CASE REPORT

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Klestadt cyst: a nonodontogenic oral cyst

Santhosh Kumar K[1], GIRI GVV[2]✉, Ravindran C[3], Deepak A Pandyan[4], Sheik Samurdeen[5], Vipul Varma[6]

Klestadt cyst is a rare, nonodontogenic cyst of maxilla commonly referred as a nasolabial cyst. The patient usually presents with a slow growing asymptomatic soft tissue swelling without any radiographic abnormalities. Here we present a case report of 36 year old female with Klestadt cyst treated successfully by surgical enucleation.

INTRODUCTION

Klestadt cyst / Nasolabial cyst are a rare, benign, nonodontogenic developmental cyst occurs in the upper lip lateral to the midline (1, 10). It is a slow growing soft tissue swelling always asymptomatic and present typically without any radiographic abnormalities.

The incidence of the cyst usually unilateral is 0.7% sometimes occurs bilatery about 10-11%among the other cysts of chin with more of female predilection and age ranges from 30-50 years most frequently (2, 3, 11-13, 15). Early clinical diagnosis is possible as it cause frequent cosmetic disfigurement in the anterior part of the face. Herein we present a clinical feature, diagnosis and treatment of Klestadt/Nasolabial cyst with review of literature.

CASE REPORT

A 36 year old female came to the Department of oral & maxillofacial surgery with the chief complaint of swelling in relation to the left side of the upper lip for past 7 years. The swelling was asymptomatic, no purulent discharge from the lesion & no other comorbids. On examination, it revealed facial asymmetry with obliteration of nasolabial fold extra orally. Intraorally, a well circumscribed ovoid swelling was seen in relation to mucobuccal fold of teeth 21 & 22. On palpation, the lesion was soft, fluctuant & nontender in nature (Figure 1). Computed tomogram axial section reveals an ovoid swelling from anterior maxillary region and extending till the nasal floor superiorly measuring 1.2cm x 1.4cm (Figure 2). Under general anesthesia, high vestibular incision placed in relation to 21 & 25 regions, mucoperiosteum raised and the lesion was completely enucleated. Excised lesion was sent for histopathological investigations (Figure 3). Histopathological evaluation reveals a cystic lumen lined by pseudo stratified columnar epithelium with surrounding fibrous capsule contains plenty of chronic inflammatory cell infiltrate and extravasated RBCs which suggestive of nasolabial cyst (Figure 4).

DISCUSSION

Klestadt/Nasolabial cyst is uncommon, rare soft tissue cyst of anterior maxillary region. It is a slow growing, benign nonodontogenic developmental cyst occurs in the nasolabial fold.

Gomes et al., described the three cardinal signs of nasolabial cyst such as complete / partial obstruction, well circumscribed swelling and localized pain (4-6). Similarly our patient also had partial nasal obstruction with well circumscribed swelling intraorally. Differential diagnosis of swelling in the anterior maxillary region could be Primarily Nasolabial cyst, periapical pathologies such as abscess, granuloma, cyst and developmental condition such as dermoid cyst epidermoid cyst etc. Dermoid and epidermoid cysts may arise in midnasal or laterally below nasal ala. These lesions are diagnosed in childhood whereas nasolabial cyst almost invariably present in adults. A distinguishing feature of these very rare cysts may be their yellow hue, as opposed to normal pink or bluish coloration of nasolabial cyst (14). Vitality of the tooth, colour of the lesion radiological examination of adjacent tooth is important for the differentiation of nasolabial cyst from the odontogenic lesion. Klestadt cyst commonly associated with the vital tooth and appears as normal mucosal hue or blue whereas periapical pathologies are always associated with nonvital tooth and in dermoid/epidermoid cyst mucosa appears yellow in colour (7). It cannot be diagnosed with plain radiographs whereas Computed tomogram usually presents well circumscribed radiolucent lesion in relation to maxillary anterior region adjacent to nasal cavity (8, 9). In our case also computed tomogram-axial view showed a well circumscribed lesion measuring 12*11*9mm. With the correlation of all these clinical and radiographical features, this condition was provisionally diagnosed as Klestadt cyst.

El din et al., suggests various treatment modalities for treating Klestadt cyst such as aspiration, incision and drainage, sclerotherapy, enucleation, marsupialization, cauterization. Among these surgical

[1]Associate professor, Department of oral and maxillofacial surgery, Faculty of dental sciences, Sri Ramachandra institute of higher education and research, Porur-Chennai, Tamilnadu-600119, India; [2]Professor, Department of oral and maxillofacial surgery, Faculty of dental sciences, Sri Ramachandra institute of higher education and research, Porur-Chennai, Tamilnadu-600119, India; [3]Dean and HOD, Professor, Department of oral and maxillofacial surgery, Faculty of dental sciences, Sri Ramachandra institute of higher education and research, Porur-Chennai, Tamilnadu-600119, India; [4]Associate professor, Department of oral and maxillofacial surgery, Faculty of dental sciences, Sri Ramachandra institute of higher education and research, Porur-Chennai, Tamilnadu-600119, India; [5]Consultant oral and maxillofacial surgeon, MSM Hospital, Tamilnadu, India; [6]Post graduate, Department of oral and maxillofacial surgery, Faculty of dental sciences, Sri Ramachandra institute of higher education and research, Porur-Chennai, Tamilnadu-600119, India

✉*Address for correspondence:*
Dr. G.V.V.Giri , MDS; Professor, Department of oral and maxillofacial surgery, Faculty of dental sciences, Sri Ramachandra institute of higher education and research, Porur-Chennai, Tamilnadu-600119, India, Ph: 9894310794; Email: drsanthoshemails@gmail.com

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Figure 1 Intraoral view of nasolabial cyst

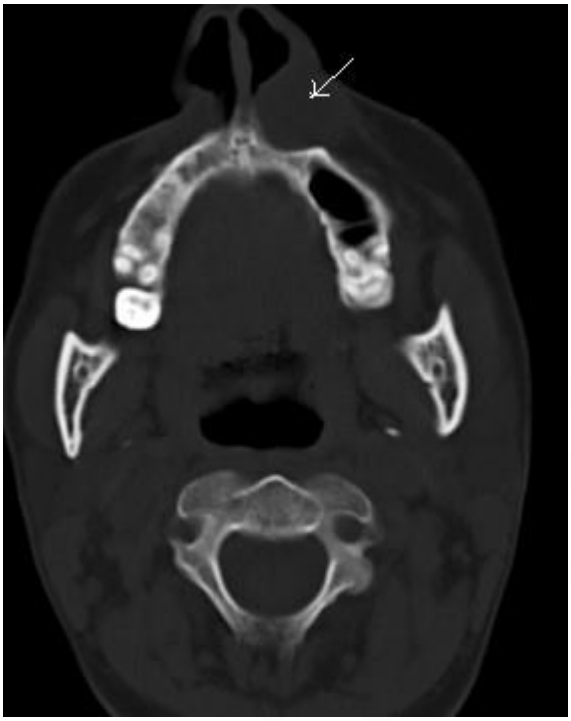

Figure 2 CT image (axial section) showing a heterogeneous soft tissue mass in the left nasal fosse (arrow)

Figure 3 Intraoperative view-vestibular incison

Figure 4 Excised gross specimen

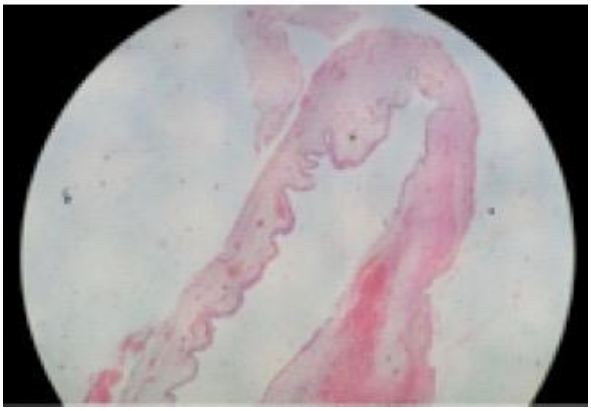

Figure 5 Histopathological view (40x)

modalities, enucleation is the treatment of choice for Klestadt cyst (7) because the recurrence is very minimal or no recurrence when compared with other modalities. So the lesion was successfully enucleated under general anaesthesia and sent for histopathological investigation which further confirmed the diagnosis. Patient has been followed up for past 2 years with no recurrence.

CONCLUSION

Nasolabial cyst is a rare uncommon nonodontogenic soft tissue cyst usually occurs unilateral rarely occurs bilaterally. The anatomical location of the cyst is the unique feature where this cyst will not occur anywhere rather than the nasolabial region. The diagnosis of nasolabial cysts should be based on clinical and imaging method findings but histopathological examination is always gives the confirmatory diagnosis. Enucleation is the good standard treatment for the nasolabial/Klestadt cyst with no or minimum recurrence rate.

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