

Recurrence of sinus tract after conventional root canal treatment

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I. Introduction

Pulp necrosis can be caused by a variety of reasons, such as severe dental caries or trauma. In dental clinic, it is important to identify the cause of pulp necrosis and keep in mind when treating. The teeth with necrotic pulp occasionally presents an apical lesion and a sinus tract and can generally be treated by non-surgical root canal treatment. This case report presents a failure and its possible causes of conventional non-surgical root canal treatment on a maxillary lateral incisor with pulp necrosis and apical abscess.

II. Case Presentation

1. Chief Complaint: I'd like to get general oral examination and scaling. When I brush my teeth, there've been bleeding and toothache generally. Sometimes I had inflammation on my gums.
2. Sex/age: F/47
3. Past Medical/Dental history: 1. HTN (on med, Candemore), 2. Hypothyroidism (on med, Synthroid)
4. Present illness: mob(-), per(-), cold(-), EPT(-) on #12
with moderate dental caries
with PAR
with sinus tract on labial vestibule
with 2-3mm PD
5. Impression: Pulp necrosis on #12 with chronic apical abscess
6. Tx plan: Non-surgical root canal treatment on #12

III. Discussion and conclusion

Tooth with pulp necrosis and apical abscess could be firstly treated by non-surgical root canal treatment. When treating a tooth with chronic apical abscess, sufficient irrigation is necessary and intracanal medicament with calcium hydroxide can be recommended. It is important to determine exactly when the canal filling should be proceeded. Especially if the sinus tract is present, it should be checked whether the tract is closed. However, there are possibilities of failure of these conventional root canal treatments. For re-treatment after failure, non-surgical endodontic re-treatment or surgical treatment can be considered. Precise analysis and consideration of the causes for failure must be preceded before the re-treatment.