RICHMOND
ENDODONTIC CENTRE

ROOT AMPUTATION 1 YEAR LATER

SEP 2013

This month's newsletter highlights the one-year recall of a root amputation I performed. During a routine hygiene appointment a probing defect was found and the PA revealed the MB root was fractured (see Pre-Op PA). The healthy 59 year-old gentleman was unaware of any problems and reported the original root canal treatment was done, in Japan, about thirty years ago. He was keen to save the tooth and his dentist referred him for an endodontic evaluation.

Clinically two narrow probing defects were detected on the MB root; a 7mm defect at the buccal aspect and a 10mm defect at the ML line angle. There was no tenderness to percussion or palpation and no mobility. The fracture is so large that the MB root is split in half. However, the 26 shared the occlusal load with five stable teeth to its mesial and a healthy 27 to its distal. It is suggested, in the literature, that 84% of root fractures are due to forces applied during obturation. I suspected that was the case for this MB root. If occlusal load was a concern then I would be more suspicious of the other roots and pessimistic of the prognosis.

Root amputations are not often performed and the literature does not provide evidence as to the prognosis for success. The gentleman was made aware of the unpredictability of the amputation versus extraction with restoration (implant, bridge, partial) or not.

Due to the coronal extent of the fracture the amputation was extended supragingivally. The gingival portion of the crown was adjusted to avoid a food trap developing. The robust amalgam core was polished and the seal for the chamber appeared to be sound (see Immediate Post Amputation photo). The soft tissue was re-approximated and secured with sutures; both a resorbable and non-resorbable membrane was used to prevent a boney defect from developing.

The healing process was unremarkable; the sutures were removed five days post-op and the non-resorbable membrane sloughed off three weeks later. Last week the one year recall revealed the 26 had no mobility, no probing defects, a healthy gingiva, and an excellent long-term prognosis (see 1 Year Recall PA and 26 photo). The original crown is intact and does not require replacing.

Despite having a split MB root the 26 was saved and the patient is pleased with the result. I will continue to monitor this tooth over the coming years and will keep you posted of developments. With modern microsurgical techniques, equipment, and materials more teeth can be saved than what was previously thought.

Regards,

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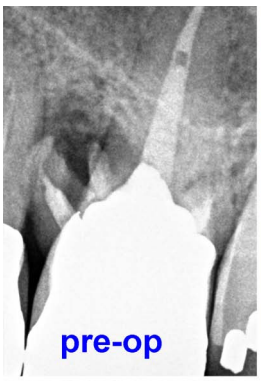
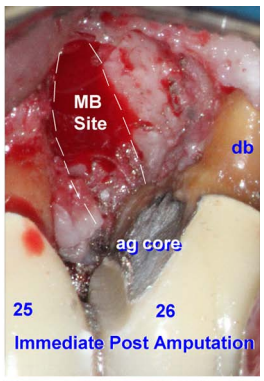
Certified Specialist in Endodontics

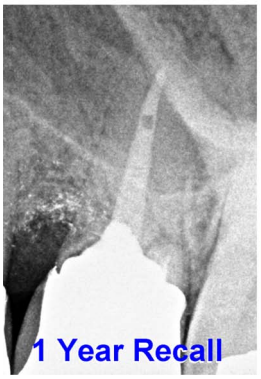
PRE-OP



S1



RECALL



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8am to 5pm - Monday to Friday
Extended hours are also available

The Richmond Endodontic Centre Boardroom is open; it is available for meetings, lectures, and study clubs. Please come by and have a look at our new presentation centre!

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