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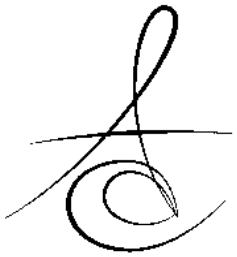

PINK SPOT IN INTERNAL RESORPTION (A Case Report)

İNTERNAL REZORPSİYON (Olgu Sunumu)

Dr.Nur OZDABAK* **Yrd. Doç. Dr. Nilgün AKGÜL****
Yrd. Doç. Dr. Serpil KARAOĞLANOĞLU*** **Prof. Dr. Nilgün SEVEN****

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ABSTRACT

Internal resorption is a pathological condition starting in the pulp in which the pulp chamber or root canal, or both of the tooth expands by resorption of the surrounding dentin. Most cases of internal resorption present no early clinical symptoms. The first evidence of the lesion may be the appearance of a pink-hued area on the crown of the tooth. But it can be encountered rarely with such an occurrence.

In this study it has been presented the treatment of upper left central tooth where a perforation and pink spot occurred on the vestibular surface of the crown by depending on the internal resorption.

Key words: Internal resorption, pink spot, teeth

ÖZET

İnternal rezorbsiyon pulpa odası ve/veya kök kanalı pulpasından başlayan ve çevresindeki dentini rezorbe ederek ilerleyen patolojik bir durumdur. İnternal rezorbsiyon vakalarının çoğu erken dönemde klinik semptom göstermez. Dişin kuronunda pembe bir sahanın görünüşü lezyonun ilk belirtisi olabilir.

Bu çalışmada internal rezorbsiyona bağlı olarak kuronun vestibul yüzeyinde bir perforasyonun geliştiği üst-sol santral dişin tedavisi sunulmuştur.

Anahtar Kelimeler: İnternal rezorbsiyon, pink spot,diş

INTRODUCTION

Internal resorption is a pathological process starting in the pulp in which the pulp chamber or root canal, or both of the tooth expands by resorption of the surrounding dentin.[1] Although the cause of this condition is unknown, precipitating factors such as trauma, direct and indirect pulp capping, pulpotomy, ort- hodontic treatment, enamel invagination and pulp polyps have been reported to initiate internal resorption.[1-3]

Most cases of internal resorption are asymptomatic and often detected as an incidental radiographic finding.[4-6] Frequently it is observed in the cervical region but may occur in all areas of the root canal system.[5] If the resorption occurs in the coronal portion of the tooth, the tooth may demonstrate a pinkish hue because of the hyperplastic, vascular pulp tissue filling the resorbed area .[1,6,7] Mummery[8] discussed the "pink spots" in teeth but mentioned that such internal granulomas were of rare occurrence.

Radiographically internal resorption appears as a uniform, round to oval radiolucent enlargement of the canal. If there is no perforation, it is not associated with the external surface of the tooth..[1] Histopatologically, the pulp tissue in the area of destruction is vascular and exhibits an increased cellularity and collagenization.[9,10] When internal resorption is detected, root canal therapy is the only effective treatment and should begin as soon as possible to limit progression .[4,5,7,11]

In this case, it has been presented the treatment of upper left central tooth where a perforation and pink-spot occurred on the vestibular surface of the crown by depending on the internal resorption.

* Çayyolu Ağız, Diş Sağlığı Polikliniği, Ankara.
** Atatürk Üniversitesi, Diş Hekimliği Fakültesi, Diş Hastalıkları ve Tedavisi Anabilim Dalı, Erzurum.
*** Balgat Ağız Diş Sağlığı Merkezi, Ankara.

CASE REPORT

A 27-year-old woman was referred to our clinic with a complaining that her maxillary left central incisor was "turning pink" and also was bleeding near gingiva. At her dental history, she told that the discoloration had begun two months ago and she had had no pain during this time. The patient did not give any trauma history .

Clinical examination revealed a pink discoloration and a small defect on the labial surface of the tooth (Fig. 1). Although there were no restoration or caries on the tooth, a vertical fracture was observed on the vestibular surface. The tooth was not sensitive to palpation and percution, and vitality testing of the tooth was negative. Radiographic examination showed a resorption area on the coronal portion of the central incisor with no apparent periapical pathosis (Fig. 2). After the clinical and radiographical examination, we made a diagnosis of internal resorption at the tooth.

Fig. 1. The photograph of maxillary left central incisor with internal resorption.

Fig. 2. Periapical radiograph of maxillary left central incisor with internal resorption.

At the treatment, an access was achieved on the lingual aspect of the crown after the tooth isolated with rubber dam. When the root canal was opened, a perforation was observed from pulp chamber to vestibular surface, also extensive bleeding and flowing out of the granulation tissue. The pulp was extirpated and hemorage was well controlled. The canal was irrigated with 2,5 % sodium hypoclorite and physiological saline solution and dried with paper points, and then, a sterile cotton pelet was double sealed with temporary stopping and Cavit. On the second visit, it was seen that the pink discoloration of the tooth was dissappeared and the patient had no complaint. On this visit the working lenght was determined and the canal was instrumented to a size 45 file. Irrigation was again done with 2.5 % NaOCl and physiological saline solution. One week later, for the reason that the tooth was asymtomatic and the canal was dry, it was decided to obturate the canal. The canal dried with paper points was obturated with gutta percha and Sealapex Root Canal Sealer (Kerr) using the lateral condensation technique (Fig. 3). The perforation area on the vestibular surface and the lingual access cavity was restorated with composite resin (Valux Plus, 3M Products) (Fig. 4). 6 months later when the tooth was reexamined by clinically and radiographically, no pathology was observed and the patient had no complaint.

Fig. 3. Periapical radiograph of the tooth after endodontic treatment.

Fig. 4. The photograph of the tooth after treatment.

DISCUSSION

Internal resorption may affect any tooth in either the primary or secondary dentition, but it is more frequently observed in permanent teeth.[2] It occurs most often during the fourth and fifth decades and more often in males.[2] Most cases of internal resorption are seen in anterior teeth.[12,13] Internal resorption lesions, especially the ones that seem like pink spots just like in this case, can be confused with cervical coronal resorption cases. However, cervical resorption generally starts damaging a small area in the root cementum. The resorbing cells penetrate and spread the resorption into the root dentin.[5,14] But in this case, resorptive process is mostly spreading into the coronal pulp tissue.

Bernard[12] classified internal resorption as idiopathic type, peripheral type, traumatic type or due to the high- speed preparation for restoration of teeth. In the present case it can be tought that the resorption is idiopathic since any trauma history had not been given by the patient. But as a vertical fracture was determined at the clinical examination, it was tought that the patient exposed to a trauma which she couldn't noticed or remembered, and the resorption occurred due to the trauma. On the other hand, no matter what the etiological factor is, if internal resorption is not treated, the resorption progresses and may cause a perforation on the tooth. In case that the perforation occurs on the root surface, it's known that the treatment gets more difficult.

In presented case it had been determined that the resorption progressed and perforated the vestibular surface of the tooth crown. In this respect, there was no need to make any surgical intervention or the treatment of perforation area by calcified materials. If it was untreated at this stage it was clear that the resorption would progress and fractures in crown might occur due to the enlargement of perforation area.

Even if internal resorption is treated once it is determined, the prognosis may be unsuccessful. In this case a control radiograph taken 6 months later shown that there was not any pathology. However, it will be important to follow these cases to check for continued absence of symptoms for a long time.

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Yazışma Adresi
Yrd. Doç. Dr. Nilgün AKGÜL
Ataturk University Faculty of Dentistry
Department of Conservative Dentistry
25240 Erzurum/ TURKEY
e-mail: nurkocakerim@yahoo.com