



The case highlighted in here is one I recently treated in Whitehorse and hence the name for this month's newsletter. Every now and then one comes across a case that demands each canal is treated individually. The pre-op PA's of this tooth made me think: throw out the day sheet, get a bucket of small hand files ready, and be prepared to sweat whilst working. Any lapse in concentration will quickly lead to an iatrogenic error.

First off I advised the patient this was a demanding tooth and it will take more time than perhaps what she would think was reasonable. The pre-op diagnosis was: symptomatic irreversible pulpitis with symptomatic apical periodontitis. The large carious defect had caused irreversible pulpitis to develop. Attaining adequate pulpal anaesthesia is oft a challenge for cases of irreversible pulpitis. Fortunately, two carpules for the block, one carpule for both lingual and buccal infiltration, and half a carpule for PDL injections were sufficient.

I attempted to limit the size of my access as much as practical and not unnecessarily unroof the chamber. I did not have adequate time to properly treat this tooth during the first appointment so only a mild pulpectomy was performed. I ventured down the canals until I felt a constriction and lightly instrumented them with hand files. I did not strive to achieve patency. Diapex was placed after irrigation with an asepsis MOB composite in the access. This was sufficient to relieve the symptoms and the second appointment was booked for the end of the day as it was not possible to predict how much time I would need to complete this kicking Whitehorse of a tooth.

The two mesial canals unite apically and were 23mm long. It took some time and a lot of pre-curved hand files (06, 08, 10) to get to length. Pre-curving a hand file is essential to negotiate such tight canals and avoid blockage, ledging, or transportation. It is important to not push the hand file apically but to twist and pull it several times before twisting counter-clockwise as you gently slide it apically. Gently sliding down whilst turning a pre-curved file is the only reliable means of negotiating such tight and curved canals. Upon reaching patency on the ML canal with the 06 hand file, I twisted and pulled several times at the working length. I repeated with larger hand files until I got to the 15/02. A 20/02 hand file was too stiff for me to feel comfortable using at length in this case. I then used a Wave One rotary file to open the coronal 2/3 of the canal, then a Pathfinder rotary file to working length followed by a 15/04 and 20/04 Vortex Blue Rotary files. The 20/04 did not make it to length and that was okay.

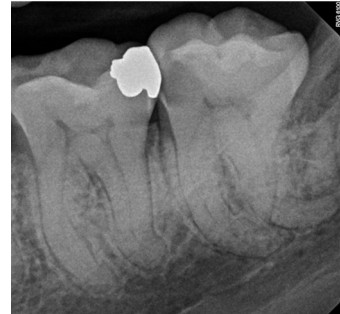
I followed the same basic regimen for the two distal canals with a couple modifications. The DL canal has an apical chicane that I did not attempt to negotiate with the 15/04 rotary file. The curve in the DB canal required the most work with hand files and as you can see I created a ledge. That ledge is evidence of me mistakenly pushing a less than perfectly pre-curved file. That made a tough canal even more of a challenge and added at least 15 minutes of extra time. So despite my best efforts I still fell victim to an iatrogenic mishap on this crazy kicking Whitehorse of a tooth. Needless to say I strongly encouraged this nice lady with demanding anatomy to have perfect hygiene in the future.

Regards,



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

PRE-OP PA



POST-OP PA



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!



RICHMOND
ENDODONTIC CENTRE
BOARDROOM