

## Research Article

### RESIDUAL CYST OF UPPER JAW: A CASE REPORT

\*Dr. Tsvetan Tsvetanov

Medical University-Plovdiv, Bulgaria Department of Oral Surgery, Dental Faculty,

#### ARTICLE INFO

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#### ABSTRACT

The residual cysts are retained radicular cysts within a jaw after tooth extraction. They are approximately 10% of odontogenic cysts. Their clinical features and radiological findings are the same as radicular cysts. Residual cysts can be retained within a jaw from 1 to 20 years. In asymptomatic cases of residual cyst is determined size decreasing with age is getting on. Diagnosis and surgical management are the same as radicular cyst. In this case report, a 56 year old female patient presented with a painless swelling of approximately 2x2 cm in size, on the maxillary right front region since 7 months. Clinical examination, diagnosis, surgical protocol is reviewed.

##### Keywords:

Asymptomatic Diseases,  
Cyst,  
Dental Radiography,  
Diagnosis,  
Histopathology,  
Treatment.

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## INTRODUCTION

Radicular cyst is retained within a jaw after tooth extraction, around its root development is termed residual. It possess characteristics of conventional radicular cyst, but in association with reasonable extraction, its inflammation process decrease and within wall is discovered *noninflammatory collagen* fibrous tissues, and thin epithelial part, which is difficult to differentiated pathologoanatomical from development cyst (Shear, 2007). In the literature there is a *doubt* about the *existence of residual dental cysts in association with observation radicular cyst healing after extraction of offending tooth* (Walton, 1996). Another authors considered for presence of active growing of residual cysts, located in the earlier edentulous spaces (Oehlers, 1970). This cyst is commonly seen in the elderly (Thiagarajan, 2013). Most common reason to diagnose is suppuration – 45,5%; high percentage is unclearly discomfort – 40,2%; very rarely it is discovered as incidental findings on routine radiographs in other occasion (Pechalova et al., 2011).

## CASE REPORT

A 56 year old female patient reported to the Department of Oral Surgery, Faculty of Dental Medicine, Medical University

\*Corresponding author: Dr. Tsvetan Tsvetanov,  
Department of Oral Surgery, Dental Faculty, Medical University-Plovdiv, Bulgaria.

–Plovdiv, Bulgaria with a chief complaint of slowly progressing swelling on the left side of the face of 7 months duration. Face showed an obvious asymmetry caused due to a swelling on the left side of the maxilla. The color of overlying skin was normal. No change in local temperature. The overlying skin was smooth, intact, and appeared little stretched. The detailed head and neck examination did not reveal any significant findings. Intraoral examination revealed missing left lateral incisor in the left maxillary region with healed extraction socket and normal overlying alveolar mucosa. There was a well-defined, localized swelling obliterating the buccal vestibule in the region of 22. It was soft, fluctuant, and nontender on palpation. The overlying mucosa was smooth, elevated, but of the same color as that of adjacent mucosa and presented with no sign of inflammation. A fine-needle aspiration revealed a yellow-colored highly viscous fluid. Intraoral periapical radiograph of maxillary left anterior teeth region revealed missing coronal part of left lateral incisor with evidence of root stump. Periapical radiograph showed a well-defined, unilocular, circular radiolucency close to upper canine and central incisor (Fig. 1). The histopathological features № 24896/7.12.15 year stained with H and E showed few inflammatory cells confirmed the diagnosis of an established residual cyst. The cyst was enucleated by using an intraoral approach under local anaesthesia (Fig. 2, 3). The sectioned gross specimen revealed yellowish, solidified pus like material surrounded by a thin-layered soft capsule (Fig. 4).



Fig. 1. Radiography



Fig. 2. Intra-oralView, Present on the mucoperiosteal flap



Fig. 3. Photograph after removal of the lesion



Fig. 4. Sectioned Gross Specimen with a Soft Capsule, root stump

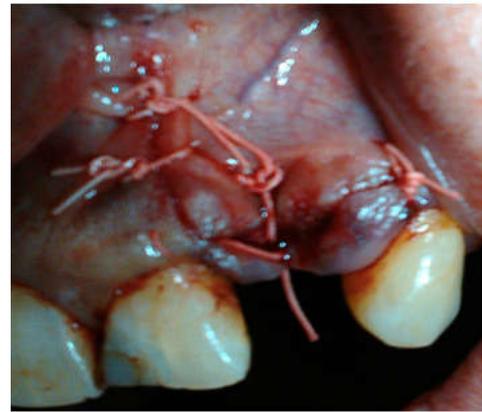


Fig. 5. Mucoperiosteal flap is sutured with interrupted sutures

After enucleation and proper haemostasis, the surgical site was closed by *interrupted suture* (Fig. 5). Postsurgical period was uneventful.

## DISCUSSION

The present case is similar to this of Adappa D, Chatra L, Shenai P, Veena KM, Rao PK, and Prabhu RV. They showed a clinical case of 36 year old female patient with painless swelling of approximately 2x2 cm in size, on the maxillary right front region since two months. Histopathological study confirmed the diagnosis - residual cyst (Adappa et al., 2014). Other authors report for missing first permanent molar with a partial radiolucency superimposed on the edentulous region. Histopathological study confirmed the diagnosis for an established residual cyst (Jamdade et al., 2012). We observed large odontogenic cysts within the jaw in the literature. The histopathology report confirmed the diagnosis of an inflamed odontogenic cyst, most probably a residual dental cyst with no evidence of odontogenic keratocyst (Dimitroulis, 1998). Cases in world literature consist retained radicular cysts after tooth extraction. The presentation of residual cyst around root remnant has not been reported in the literature. Literature dates for residual cyst frequency are *miscellaneous*. In a study carried out on five hundred ninety four patients with 621 cysts, most of the cysts were inflammatory: 435 cysts (70.1%) and odontogenic: 603 (97%) in their origin. They determined 18% frequency of residual cyst, most cited percentage in the literature (Pechalova et al., 2009). Other authors also report that from 2275 biopsy reports analyzed, 194 cases (8.5%) were jaw cysts, including odontogenic (6.7%) and nonodontogenic cysts (0.25%). Odontogenic cysts included 69.3% radicular, 20.3% dentigerous, 5.2% keratinizing odontogenic, 3.3% residual, and 1.9% other cysts, such as lateral periodontal, botryoid odontogenic, and gingival cysts (Selvamani et al., 2012). Types of treatment that can be conducted for the residual cyst is either marsupialisation or enucleation depending on the size of the cyst (Adappa et al., 2014). In the case presented here, due to the smaller size and intact cortical lining, enucleation of the cyst was performed.

## Conclusion

This case report illustrate a rare case of residual cyst around root stump. To conclude histopathological examination is necessary to provide an adequate diagnosis.

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