CASE REPORT

Giant Nasolabial Cyst

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Abstract

Nasolabial (nasoalveolar) cysts are nonodontogenic soft tissue lesions derived from epithelial remanant of the nasolacrimal duct. These are generally slow-growing painless lesions. Additionally, they can cause obstruction, facial deformity and pain. This case report evaluates the facial deformity and boat-shaped resorption demonstrated on computerized tomography (CT) in a 28 years-old patient presenting with facial swelling and pain as a result of a nasolabial cyst.

Nasolabial cysts must be kept in mind in patients suffering from facial deformity and infection as an underlying predisposing factor. Recurrences may be seen in cases not amenable to treatment by surgical excision.

Keywords: facial deformities, facial pain, Nasolabial cysts.

Introduction

Nasolabial cysts are rare non-odontogenic benign lesions of nasal region.[1,2] These are developmental cysts occurring in the soft tissue. These lesions can be asymptomatic or can cause nasal obstruction, pain or facial deformities. Nasolabial cysts are predominantly seen in females and on the left side.[3,4]

The aim of this article is to emphasize the importance of big, rarely seen nasolabial cyst leading to facial deformity and infection seen in a 28 years old woman, and to discuss its treatment by the analysis of the data in literature.

Case Report

A 28-year-old female patient presented with progressive facial swelling and pain on touch lasting for 6 months. There was no report of allergy or anything significant in her past history. On physical examination, the patient had swelling in the fossa of right canine localization, erasing the nasolabial sulcus and lying through the nasal cavity without occluding the passage. Evaluation of other systems revealed no pathology (Figure-1). Laboratory analysis revealed leukocyte count of 13500/mm3, haemoglobin level of 13.6g/dl, sedimentation rate of 34 mm/hour, C-reactive protein (CRP) of 32mg/dl, and platelet count of 501.000/mm^3. Biochemical parameters were normal. Maxillofacial CT showed 5x5cm cystic lesion leading to bone resorption on the base of the nasal passage (Figure-2). Since the patient refused surgery, intravenous ampicillin-sulbactam treatment was started at a dose of 4x1 gr, and infection parameters regressed. The swelling significantly improved following thin needle aspiration. Approximately 5 ml of light yellow and clear fluid was aspirated. Biochemical and microbiological examinations revealed no pathologies. However, patient's complaints recurred after a while. Therefore, the cyst was surgically excised through sublabial incision. Histopathological examination showed benign cystic mass lined by respiratory epithelium. No recurrence was noted during 6-months follow-up.

Figure-1: Erased right nasolabial sulcus.

Discussion

Nasolabial cysts were first described by Zuckerandl in 1882 and histopathological examination was performed by Brown-Kelly in 1898.[1-3] Nasolabial cysts are rare non-odontogenic benign lesions in the nasal alar region.[1,3] Although there are giant nasolabial cysts reported in the literature, the important aspect of this case is that it was complicated by infection, facial deformity and bone resorption.

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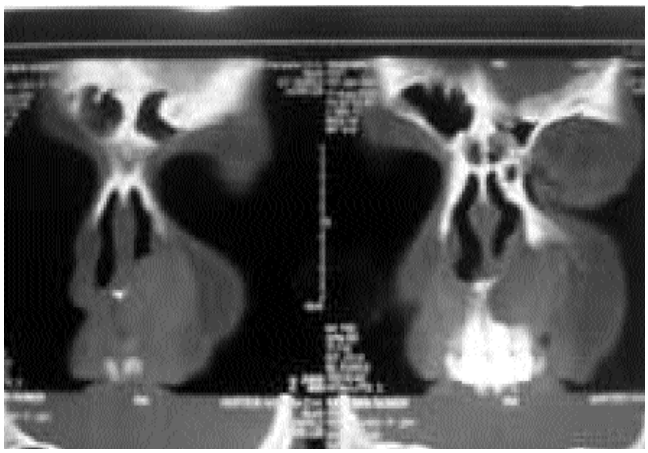

Figure-2: Maxillofacial CT.

Nasolabial cysts comprise 0.7% of maxillary and mandibular cysts.[4,5] They appear as fluctuating soft tissue swelling around the nasal wing in the maxilla. Although they usually expand slowly and painless characteristically, they may present with a painful and fast growing mass when they are infected. The main complaints of our patient were pain and facial deformity. Although nasolabial cysts are commonly unilateral, they can be seen bilaterally in 10% of the cases.[4,6,7] This lesion is frequently seen in females (75%) in fourth and fifth decades.[4,7] Radiological examination of lesions in 1-4 cm size usually shows no significant signs. Larger cysts can cause boat-shaped resorption at the location.[1] Our case was consistent with the other case reports because of female gender and bone resorption. Diagnosis of nasolabial cysts is based on the clinical findings and physical examination. Panoramic and intraoral X-rays generally show no pathology.[1,2] Cyst localization and relation with the nearby tissue can be evaluated with the help of magnetic resonance imaging (MRI) and computerized tomography (CT). CT can differentiate the bone resorption and MRI can clearly demonstrate the cyst content.[1,2,6] Our case had a giant nasolabial cyst with a size of 5x5cm, and boat-like bone resorption caused by the cyst. This was seen clearly on CT.

Nasolabial cysts can grow from nasolabial sulcus into oral and nasal cavities, and sometimes as seen in this case, it can reach fairly large sizes.[5,6] Teze et al. also reported a case with a giant size cyst which caused bone resorption previously.[8]

Sclerozing agent injection, sublabial marsupialization, transnasal marsupialization, aspiration and transnasal excision with the help of endoscopic debrider can be the choices of treatment. When the cyst is excised; it does not recur.Surgical excision, performed with sublabial incision, is generally the choice of treatment.[3,7] However, according to previous studies, transnasal approach decreases the operation and hospitalization time, and it is also a safer option compared to sublabial approach.[6,9]

Microscopic examination reveals cylindrical epithelium that partly contains mucous cells lines internal fibrous wall; epithelial cell contains cilia in some cases. Squamous epithelium can also be seen in small areas.[1,2]

Other non-odontogenic cysts (median-alveolar and palatine, globulomaxillar, nasopalatine) and odontogenic lesions (follicular, periodontal and residual) should be considered in differential diagnosis. Furthermore, benign (neurogenic tumour or haemangioma) or malign tumours (squamous cell tumour or minor salivary gland tumours) should also be kept in mind.[4,5] Kato et al. reported a facial haemangioma which caused bone erosion in the nasolabial region.[5] Infected cysts can be misdiagnosed as furuncles.[2,3] The final diagnosis is made with clinical, radiological and histopathological examinations.[1]

Conclusion

Nasolabial cysts must be kept in mind in patients suffering from facial deformity and infection as an underlying predisposing factor. Recurrences may be seen in cases not amenable to treatment by surgical excision.

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