaherty et al., 1996; Harley and Erdman, 1990; Kotzur and Gubisch, 1997; Lawson et al., 1983; Mc Gregor et al., 1958; Mouly, 1970; Shulman and Westreich, 1983; Zjilker and Vuyk, 1993).

It appears, that surgically displaced mucosa or remnants of bone and cartilage are responsible for the formation of mucous cysts. The dispersion of these remnants can be caused by lateral osteotomy and by trauma to the mucous layer. Neither preoperative investigations nor intraoperative findings showed a direct connection between the normal mucous layer of the nose and the cyst. This parallels the findings of other reports. The need for atraumatic and careful tissue dissection has been emphasised by

virtually all authors who have described postseptorhinoplasty mucous cysts. By preserving the mucosal integrity and using