

Non surgical endodontic retreatment following surgical endodontic failure: A case report

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Abstract

Retreatment in endodontics provides a second chance for the patient to save the tooth that would otherwise be deemed for extraction. Treatment approach can be either surgical or non surgical. Treatment failure can be due to many reasons from missed canal to iatrogenic perforation which has to be evaluated carefully before initiating the treatment. Sometimes a clinician also has to deal with inter appointment flare ups requiring prompt and efficient patient management. This case report describes the non surgical management of failed root filled teeth which had also been treated surgically.

Key words: Calcium hydroxide, Endodontic failure, Retreatment

Introduction

Conventional endodontic treatment may fail due to various reasons and inadequate root canal treatment with persistent infection remaining in inaccessible areas of the canal being one of them^{1,2}.

When patient reports to the dental clinic with severe pain/swelling on the tooth that has previously been root filled they are anxious and skeptic about whole of endodontic treatment posing clinician in tricky state of patient management. Endodontic retreatment offers the patient a second chance to save a root canal treated tooth that would otherwise be destined for extraction.

Such a retreatment can be carried out either surgically or non surgically. Nonsurgical retreatment when possible often is the first choice for attempting to correct obvious deficiencies in the previous treatment. However, surgical retreatment would be the choice in the presence of certain indications like presence of an apical cyst, anatomical or iatrogenic obstruction etc³.

The surgical procedure can effectively remove the infected portion of the root colonized by bacteria either intraradicular or extraradicular or both, thus enhancing the chances of healing. Consequently, complete healing after periapical surgery has been reported in 37%–97%

of teeth. Nevertheless, it can show signs of failure due to poor root canal treatment, faulty surgical procedure, lack of retrofilling⁴.

In case of a surgical failure, re-surgery has showed reduced success rates compared with first-time surgery. It has been reported that success rates were 5%–27% lower for re-surgery compared with first-time surgery⁵. Further surgical procedure can be a traumatic experience with many disadvantages like pain, edema, discolorations and other post operative complications which can hamper the patients daily activities. Hence it is advisable to select a nonsurgical retreatment wherever feasible with an emphasis on effective sealing of infected root canal.

Generally surgical retreatment would be carried out following a nonsurgical endodontic failure, on the contrary, this case report deals with the non surgical retreatment following the surgical treatment failure of a previously endodontically treated maxillary central and lateral incisors.

Case Report

A 32 years old male patient reported with severe pain on upper front teeth since 2 days. He gave a history of root canal treatment 2 years back followed by immediate

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