Four year follow-up of root canal retreatment of badly compromised tooth

The patient, a lady in her early fifties, was referred for retreatment of the root canal of her

46 (Figure 1) in 2009.

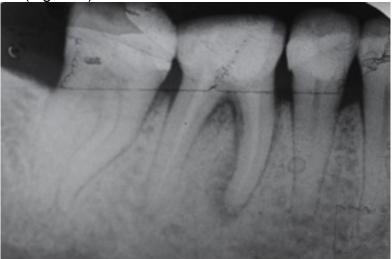


Figure 1. Pre-operative radiograph, taken in 2009, clearly indicating advanced breakdown of alveolar bone surrounding the mesial root of 46 and involvement of the furcation area.

The tooth was retreated with the result shown in Figure 2.



Figure 2. Immediately post-operative. It can be seen that there had been some transportation of one mesial canal and also some extrusion of sealer peri-apically.

A few weeks later the patient was recalled and apost supported core built up (Figure 3). A porcelain crown was eventually placed

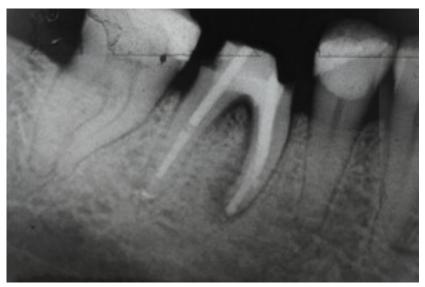


Figure 3. A few weeks later, (in 2009), a post supported core was built up. The extruded sealer had already been resorbed.

A one year follow-up confirmed that healing had been taking place, but there was still some concern about the continued presence of radiolucency in the furcation area (Figure 4).



Figure 4. Healing had taken place but the furcation area was

still present.

Two years later, in 2011, another follow-up radiograph showed similar results (Figure 5).



Figure 5. Two years post-operative. The furcation area was

still cause for concern.

At four years post-operatively, in 2013, follow-up confirmed healing of the furcation area as well. (Figure 6).



Figure 6. Healing of the furcation area confirmed.

Discussion

This case is another example of "extreme endodontics", illustrating the fact that even badly affected teeth can be treated conservatively, putting the lie to the notion that all such teeth must be extracted and replaced with implants.

Traditionally, teeth with furcation involvement, have always been viewed with suspicion. As this case has shown, given time, and proper treatment of course, these lesions can also heal.

The massive peri-radicular infection around the mesial root healed relatively fast, as Figure 3 confirmed. This in spite of the transportation in one mesial canal and the extrusion of sealer. It only confirms what we know, that root canal treatment can have a 99% success rate, even in badly affected teeth and even in the face of severe procedural difficulties.