CASE REPORT

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Mucous cyst of the nasal dorsum*

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SUMMARY

The case of a 47-year-old patient with a nasal dorsum cyst excised via external rhinoplasty is described. The lesion was diagnosed as a mucous cyst. Only ten cases of mucous cysts on the nasal dorsum have been published to date, all having developed post rhinoplasty. To our knowledge, ours is the first case that is not associated with rhinoplasty. The external rhinoplasty approach permits better exposure and complete excision of the nasal dorsum masses, and offers good esthetic results.

Key words: external rhinoplasty, nasal dorsum, mucous cysts

INTRODUCTION

Mucous cyst of the nasal dorsum is a rare finding, with only ten cases, all complications of rhinoplasty, reported to date in the literature (Flaherty et al., 1996; Harley et al., 1990; Kotzur et al., 1996; Lawson et al., 1983; McGregor et al., 1958; Mouly, 1970; Schulman et al., 1983; Zijlker et al., 1993). In contrast to these cases, we present a patient with a mucous cyst that developed after only minor nasal trauma.

CASE REPORT

A 47-year-old man presented with a 6-month history of a soft mass on his nasal dorsum. He stated that the mass had developed after minor nasal trauma. On physical examination, a 1.5 cm non-mobile mass was found on the patients rhinion (Figure 1). The lesion was located in the subcutaneous tissue, and the overlying skin was slightly more vascular than that in the neighbourhood. There was no scar formation on the dorsal skin due to previous minor trauma. There was no evidence of the mass intranasally. Computed tomography (CT) was done to assess for any intracranial connection, and this confirmed the presence of a subcutaneous cystic structure with no intracranial extension (Figure 2). The patient underwent surgical excision of the mass through a Goodman external rhinoplasty incision. Intraoperatively, the structure presented as a cystic mass that was adherent to the overlying skin and to the underlying cartilaginous and bony nasal structures of the rhinion. During the operation, perforation of the cyst yielded clear fluid. It was noted at surgery that the nasal bone and upper lateral cartilage of the rhinion underlying the cyst were eroded. There was no intranasal connection. At the end of the operation, the overlying skin was replaced and a nasal splint was positioned over the nasal dorsum. There were no complications during or after surgery. Histopathologic analysis revealed the diagnosis of a mucous cyst and the absence of an intranasal connection. The patient had an acceptable cosmetic result (Figure 3) and there was no sign of recurrence after 11 months of follow-up.

DISCUSSION

All the ten nasal dorsum mucous cysts reported to date in the literature have been complications of rhinoplasty. In contrast to this, our patient had not undergone this type of procedure. Although the development of mucous cysts after rhinoplasty is thought to be caused by herniation of nasal mucosa (McGregor et al., 1958; Mouly, 1970), none of the cysts in the documented cases had connections with this tissue (Flaherty et al., 1996; Harley et al., 1990; Kotzur et al., 1996; Lawson et al., 1983; McGregor et al., 1958; Mouly, 1970; Schulman et al., 1983; Zijlker et al., 1993). This observation makes the above theory unlikely. Another theory described by Lawson et al., and Shulman et al., suggests that such cysts are probably free mucosal grafts located in ectopic positions (Lawson et al., 1983; Schulman et al., 1983). We may never surely know the etiology of cysts like the one that developed in our patient, which arose after only minor nasal trauma.

All patients with masses affecting the nasal dorsum should be considered for potential intracranial extension of the lesion. Thus, a thorough preoperative radiological evaluation is indicated. At our institution, a CT scan is considered a preliminary examination. Magnetic resonance imaging (MRI), which gives better definition of soft tissues, is likely the best method for detecting intracranial masses (Barkovich et al., 1991). A MRI examination should be done to confirm any suspected intracranial extension found on a CT scan.

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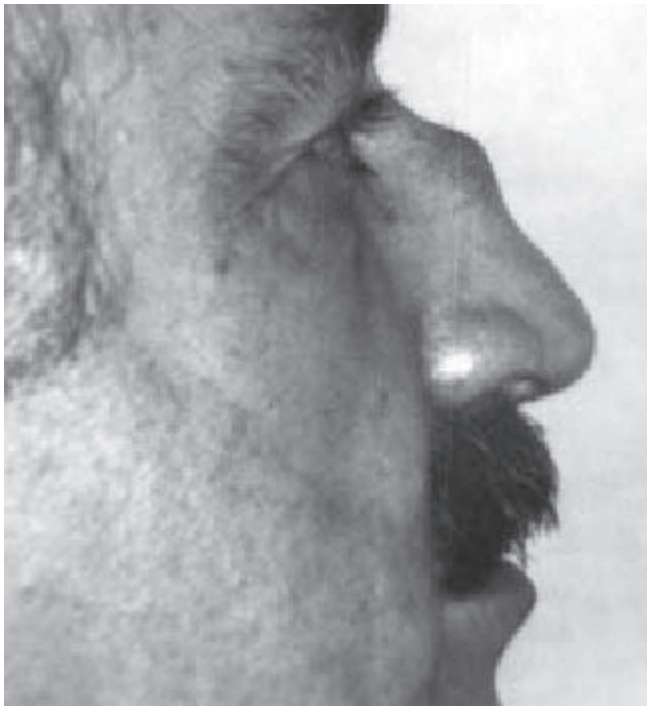

Figure 1. A 47-old-man presenting with a mass over the dorsum of the nose.

Various surgical approaches have been used to treat mucous cysts of the nasal dorsum, including the transnasal approach via intracartilaginous or intercartilaginous incision, and the external approach (Harley et al., 1996; Kotzur et al., 1996; Zijlker et al., 1993). In our opinion the external rhinoplasty approach provides better exposure and improves the surgeons control over excision and any required osteotomies. Using this approach, lesions located on the dorsum of the nose can be excised in their entirety, and, with meticulous technique postoperative scarring of the incision is minimal. Considering the good cosmetic results achieved with this approach, and the lack of significant associated morbidity, we believe that the external rhinoplasty should be the preferred method for the excising nasal dorsum masses such as mucous cysts.

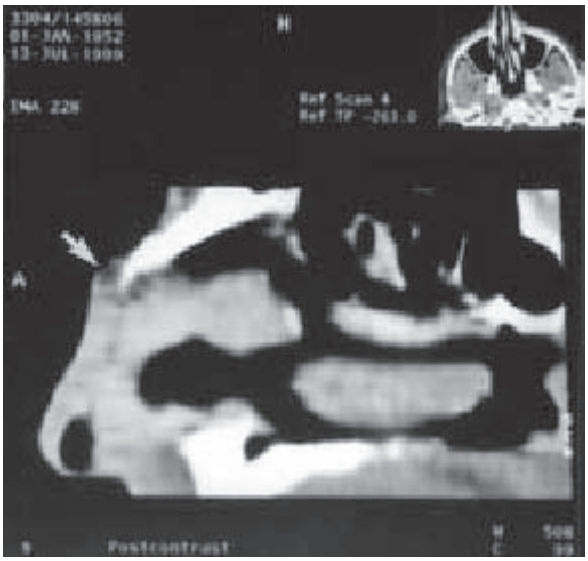

Figure 2. Sagittal reconstruction of the axial CT scan shows the nasal dorsum cyst (arrow) without an intracranial extension.

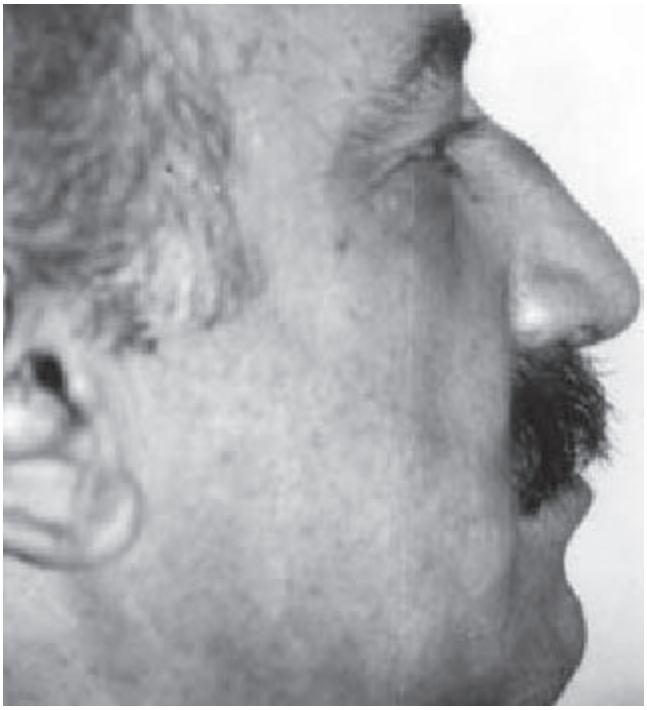

Figure 3. Post-operative result after three months.

REFERENCES

1. Barkovich J, Vandermarck P, Edwards M, Cogen PH (1991) Congenital nasal masses: CT and MR imaging features in 16 cases. A J Neuroradiol 12:105-116.
2. Flaherty G, Pestalardo CM, Iturralde JG, Lauginge R (1996) Mucous cyst: Post rhinoplasty complication. Aesthetic Plast Surg 20:29-31.
3. Harley EH, Erdman JP (1990) Dorsal nasal cyst formation. Arch Otolaryngol Head Neck Surg 116:105-106.
4. Kotzur A, Gubisch W (1996) Mucous cyst- A post rhinoplasty complication: Outcome and prevention. Plast Reconstr Surg 100(2):520-524.
5. Lawson W, Kessler S, Biller HF (1983) Unusual and fatal complications of rhinoplasty. Arch. Otolaryngol Head Neck Surg 109:164-169.
6. McGregor MW, OConnor GB, Saffier S (1958) Complications of rhinoplasty: 1. Skin and subcutaneous tissues. J Int Coll Surg 30:179-184.
7. Mouly R (1970) Le kyste mucoide. Complication inhabituelle de la rhinoplastie. Ann Chir Plast 15:153-155.
8. Shulman Y, Westreich M (1983) Post rhinoplasty mucous cyst of the nose. Plast Reconstr Surg 71:421-422.
9. Zijlker TD, Vuyk HD (1993) Nasal dorsal cyst after rhinoplasty. Rhinology 31:89-91.

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