

The goal of endodontics is the prevention or elimination of apical periodontitis. Endodontic microsurgery may be necessary if, despite orthograde treatment or retreatment, a persistent or refractory periradicular pathosis exists. Some reasons for orthograde RCT not being successful are:

- Portions of the canal system not sufficiently instrumented, irrigated, or obturated either due to iatrogenic errors or an inability of current instrumentation/irrigation techniques to adequately débride such sites
- Microorganisms in proximity of the apical constriction or foramen
- Bacterial plaque on apical root surface or within the lesion itself
- Lesion is non-odontogenic

Few other dental procedures have undergone such a dramatic transformation as endodontic microsurgery. The use of greater magnification and illumination, ultra-sonic instrumentation, and bio-compatible materials in microsurgery results in a statistically significant greater success rate (94.5%) than traditional root-end surgery. In addition, microsurgery is less taxing on the practitioner, safer for the patient, and more predictable.

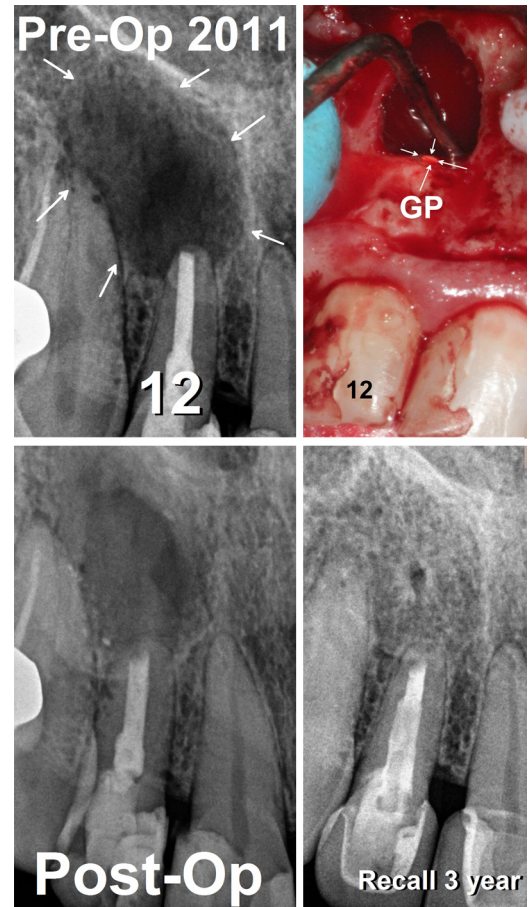
The images above are of a 12 I performed surgery on three years ago. The original RCT was done over a decade ago; recently spontaneous throbbing and tenderness to percussion and buccal palpation had developed. After the pros and cons of retreatment and surgery were discussed the 53 year-old lady chose to proceed with microsurgery. MTA was used to seal the retro-preparation and the histopathological diagnosis of the lesion was acute exacerbation of chronic apical periodontitis. The sutures were removed three days later and the patient recovered quickly from the surgery. The soft tissue aesthetics were unaffected by the surgery with no recession or scarring.

The 12 has responded very well to treatment, it is asymptomatic and functional with a new aesthetic crown. The PDL is normal and the massive bony defect has healed; the long-term prognosis for this tooth is excellent. The crown/root ratio for 12 would be unfavourable if 3mm or more of the root was resected during surgery. Conservative endodontic microsurgery enabled this lady to keep her tooth at considerably less cost than extraction and an implant or bridge.

Regards,



Joel N. Fransen
BSc(OT), DMD, FRCD(C)
Certified Specialist in Endodontics



Richmond Endodontic Centre
Dr. Joel N. Fransen

110-11300 No.5 Rd
Richmond, BC V7A 5J7
office@endodonticcentre.com
T 604.274.3499
F 604.274.3477

Office Hours
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!