

One of the worst feelings in endo is losing working length (WL). This is often due to an accumulation of dentine shavings and residual pulp. This debris is often infected and its removal is necessary for resolution or prevention of periradicular periodontitis. It is ideal to never create or encounter a block. This newsletter provides some tips just in case this happens to you or a 'friend' of yours.

The first step is to NOT PUSH a hand file into the blockage, especially a straight one. This will either further compact the debris making it more difficult to remove or create a ledge. Flush the canal with lots of NaOCl then gently probe the site with a pre-curved No. 8 or 10 file. If a 'sticky' spot is detected a blockage is present; if not then a ledge is likely. A future newsletter will speak to the issues relating to ledged canals.

The curve should be smooth. A kink makes a file functionally useless and increases the possibility of a fracture. To create a smooth curve I slowly slide a file over the shaft of a hand mirror with light, but firm pressure from my thumb.

Once a block is confirmed, ignore it for a bit and flare the canal coronal to it. Use both hand and rotary files (non-cutting tip) at a length 1mm short of the blockage. Coronal flaring greatly enhances tactile sensation of the site as well as the efficiency of flushing debris out. Now gently twiddle No. 8, 10, and 15 pre-curved files at the length of the block. Cycle through the files, clean the flutes regularly, immediately discard those with signs of wear, and irrigate frequently and copiously. This is all in aid of loosening the debris, similar to fluffing up a pillow.

After about four cycles, gently probe the site with a pre-curved 6, 8, or 10 file. If you feel a 'sticky' spot, gently turn clockwise 90° and pull. Twist and pull with only a minimal downward pecking motion; sequence through the files several times as described above. This is tedious but it is the only safe way to negotiate apically through a blockage. Attempts to hasten the process will result in new problems (i.e. larger files are stiff and form ledges quickly).

Use an apex locator and check periapical radiographs to monitor your progress and confirm the WL. Gently file with progressively larger files at WL with 1-2mm amplitude push/pull strokes.

Since the coronal and mid-root portions of the canal have already been prepared, instrumentation now can focus solely on the apical third. Avoid a second block by frequently irrigating and confirming patency with a pre-curved 10. I hope you never need to use the tips in this newsletter, but if you do enough endo you will eventually.

Regards,



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## It is the *5th anniversary* of the opening of the Richmond Endodontic Centre!



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### **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!



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