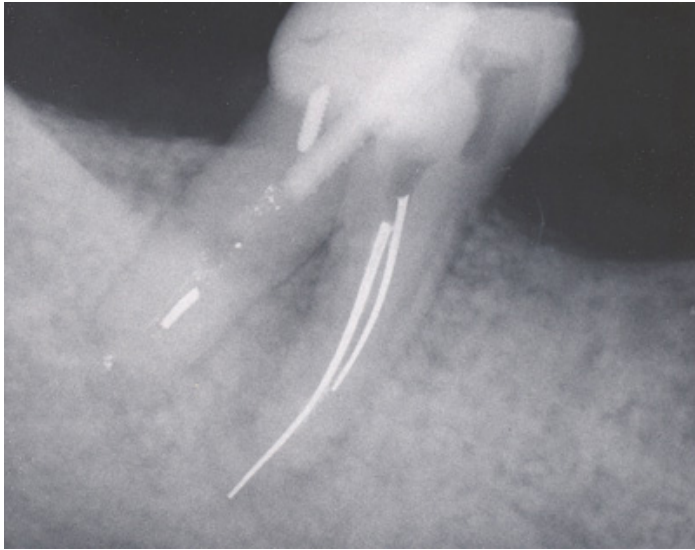




## **Endodontic Retreatment**

Contributed By: Dr. Steven J. Cohen – January 2004

Patient presented with pain and localized swelling associated with tooth 4.7. She also reported a history of previous endodontic therapy approximately 10+ years ago.



**Figure 1:** Now, take a good look at Figure 1, and look at the endodontic treatment compared to the restorative treatment. Old silver point endo is noted, which is failing, with one silver point out the apex of the mesial root... and a piece of silver point remaining in the distal root. A partially radiopaque post is noted in the distal root with composite or ceramic coronal restoration. Something here doesn't make sense (?). On further questioning, the patient revealed that another general dentist attempted to retreat the endodontic therapy approximately 2 years ago... and failed. Since there were no symptoms, he restored the tooth as seen here.

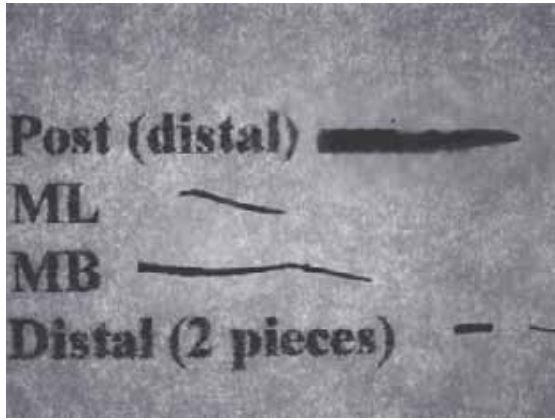
There are 4 pieces of metal in this tooth, and each has its own variation of strategy for removal:

- i) The post is isolated within the chamber and vibrated free with a CPR-1 ultrasonic tip, at highest power.
- ii) The two mesial silver points are identified at the chamber floor. The shorter of the two, sticking up somewhat into the chamber, is vibrated with low power using a CPR-8 tip. Once movement is noted, microforceps are inserted into the chamber, and the tip is locked and retrieved.
- iii) The second silver point, deeper in, is trickier. Ultrasonic vibration is not as effective, due to depth in the canal and some degree of binding at the apical constriction. Repetitive hand instruments, carbon steel Pathfinders, and #10 Hedstroms were used to navigate beside the file and created space around it within the canal. After several files, the file gradually moved coronally, until it could be locked with pliers and retrieved.



- iv) The segment near the distal root apex was the most challenging. Canal preparation was carried out, crown down, with GG burs. A #15 file was then negotiated down to meet resistance. With a slight bend in the file, this was bypassed. This motion was repeated carefully, until a metal fragment became visible under the microscope. This was vibrated free.

**Figure 2:** Check film was taken, revealing that a fragment still remained in the distal root!



**Figure 3:** The last step was repeated, until all metal fragments were removed from the tooth.

**Figure 4:** The canals were then flushed and dried, and then obturated with sealer and thermoplastic injection of gutta percha. The tooth was closed with a temporary restoration, and the patient was advised to return to the general dentist for permanent restoration.



Aside from the technical difficulties with this case, my concern is also the thought process used (if any thought was used at all ! ) by the general dentist who attempted retreatment. This attempt undoubtedly made retreatment much more difficult.

This is not an isolated case. Endodontists are now encountering general dentists who attempt their own retreatments first, at an increasing frequency. This increases the difficulty, the frustration, and the cost. Where are dentists getting the idea that they can perform effective retreatment of endodontic therapy ???