

ENDODONTIC IATROGENY AND ITS OVER TIME EFFECTS

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Abstract: *The inaccurate endodontic treatment without a rigorous control of the manoeuvres generates inflammatory iatrogenic reactions over time. The paper reveals the clinical case of a patient, who after an incomplete and incorrect endodontic treatment has developed an inflammatory apical reaction which required surgical procedure.*

Keywords: *periapical granuloma, endodontic treatment, root canals*

Rezumat: *Accesul endodontic neadecvat și fără un control riguros asupra manoperelor efectuate crește riscul producerii unor modificări inflamatorii de natură iatrogenă. Lucrarea prezintă cazul clinic al unei paciente care, după un tratament endodontic incomplet și incorect efectuat, dezvoltă pe parcursul anilor un granulom periapical ce a necesitat o intervenție chirurgicală laborioasă.*

Cuvinte cheie: *granulom periapical, obturație endodontică, canale radiculare*

CASE PRESENTATION

We present the case of a 26-year old patient, registered in our medical records, who 11 years ago requested to her former dentist, an intraoral examination complaining about pains at the level of the tooth 4.6.

Vital extirpation and endocanalicular obturation were made with local anaesthesia, while the obturation of the coronary part with an unphysiognomic material (amalgam) was performed in the second session.

6 years after these interventions, the patient returned to her dentist complaining about pains at the level of the same tooth; this time, the tooth percussion was painful. (2) We also noticed that, although, the patient had a strict oral hygiene, a decaying process could be observed around the edge of the old obturation, unadapted by the amalgam.

Regarding the radiological examination, (1) we could notice the existence of an incorrect endocanalicular obturation on just $\frac{1}{4}$ of the root length and not up to the apical area, as well as certain periapical inflammatory reactions. (picture no. 1)

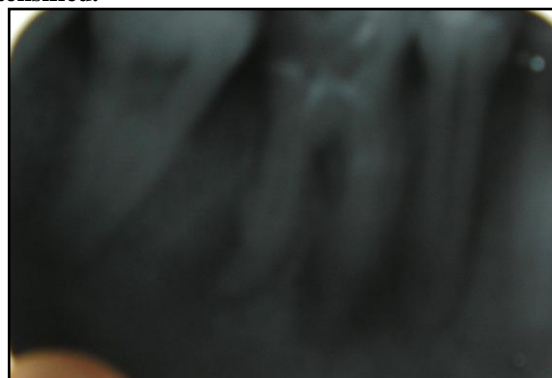
In this situation, the following manoeuvres were required: desobturation of the radicular canals, drainage of the tooth and a surgical procedure of apical resection type, with the restoration of the endodontic treatment.

Picture no. 1. Rx aspect of the periapical granuloma at the level of the tooth 4.6.



We guided the patient towards the oro-maxial-facial setting in Sibiu, previously preparing the tooth for such an intervention. After having accomplished the tooth drainage, the entire painful symptomatology sharpened (picture no. 2) in the oral vestibule, at the level of the apex of the tooth 4.6, with the occurrence of a fistula, through which a mucopurulent secretion was leaking. (4).

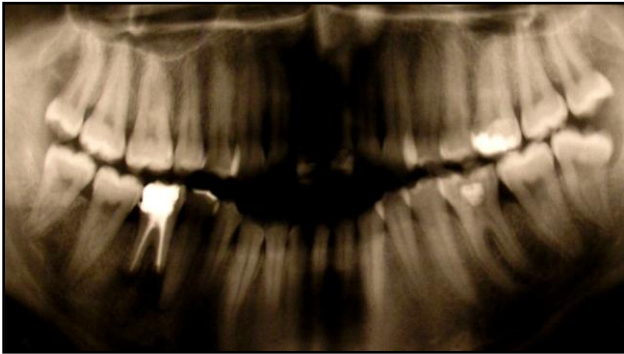
Picture no. 2. Zoomed periapical area of radiotransparence, indicating that after the endodontic drainage, the inflammatory reaction intensified.



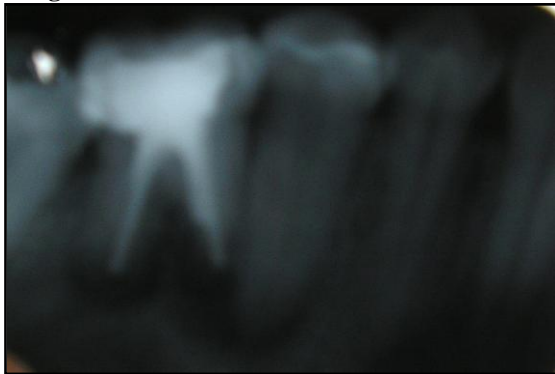
The surgical intervention was correctly performed, removing the entire inflammatory granulomatous area, as well as $\frac{1}{3}$ of the affected radicular area. Intrasurgically, the canals were closed according to the length of the remaining radicular segment. (pictures no. 3 and 4)

CLINICAL ASPECTS

Picture no. 3. Rx OPT aspect after the apical resection of the tooth 4.6.



Picture no. 4. Retroalveolar radiological aspect after the surgical intervention.



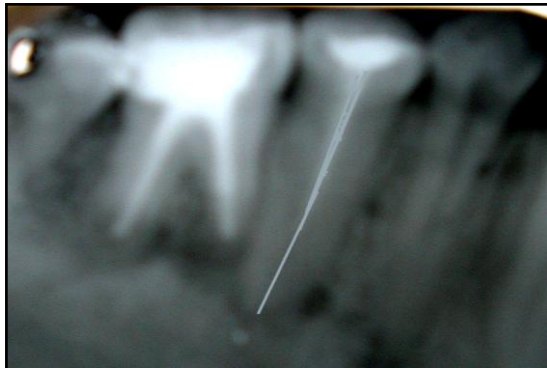
One year after the surgical intervention, the patient came to our dental office, this time complaining about pains at the level of the tooth 4.5. (3,5)

We accomplished the vital extirpation and the endocanalicular obturation with local anaesthesia and afterwards, the obturation of the coronary portion with composite materials.

Today, the radiological examination does not suggest any pathological alterations (picture no. 5); both the tooth 4.6 and the tooth 4.5 being totally asymptomatic, without periapical or marginal decaying processes.

The patient comes for check ups twice a year.

Picture no. 5. The aspect of the correct canal obturation of the teeth 4.5 and 4.6.



CONCLUSIONS

1. The endodontic obturation of the molar was incorrect, generating the development of a periapical granuloma with its characteristic symptomatology.
2. After the apical resection of the tooth 4.6, this becomes asymptomatic from the clinical and radiological point of view.
3. The periapical reactions were iatrogenic, with the risk for retrograde over time affection of the neighbouring tooth.
4. After the surgical intervention on the molar and after the correct radicular obturation of the premolar, the evolution is favourable.

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