III CONVEGNO NAZIONALE GIPATEC 2023
Napoli,
14 – 15 Settembre 2023
Università Federico II di Napoli
Aula Magna Scienze Biotecnologiche

ODONTOGENIC KERATOCYST CAN BE MISDIAGNOSED FOR A LATERAL PERIODONTAL CYST WHEN THE CLINICAL AND RADIOGRAPHICAL FINDINGS ARE SIMILAR

Roberta Gasparro[1]*, Rosa Maria Di Crescenzo[2]*, Alessandro Espedito di Lauro[1], Stefania Staibano[2], Gilberto Sammartino[1]

Department of Neuroscience, Reproductive Science and Odontostomatology
Department of Advanced Biomedical Sciences, Pathology Section
University of Naples Federico II, Naples, Italy
*equally contributed

OBJECTIVES

The lateral periodontal cyst (LPc) is a rare non-inflammatory intraosseous cyst; the treatment requires a conservative surgical removal with lower rate of recurrence (about 2.4%). Odontogenic keratocystic (OK) can be asymptomatic or presenting aggressive behaviour and high rate of recurrence (up to 62.5%). From a clinical point of view, it is important to correctly diagnose these lesions when they present similar clinical and radiographical features. This study presents an OK located in premolar region that simulated a LPc from a clinical and radiographical point of view.

METHODS

A 34-year-old systemically healthy man presented with a complaint of soft pain in the vestibular aspect of left mandibular second premolar and left mandibular first molar region of two months duration. Vital teeth in the left mandible, no mucosal swelling, and no drainage were observed. The radiographic examination (CBCT) showed a well circumscribed hypodensity area, measuring approximately 2×4 cm. No displacement and no resorption of the roots were notified (Figure 1A-D). Upon clinical and radiographical examination, a provisional diagnosis of LPc was made, but considering the differential diagnosis described previously, a surgical treatment consisting of the enucleation of the lesion and histological examination, was planned. The lesion was gently removed (Figures 2A,B,C) and sent to the anatomic pathology laboratory for histological examination

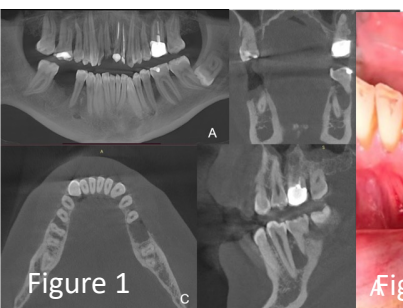


Figure 1

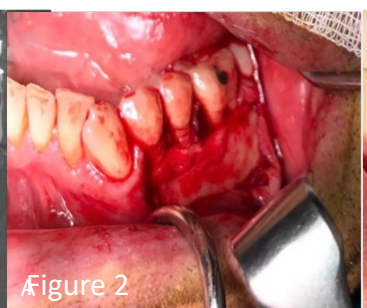
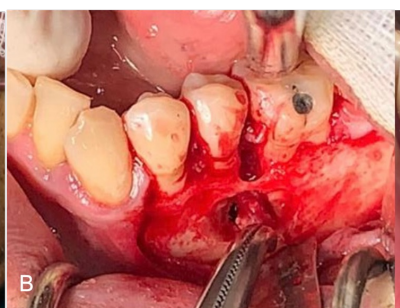
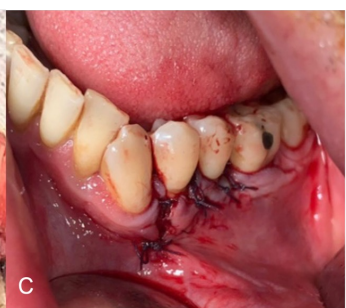


Figure 2





RESULTS

Histologically, a cystic wall partially lined by a keratinizing squamous epithelium with a wavy parakeratotic epithelial cells was observed. The cyst was surrounded by chronic granulomatous inflammatory with cholesterol clefts (Figures 3A,B). Based on these findings, the diagnosis of odontogenic keratocystic was made and follow-up was established every 6 months for the first 5 years and every year from 5 years upwards

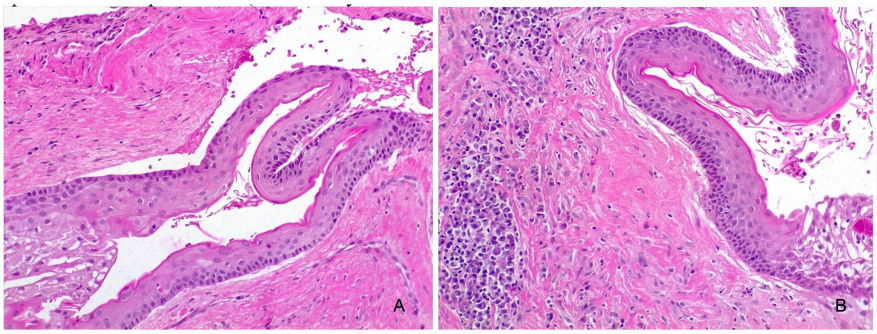


Figure 3

CONCLUSION

Radiolucent lesions in the premolar and canine region are frequently clinically and radiographi- cally misdiagnosed. The identification of keratocyst in a location preoperatively favoring a lateral periodontal cyst should be suspected and biopsy must be considered in all cases to establish the nature of the lesion, the best surgical treatment, and the follow-up

REFERENCES

- Ramesh r, Sadasivan a. lateral Periodontal cyst - a di- agnostic dilemma: report of a rare case with cBct and histo- logical findings. Int J Surg Case Rep 2020;75:454–7.
- Boffano P, cavarra F, agnone aM, Brucoli M, ruslin M, Forouzanfar t, *et al.* the epidemiology and management of odontogenic keratocysts (OKcs): a european multicenter study. J craniomaxillofac Surg 2022;50:1–6.