

## Nasopalatal Cyst – A Case Report

**Language:** English

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### Introduction

Nasopalatal cyst (NPC) is rare but most common among the developmental, non- odontogenic cysts of the jaws. NPC also called as incisive canal cyst, Nasopalatal canal/duct cyst. It is unique in that it develops in only a single location, in the midline anterior maxilla. NPC was first described by Mayer in 1914. It arises from the embryonic ducts of scrapa and stenson. It accounts for about 5-10% of the jaw cysts and 1% of the population. Majority of the cases occur between fourth to sixth decades of life. Males are more commonly affected than the females. Most of NPCs are asymptomatic. Usually patient complains of palatal swelling, upper anterior teeth displacement, sub-labial swelling, and low grade pain. Various combinations of swelling, discharge and pain may occur. NPCs are usually treated by enucleation, in case of large cysts, marsupialization may be considered before definitive enucleation. Recurrence rate ranges from 0% to 11%.

### Objectives

A thirty-eight year old female patient presented with the swelling in the anterior region of palate since 1year. Patient noticed the swelling 1 year back which has gradually increased to present size. The swelling associated with discomfort during biting and chewing the food. Intra-oral examination revealed a solitary, well defined, oval shaped swelling measuring about 2 x 1.5cms in the anterior palate in the midline (Figure 1). Overlying mucosa was normal. The swelling was hard, tender and non mobile. Considering the case history and examination of lesion we gave provisional diagnosis of Nasopalatal cyst and differential diagnosis of Median palatal cyst and Radicular cyst in respect to 11 or 21.



Fig. 1: Showing intra oral midline swelling

### Material and Methods

Maxillary occlusal radiograph (Figure 2) revealed a solitary, well defined, ovoid radiolucency measuring about 2 x 1.5cms located in midline of the anterior maxilla below the roots of maxillary central incisors. Computed tomography (C.T) confirmed the presence of well defined, midline cystic lesion in the anterior portion of the hard palate bulging into the oral cavity (Figure 3 and 4).

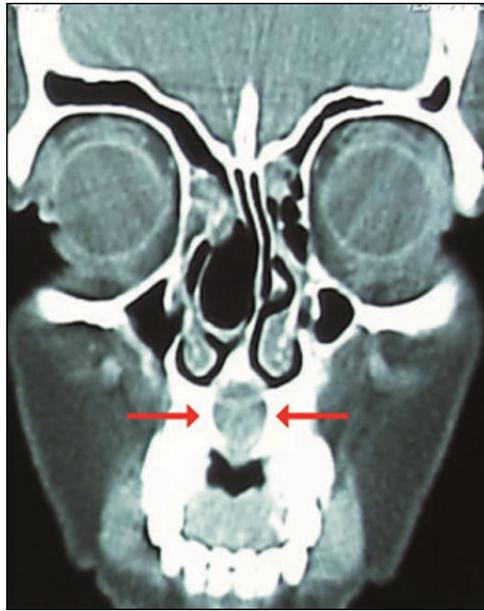
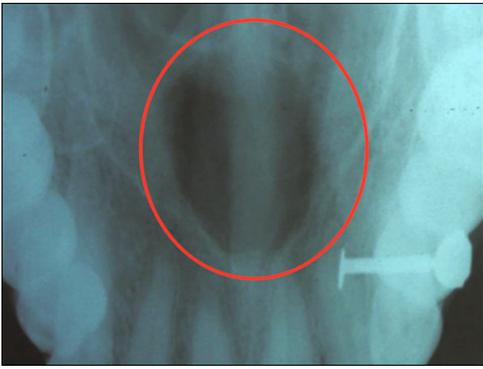


Fig. 2: Maxillary occlusal radiograph showing a solitary, well defined, ovoid radiolucency

Fig. 3: CT Coronal view showing well defined, midline cystic lesion in the anterior portion of the hard palate bulging into the oral cavity



Fig. 4: CT Axial view showing well defined, midline cystic lesion in the anterior portion of the hard palate

## Results

Then the patient underwent excisional biopsy of the cystic lesion. On histopathological examination, the cystic lining showing simple cuboidal epithelium and underlying connective tissue showing chronic inflammatory cell infiltrate (Figure 5). The histological features were suggestive of Nasopalatal cyst.

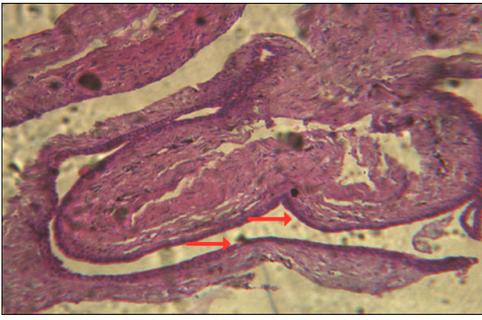


Fig. 5: Showing cuboidal epithelium in the cystic lining

## Conclusions

Nasopalatal cyst is rare but most common among the developmental, non-odontogenic cysts of the jaws. The lesion may be asymptomatic or manifests as swelling, pain and discharge from the anterior hard palate. Histopathologically, the type of cystic lining varies according to the location involved (palatine, nasal or intermediate). The cuboidal cystic epithelial lining is very rarely seen. So one should always correlate both clinical and histopathological features to arrive at final diagnosis.

## Literature

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## Abbreviations

NPC: Nasopalatal Cyst

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# NASOPALATAL CYST – A CASE REPORT

## INTRODUCTION

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Intra Oral Swelling

## CASE REPORT

A thirty-eight-year old female patient presented with the swelling in the anterior region of palate since 1 year. Patient noticed the swelling 1 year back which has gradually increased to present size. The swelling associated with discomfort during biting and chewing the food. Intra-oral examination revealed a solitary, well defined, oval shaped swelling measuring about 2 x 1.5 cms in the anterior palate in the midline. Overlying mucosa was normal. The swelling was hard, tender and non mobile. Considering the case history and examination of lesion we gave provisional diagnosis of Nasopalatal cyst and differential diagnosis of Median palatal cyst and Radicular cyst in respect to 11 or 21.



Maxillary Occlusal View



CT Coronal View

## RADIOLOGICAL EXAMINATION

Maxillary occlusal radiograph revealed a solitary, well defined, ovoid radiolucency measuring about 2 x 1.5 cms located in midline of the anterior maxilla below the roots of maxillary central incisors. Computed tomography (CT) confirmed the presence of well defined, midline cystic lesion in the anterior portion of the hard palate bulging into the oral cavity.



CT Axial View

## HISTOPATHOLOGY

On microscopic examination, the cystic lining showing simple cuboidal epithelium and underlying connective tissue showing chronic inflammatory cell infiltrate. The histological features were suggestive of Nasopalatal cyst.



Photomicrograph 10x

## DISCUSSION & CONCLUSION

Nasopalatal cysts are rare but commonest among the developmental, epithelial, non-odontogenic cysts of the jaws. The lesion may be asymptomatic or manifests as swelling, pain, and discharge from the hard palate. Histologically, the type of cystic epithelium varies according to the location involved (palatine, nasal or intermediate). A cuboidal cell epithelium is rarely observed. So one should always correlate both clinical and histopathological features to arrive at the final diagnosis.

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