

A Case Report of Maxillary Incisive Canal Cyst in a 33 Years Old Male

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Abstract: The nasopalatine duct cyst also termed as incisive canal cyst. The main aim of this report is to give an overview of the surgical technique and procedure that is done in this case as most of the cyst is removed by the palatal approach. We present a 33 year old male with incisive canal cyst. Radiographic shows globular shape radiolucency. No sign of recurrence after the surgical procedure.

Keywords: maxillary incisive cyst, sublabial approach

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I. Introduction

The nasopalatine duct cyst was termed as incisive canal cyst. It occurs in about 1% of the population. First describe by Meyer in 1914. It arises from embryologic remnants of nasopalatine duct. Most of the cysts develop in the midline of anterior maxilla near the incisive foramen. The majority of cases occur between 4th and 6th decades of life and more common in males than women with a ratio of 3:1. In some literature it is said to cause by trauma or infection of the duct and mucous retention of adjacent minor salivary.

Case report:

It is a case report of a maxillary incisive canal cyst in a 33 years old male who attended the Department of Otorhinolaryngology Jawaharlal Nehru Institute of Medical Sciences, Imphal, Manipur in the year 2019. Patient complains of swelling in the gums behind the upper central incisors for 3 months. Patient did not have any pain or difficulty while chewing or eating. There was no history of trauma. No use of any forms of tobacco. No history of diabetes or hypertension. No any previous history of surgery. On intraoral examination the swelling was globular on palpation measuring around 0.5×0.5cm behind the upper central incisors and can be felt in the front sublabially when push from behind. No tenderness present. Extraorally there was no abnormality and no lymphadenopathy. Enucleation was planned under general anesthesia.

All routine investigations were within normal limits. Radiographic examination showed a well circumscribed round shaped radiolucency located in midline of the anterior maxilla between roots of upper central incisors. CT scan PNS showed a rounded cyst measuring 22×17mm in axial and 19mm in cranio caudal span at the level of incisive canal.

Enucleation under GA was done. We approach the benign cyst sublabially giving an. incision around 2 to 3 cm and exposed the cyst. A friable hemorrhagic cyst was removed and leaving a big cavity lined by bone under the floor of nasal cavity. The bony wall of the cavity was made raw by serrating with a freer elevator and cavity was filled with bone wax mixed with some bone dust harvested by drilling around the walls of the bony cavity. The hemorrhagic cyst was sent for histopathological examination. Flap was closed with opposing the soft tissue and periosteum with chromic catgut 4-0 and mucus membrane were opposed with mersilk 3-0. External stitch was removed after 7 days. Postoperative period was uneventful. Patient was follow up on 10 day, 1 month and 6 months. No recurrence was seen. Histopathological studies showed a cyst lined by stratified squamous epithelium.



Fig 1 Orthopantomogram



Fig 2



Fig 4



Fig 3



Fig 5

II. Discussion

Maxillary incisive cyst is the most common non odontogenic cysts of the oral cavity. Due to similar signs and symptoms, it may be easily misdiagnosed as a periapical lesion or granuloma. Sublabial approach is easier. Presentation of age and symptoms and radiographic features are similar to findings of Dedhia P et al². In case of Cecchetti F et al³, they used palatal approach for removal of the cyst and complications like submucosal hematoma, pain, tenderness and swelling occurred in the hard palate. Whereas, in our technique of sublabial approached no such complications were occurred.

III. Conclusion

Non odontogenic cyst of the oral cavity must be distinguished from other maxillary anterior radiolucency on the basis of radiographic and histopathology. As per the literature review, nasopalatine duct cyst is considered a rare pathology Sankar D et al⁴. So, we try to present this case as it rarely encountered at our ENT OPD and to provide the better way of surgical approach of such case.

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