

## CANARY CASE REPORT: WHAT CAUSED THE PULPITIS?

### CHIEF COMPLAINT:

Patient was seen on emergency basis concerning pain in the right posterior area of the maxilla centered around the maxillary right first molar (tooth # 16). The pain had been present for a few days and was increasing in frequency. The patient complained of:

- Pain on cold which lingered;
- Pain on percussion which was difficult to reproduce;
- Pain on eating which lingered;
- And occasional spontaneous pain.

### CLINICAL EXAMINATION:

On examination, the soft tissues in the area were normal with no sign of swelling or a fistula. Periodontal pockets were all 3 mm. in depth or less. The restorations on the maxillary right second and first molar as well as on the bicuspid were intact with no evidence of marginal breakdown. Periapical radiograph showed the restorations were of moderate depth with no evidence of apical change. There was a small radiolucent area at the tip of the roots of the maxillary second molar but there were no symptoms associated with this tooth.

### TREATMENT RECOMMENDATION:

The dentist felt that based upon the symptoms and clinical examination that the recommended endodontic treatment for the maxillary right first molar. The patient wanted to wait a few days before starting the endodontic treatment and a prescription was given for an antibiotic and anti-inflammatory.

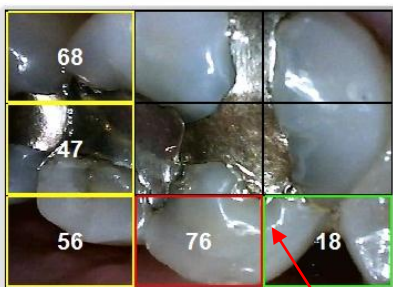


### APPOINTMENT SIX DAYS LATER:

The patient returned to start endodontic treatment six days later. She had not taken her antibiotics and reported that the pain was still present but “it did not feel like the other two teeth that needed root canal”. The tooth responded to hot, cold and percussion. A Canary Scan was done on the tooth and around the mesial portion of the amalgam the Canary Numbers were 68, 47 and 56 (from buccal to lingual). There was also a 76 around the disto-lingual cusp. Upon removal of the amalgam, caries was found around the mesial portion of the preparation, under the disto-lingual cusp and there was a crack on the pulpal floor beneath the distal pit.

The caries was removed, cracked area prepared and the tooth restored with a flowable composite and heavily filled posterior composite. There have been no symptoms in the few weeks.

**The Canary System was able to detect the caries around the amalgam margins and provide the clinician with the evidence to restore rather than initiate endodontic treatment.**



**76** Disto-Lingual Cusp

LEFT: Canary Scan results. Canary Number 76 on disto-lingual cusp.

RIGHT: Photograph with amalgam removed.

