



Multiple idiopathic cervical resorption: A diagnostic dilemma

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Multiple idiopathic cervical resorption is an uncommon condition, the etiology of which remains unknown. The case of a 36-year-old woman with idiopathic resorption in the cervical areas of multiple teeth is presented. Her medical history was noncontributory, but her dental history was valuable in reaching a diagnosis. Hematologic and endocrinal investigations were unremarkable, but a computed tomography scan revealed relevant information. The progression of the lesion and involvement of multiple teeth without any pattern or chronology are challenges faced when diagnosing and treating this condition. (*Quintessence Int* 2012;43:187–190)

Key words: computed tomography scan, diagnosis, multiple idiopathic cervical resorption, radiograph

Multiple idiopathic cervical resorption has long challenged clinicians. This entity is generally eclipsed by a lack of substantial clinical features and affirmative history, which is why it is found incidentally. The prognosis of the affected teeth remains unclear due to the atypical progressive pattern of resorption; however, teeth can be retained with early intervention.

CASE REPORT

A 36-year-old woman presented with pain in her maxillary left canine and first premolar that had persisted for 15 days. The patient reported a spontaneous dull aching pain with occasional episodes during the night. Her mandibular right first and second molars had been extracted 2 years prior. In addition, she had undergone excision of a fibroadenoma on her left breast 5 years prior. Intraoral examination revealed minor bleeding on probing between the maxillary left canine and first premolar. Other than a small, hard steplike defect on the distal aspect of maxillary left canine, no other abnormalities were conspicuous upon visual or tactile examination (Fig 1). Vitality tests were negative for the canine and first premolar. A periapical radiograph revealed cervical resorptive lesions in the maxillary left canine, first premolar, and second premolar (Fig 2). Pulpal space was encroached upon by a resorption defect in the maxillary left canine and first premolar. The patient's history failed to reveal any incidence of trauma, orthodontic treatment,

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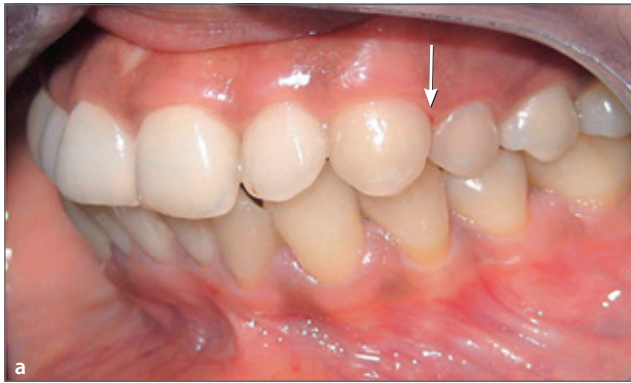


Fig 1 (a) Distal surface of canine where a steplike defect was noted (arrow); (b) occlusal view showing no other abnormality (arrow).

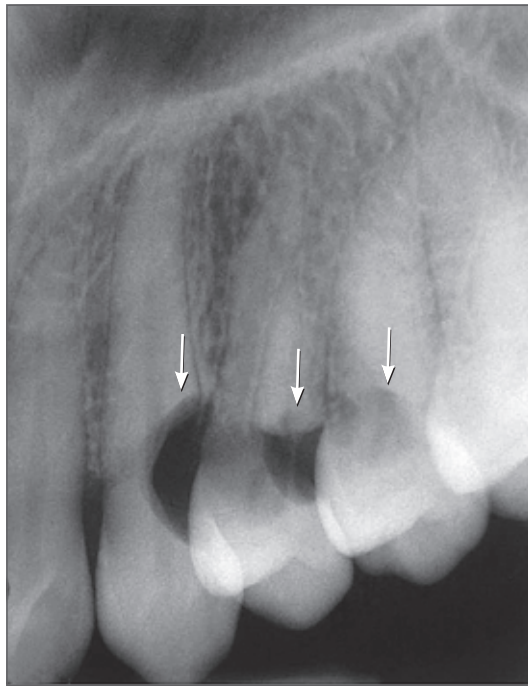


Fig 2 Initial periapical radiograph; note overlapping (arrows).

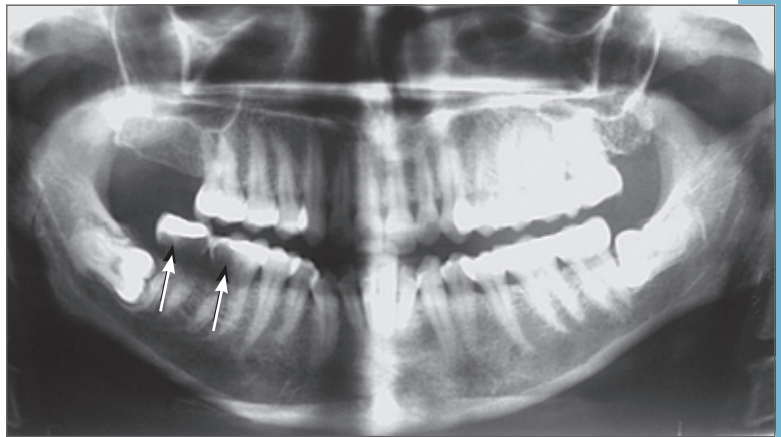


Fig 3 Panoramic radiograph prior to extraction showing bizarre cervical lesions (arrows).

bleaching, periodontal treatment, or any other relevant information. There was no family history of any similar condition, and she had no pets or any contact with cats. A panoramic radiograph taken 2 years prior (Fig 3) revealed bizarre lesions affecting the crown and root of the mandibular right first and second molars, which were extracted at that time. The other teeth appeared normal, with no signs of resorption.

After pulp extirpation of the canine and first premolar, another periapical radiograph was taken with a different horizontal angulation (Fig 4) since the information from initial periapical radiograph was blocked by overlapping contacts. The severity of resorption varied among the teeth, involving both the mesial and distal surfaces of the canine, first premolar, and second premolar. The first molar, however, was affected on only the mesial

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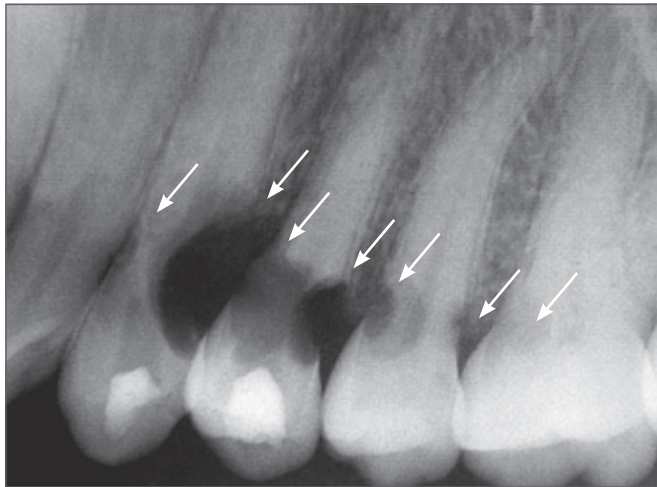


Fig 4 (left) Periapical radiograph illustrating resorptive defects and their mesiodistal extent (arrows).

Fig 5 (below) Extracted maxillary left first premolar showing extensive cervical resorption with granulation tissue.

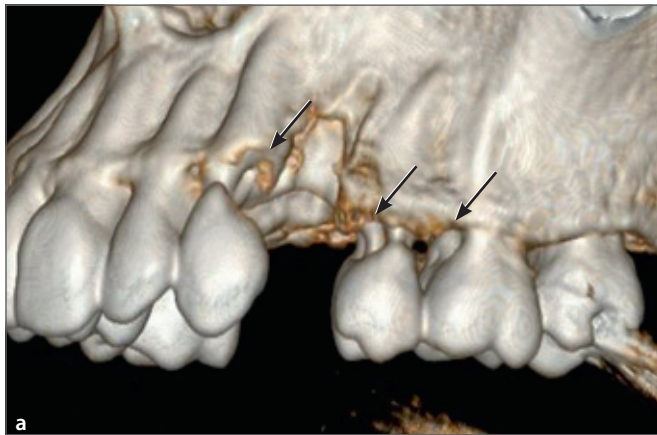
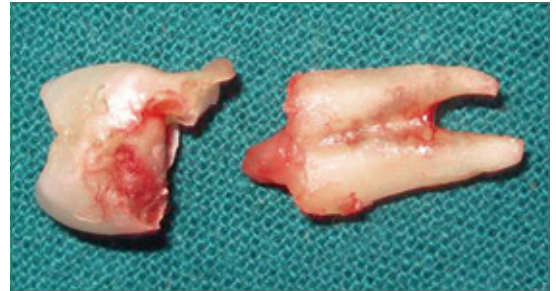
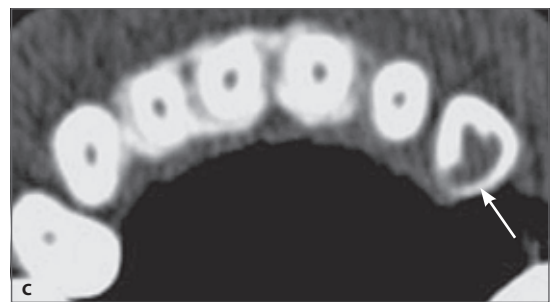


Fig 6 (a) Volume-rendered image of CT scan showing resorption in the canine, second premolar, and molar (arrows). (b and c) Apical and buccolingual extent of resorption in the canine (arrow).



side. The appearance of resorptive lesions hinted toward progression of the lesions from the anterior to posterior, involving both proximal surfaces. The maxillary left first premolar was extracted because its prognosis was considered poor based on information revealed by the second periapical radiograph. After extraction, examination of the tooth revealed a completely resorbed cervical area with attached granulation tissue (Fig 5).

The findings suggested an idiopathic nature of the lesion, which prompted further investigation. A computed tomography (CT) scan revealed the extent of lesions in the affected teeth (Fig 6) and confirmed the absence of any hidden lesions in other teeth. Relevant ionic (calcium and phosphorous), enzymatic (alkaline phosphatase), and endocrinal investigation (T3, T4, and parathyroid hormone) reports were

normal. Considering these facts, in which no factor contributed to the etiology, a diagnosis of multiple idiopathic cervical resorption was made. Endodontic treatment for the canine and second premolar, followed by surgical exposure and restoration for the canine, second premolar, and first molar, was planned.

DISCUSSION

A diagnosis of multiple idiopathic cervical resorption was reasonable since no systemic or local factors could be associated with the condition, the lesions appeared to originate from the cemento-enamel junction, and multiple teeth were involved. It is rare to find idiopathic resorption associated with the cervical areas involving multiple teeth,¹ and few cases have been reported. Involvement of multiple teeth excludes the diagnosis of invasive cervical resorption, which typically involves one tooth and is often related to contributing factors such as trauma.² This entity is invariably concealed due to a lack of symptoms until later stages, and it is difficult to predict what teeth would be affected and when. This condition is found to either spontaneously arrest or proceed to the point that the involved teeth require extraction.³ A history of contact with cats is essential—there is a possible link

between multiple invasive cervical resorption in humans and feline odontoclastic resorptive lesions in cats.⁴ Cone beam CT is recommended for evaluating cases of multiple idiopathic cervical resorption, especially to determine the extent of lesions on the buccal and lingopalatal surfaces.⁵ The progression of the lesion is not halted by endodontic treatment,³ so teeth with small lesions caught early can be maintained by surgical exposure and restoration. However, at later stages, even after appropriate treatment, lesions can recur.

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