RICHMOND
ENDODONTIC CENTRE

NON-SURGICAL ReTx

MAY
2018

In some quarters, nonsurgical retreatment (ReTx) may be looked upon unfavourably when considering options for a previously treated tooth. Modern endodontic techniques and armamentarium combined with greater magnification and illumination as well as operator experience will deliver reliable and predictable results that should not be dismissed with disdain. Is it not a universally accepted truth that a natural tooth with a good prognosis is superior to any alternative?

The images above are of a recent ReTx case of mine. Labelling this case a 'failure' smacks of professional impropriety as the treatment fell short of our technical goals of cleaning, shaping, irrigating, and obturating the entire canal system. An 'incomplete' treatment may result in 'incomplete' healing which we hope to rectify via ReTx. Saving this tooth via ReTx is predictable and superior the alternatives.

Access through porcelain poses three distinct challenges: fracture, a lack of coronal anatomical landmarks, and limited visibility. Initial access is done with a high speed round diamond bur with copious water spray to minimise the risk of cracks in the aesthetic glass. Isolate one tooth mesial and one distal of the ReTx tooth to compensate for the dearth of landmarks which otherwise guide our access design and orifice exploration. Visibility is particularly challenging in the dark chambers of crowned teeth; enhanced magnification and illumination are a must. The microscope enabled me to locate a previously untreated MB2 without excessive removal of tooth structure.

The gutta-percha (GP) was removed by heating chloroform with a HotTip followed by a 15/02 hand file into the canal. Heat should only be applied in short bursts so as to avoid burning the PDL.

Attaining patency without transportation is the preeminent challenge for ReTx. A short obturation could be the result of the initial operator obstructing the true canal path with dentinal débris, a ledge, transportation, or an indiscernible instrument fragment. Other challenges to gaining patency include: forcefully placed carrier-based obturation systems, posts, old GIC-based sealers, and hard-setting pastes. It is ideal if there is only knotted pulp remnants and some dentinal 'mud' apical to the GP. Negotiating through this infected 'mud' requires time with small, pre-curved, hand files and plenty of irrigation. We all must come to terms with the retreatment dilemma: resist the urge to push a hand file and create a ledge or compact débris, yet apical migration is craved. Numerous twist and pull motions are required with NaOCl to soften up the compacted débris and allow subsequent small files to deftly progress apically.

Fortunately, in this case there was not an excess of canal obstructions to overcome. I was able to gain patency in all four canals and complete the ReTx in reasonable time. This is rare for ReTx cases; gauging the degree of difficulty pre-operatively is problematic and we are often surprised for all the wrong reasons.

Saving teeth with ReTx is a great service for our patients and one of the main reasons I pursued a career in endodontics. However, such treatment can quickly ruin one's day, have one start daydreaming about the beauty of orthodontics, hygiene checks, crown preps, and think 'by the way where is that blasted endo referral pad'.

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
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