

CASE REPORT

Mucous Retention Cyst of the Cribriform Area: An Unusual Presentation

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ABSTRACT

Mucous retention of the nose and paranasal sinuses are rare, with an incidence of 1.4 to 9.6%, as described in literature. We report this case of mucous retention cyst in view of its rarity of presentation from the point of its origin-cribriform plate. The cyst was so large as to extend into the oropharynx and cause symptoms of dysphagia. Mucous retention cysts have to be considered as a differential diagnosis in masses arising from the cribriform plate. Endoscopic excision of such masses results in minimal morbidity to the patient.

Keywords: Cribriform, Cribriform plate, Endoscopic, Excision, Mucous retention cyst.

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CASE REPORT

A 65 years old lady presented to our outpatient department (OPD) with complaints of right sided nasal obstruction and difficulty in swallowing since 1 month. Examination of the nose did not reveal any abnormality. There was a greyish mass arising from the nasopharynx, and going downwards behind the uvula, stopping short of the tip of the uvula (Fig. 1).

We proceeded to do a diagnostic nasal endoscopy. There was a mass arising from the area of the cribriform plate and the superior turbinate. The mass descended downwards, medial to the middle turbinate and into the choana, completely obstructing the right choana. On probing, the mass was insensitive to touch and did not bleed on touch. It was firm in consistency, could be probed all around, except superiorly. Furstenberg's test was negative.

Computed tomography (CT) of the nose and paranasal sinuses showed a 5.6 × 2.8 cm soft tissue lesion arising

from the region of the cribriform plate and superior turbinate, extending into the right nasal cavity, and posteriorly into the oropharynx (Fig. 2).

The differential diagnosis in view of the origin of the lesion included a fibroma, Mucous retention cyst, lipoma and malignant tumor such as an esthesioneuroblastoma.

The patient was planned for an endonasal endoscopic excision of the mass under general anesthesia, after delineating the mass and ruling out any intracranial extension. After adequate decongestion and infiltration, we proceeded to detach the superior attachment of the mass from the area of the cribriform plate and superior turbinate. The entire mass was freed, and delivered through the oral cavity in toto (Fig. 3). No CSF leak was noted after excision.

Tissue sent for histopathological examination showed a 6 × 3 × 1 cm polypoidal mass, which has a glistening greyish white outer surface. Its cut section had foci of yellowish areas of 0.5 cm each, in a homogenous greyish white background. Microscopically, the tissue was lined by respiratory epithelium, with intracellular mucin. There was no evidence of dysplasia. The biopsy specimen was suggestive of a ruptured mucinous retention cyst (Fig. 4).

DISCUSSION

Mucous retention of the nose and paranasal sinuses are rare, and have an overall incidence of 1.4 to 9.6% in the general population. Most are often found incidentally during a radiographic examination.¹ Although a majority



Fig. 1: Greyish mass seen in the oropharyngeal region (arrow)

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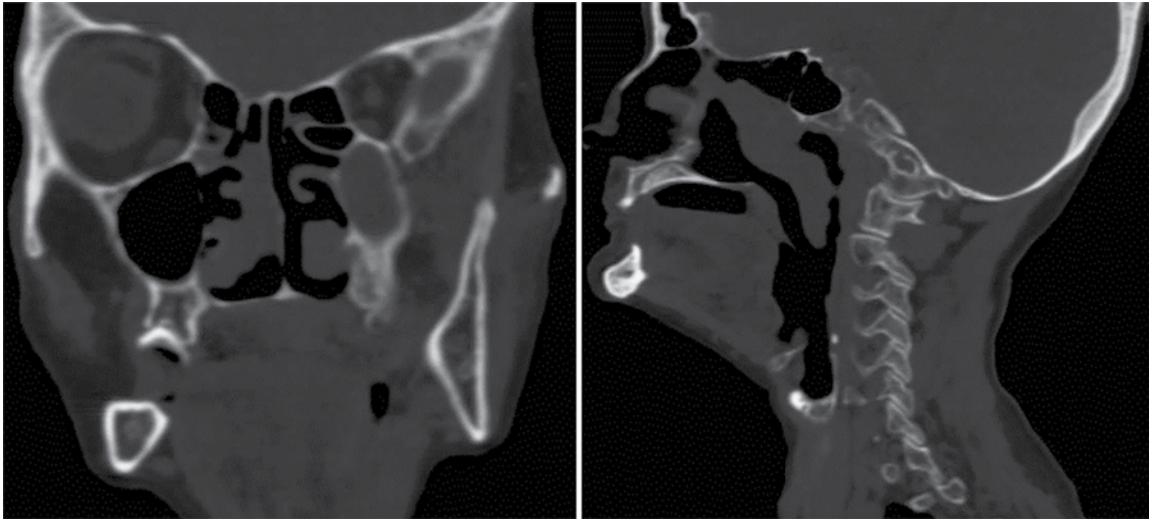


Fig. 2: Coronal and sagittal CT scan images showing the mass arising from the cribriform plate and superior turbinate, extending into the oropharynx



Fig. 3: Mucous retention cyst of arising from the cribriform plate—after excision

of mucous retention cysts are asymptomatic, some can produce symptoms such as headache, facial or periorbital pain, nasal obstruction, repeated infections of the paranasal sinuses.^{2,3} Our patient had symptoms of nasal

obstruction and dysphagia, in view of the cyst obstructing the choana and descending into the oropharynx.

Retention cysts are of two types: serous and mucous. While mucous cysts are more common, and are caused by the obstruction of the seromucinous glands; serous are the result of accumulation of fluid in the submucosal layer. It is difficult to differentiate between the two on imaging as both appear as smooth, outwardly convex soft tissue masses.⁴

Most cysts remain asymptomatic and unchanged; some can resolve spontaneously. This can occur if the fluid filled sac ruptures and the cyst disappears.⁵ Rupture could be triggered by an incidental blunt trauma to the head.⁶

Mucous retention cysts can be diagnosed by a CT scan. An magnetic resonance imaging (MRI) may be required if there is orbital or intracranial extension. Mucous retention cysts may be differentiated from a mucocele by the fact that they do not completely fill the sinus cavity, and do not cause bony expansion.

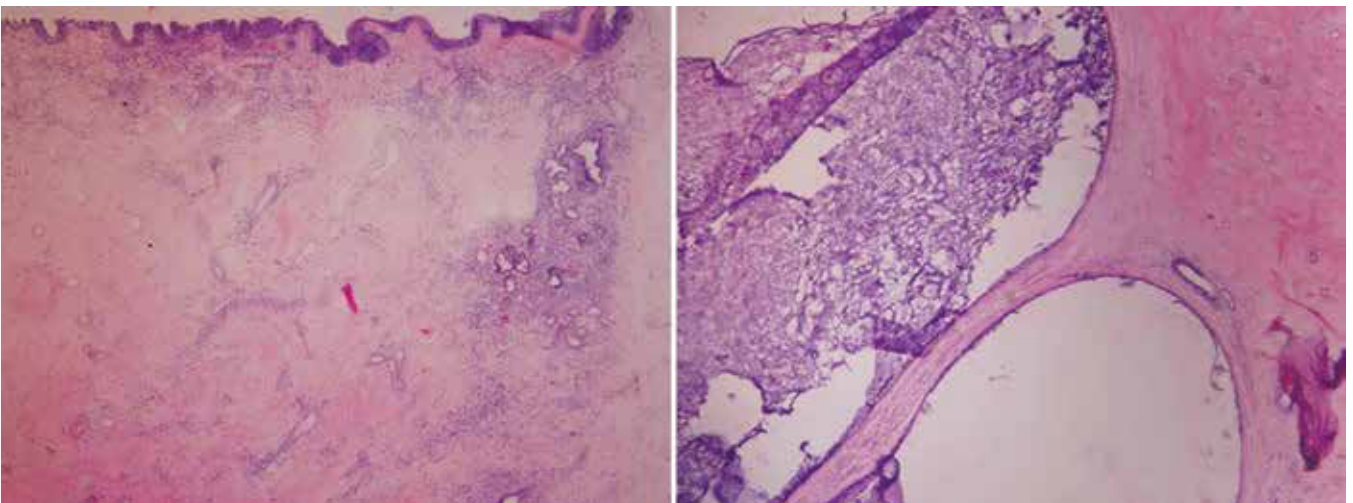


Fig. 4: Hematoxylin and Eosin stain of the specimen showing mucous retention cyst

Treatment is warranted only if the patient has symptoms. Most can be successfully treated by an endoscopic sinus surgery.

We report this case of mucous retention cyst in view of its rarity of presentation from the point of its origin-cribriform plate. The cyst was so large as to extend into the oropharynx and cause symptoms of dysphagia. Mucous retention cysts have to be considered as a differential diagnosis in masses arising from the cribriform plate. Endoscopic excision of such masses results in minimal morbidity to the patient.

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