

原文題目(出處)：	Uncommon synchronous histopathological features of a radicular cyst: a case report. Cases Journal 2009;2:9067
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內文：

Introduction

◇ **Radicular cyst** :

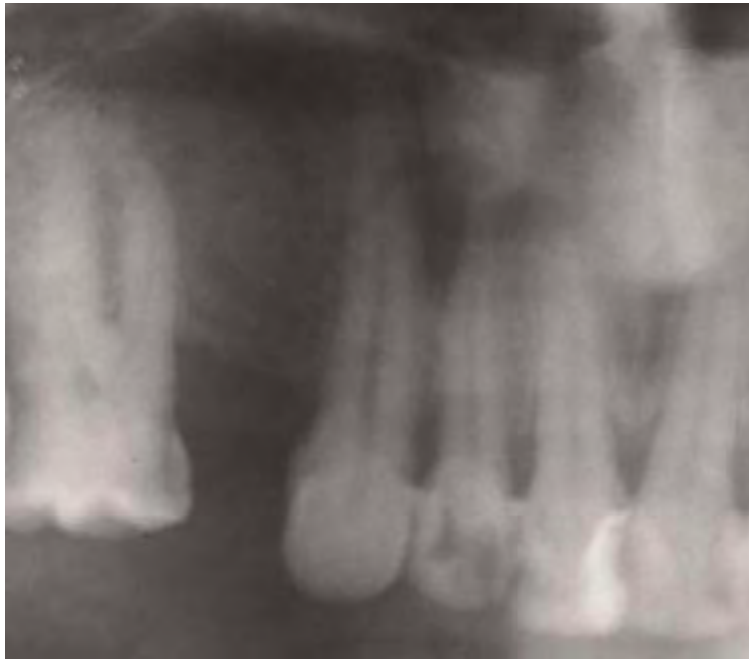
- the most common inflammatory odontogenic cystic lesions
- commonly found at root apices of involved teeth or lateral to the root
- nearly 2/3 of reported cases → **40,50 y/o males**
- >1/2 of reported cases → **Maxillary anterior segment**
- (1) small : asymptomatic
- (2) large : cause swelling and bony expansion → painful
- **X-ray** : round or ovoid RL area surrounded by a narrow RO margin
- **Actinomyces** is the most commonly occurring organism
- to protect vitality of the tooth, reactionary dentin may induce production of calcified tissues → blockage of the root canal → difficult Endo. Procedures
- **Histopathologically** :
 - (1) the cyst is thin with smooth or corrugated inner surface
 - (2) epithelial lining : stratified squamous, 10% with Rushton's hyaline bodies
 - (3) fibrous capsule : composed mainly of condensed parallel bundles of collagen fibres peripherally and a loose connective tissue adjacent to epithelial lining
 - (4) Other : satellite microcysts, calcifications, mast cells and remnants of odontogenic epithelium

- ◇ The process of haem catabolism, the presence of hemosiderin and lipid-laden macrophages or foam cells have described in atherosclerotic p't suffering from

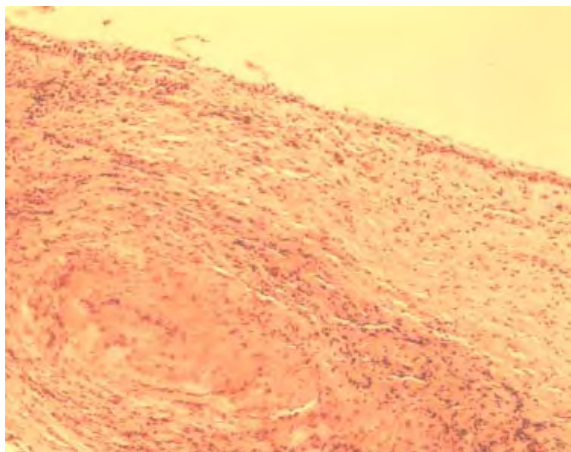
ischaemic heart disease, but not been evaluated in radicular cyst lamina propria.

Case presentation

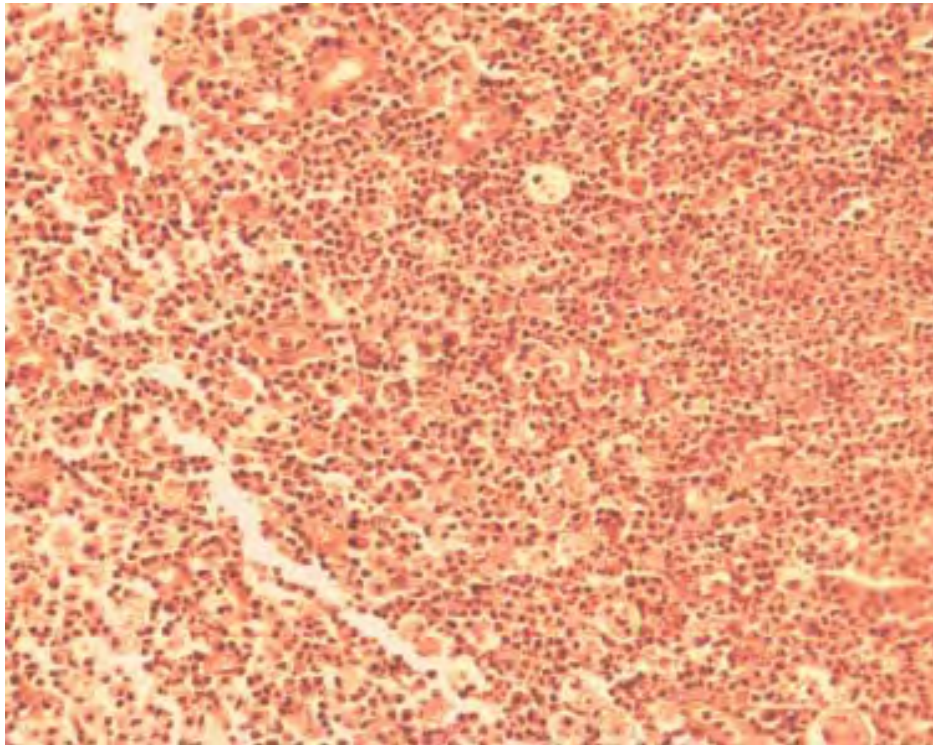
- ◇ **General Data** : a 38 y/o Mediterranean female
- ◇ **C.C.** : throbbing R't Maxillary pain
- ◇ **O.E.** : (1) oral fistula in the tooth 12 area
(2) tooth 12 : severely decayed ; tender to percussion
- ◇ **X-ray finding** : a periapical RL lesion of tooth 12



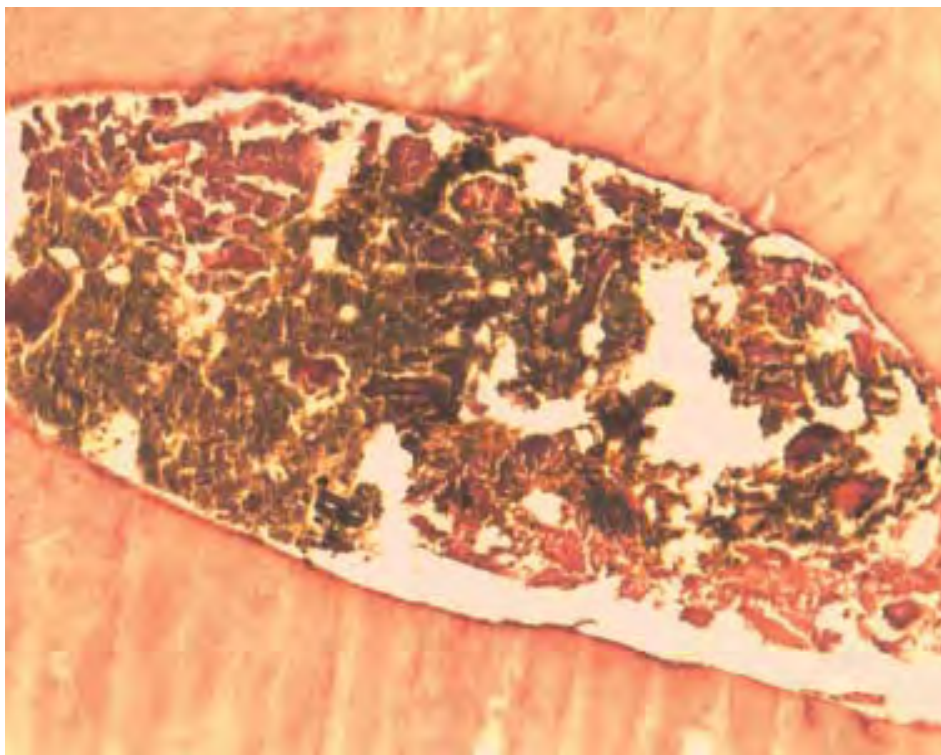
- ◇ Surgical extraction and enucleation (under LA)
 - The cyst measured 6mm in diameter
 - buffered formalin, EDTA, cut the specimen into 5µm, H&E stain
- ◇ **Histopathologically** :
 - atrophic non-keratinized stratified squamous epithelium
 - in the lamina propria, an oval fibrotic island was observed, surrounded by multiple inflammatory cells



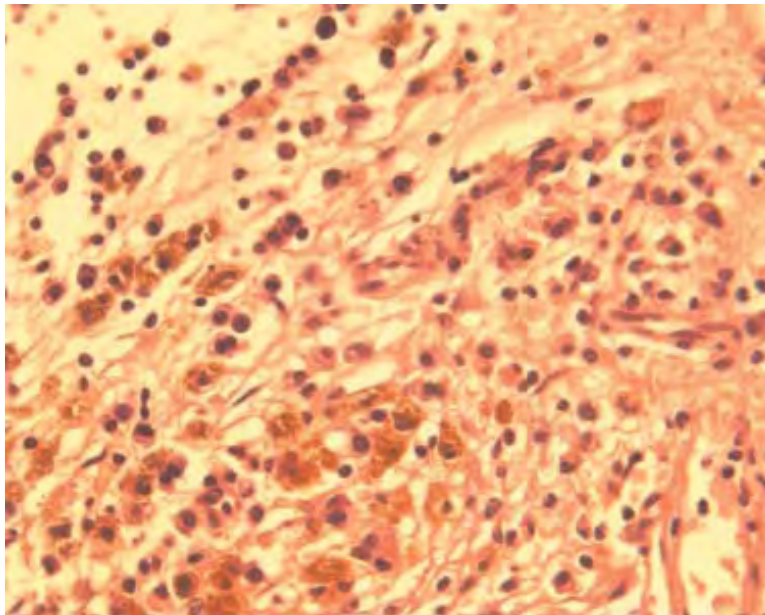
- in other areas : lipid-laden macrophages / foam cells



- dystrophic calcification into the canal → excessive formation of reactionary dentin → apical part was obstructed



- topical hemosiderin pigmentation of the chorium expressed the catabolism of hemoglobin structure due to micro-hemorrhages



Discussion

- ◇ Radicular cysts are common osseo-destructive jaw lesions.
- ◇ Uncommon microscopical features include **subepithelial fibrosis**, **topical hemosiderosis** and **lipid-laden macrophages** in association with a root canal dystrophic calcification.
- ◇ Root canal dystrophic calcification may cause obliteration of the root canal apex. → difficult to treat by conventional methods (ex. : endo tx.) → surgical excision
- ◇ The phagocytosis of the lipid debris induces microscopic expansion of the macrophages → **lipid-laden macrophages** or **foam cells**
- ◇ Another form of chronic irritability may be identified by the presence of **subepithelial fibrosis**. This appears as scar tissue formation.
- ◇ Other rare forms : hemosiderin pigmentation → indicate the presence of many micro-hemorrhages in the lamina propria
- ◇ This case report described the association of pulp dystrophic calcification with subepithelial fibrosis, lipid laden macrophages and hemosiderin pigments on the chorium of a radicular cyst.

Conclusion

- ◇ the synchronous existence of these features in a radicular cyst may indicate the development of chronic irritation in periodontal tissues by the root canal microbial proliferation.

題號	題目
1	<p>關於 radicular cyst，下列何者為非？</p> <p>(A) Patients with radicular cyst have no symptoms unless there is an acute inflammatory exacerbation.</p> <p>(B) The source of epithelium is usually a rest of Malassez.</p> <p>(C) Neither the size nor the shape of the lesion can be considered a definitive diagnostic criterion.</p> <p>(D) It will be healed after removal of the problematic tooth.</p>
答案 ()	出處：Oral & Maxillofacial pathology P.116
題號	題目
2	<p>在顯微鏡下觀察 radicular cyst，下列何者為非？</p> <p>(A) The cyst is lined by stratified squamous epithelium.</p> <p>(B) The lumen will be filled with fluid and cellular debris.</p> <p>(C) On occasion, the lining epithelium may demonstrate linear or arch-shaped calcifications known as Rushton bodies.</p> <p>(D) The wall of the cyst consists of loose fibrous connective tissue.</p>
答案 ()	出處：Oral & Maxillofacial pathology P.119