

Editorial

Endodontics made Easy

Three-dimensional microcomputed tomography pictures are revealing without an iota of doubt, the complexities of root canal system. They also show that all canals are curved, and the canal walls are almost parallel with fins and isthmuses. We have been assuming these facts, without tangible proof for many years, and were treating the canals with the seriousness they deserved. Even with the stainless steel instruments, efforts were made to take larger instruments as dictated by the canal diameter to clean and disinfect.

Introduction of tapered rotary NiTi instruments brought a revolution in endodontics, and a promise that you can work with very few instruments. NiTi instruments are supposed to be flexible. But this flexibility is nullified

by the bulk of metal in the tapered systems. How many dentists have actually checked the flexibility of tapered rotary NiTi instruments and found for themselves that they do not provide the flexibility that is being promised?

The rigidity of these instruments causes a lot of instrument separations, transportations, ledges, and zip formations. The percentage of debris removal that was achievable with stainless steel hand instruments (20%) has been brought down by 2% with the use of tapered rotary NiTi systems.

This is an era of fast life, and dentists are part of the main stream. They want to perform endodontics in a jiffy with least number of instruments, totally ignoring the complexities of root canal. This leads to an increase in failing cases, making retreatment and apical surgeries common and big business. Why? Because the forgotten dimension, the “working width” is not being addressed. Cleaning and disinfection are thrown to the wind and hermetic seal is a lost dream. Attempts to achieve the latter are being made by obturations with “puff” and by using thermoplasticized gutta-percha to fill up to the apical third; ignoring the fact that gutta-percha will shrink on cooling.

Ricucci has published a classic histopathologic study on long standing root canal cases. From his study, it is amply clear that cleaning, disinfection and three dimensional obturation of apical third of the main canal are necessary for long-term prognosis.

Not satisfied with completing root canals with three instruments, attempt was made to use only F2 to finish canal instrumentation. De-Deus et al showed that debridement quality of the single-file F2 ProTaper technique was suboptimal in root canals.

It is appalling that the mounting scientific studies are being ignored and attempts are made to project root canal treatment as an easy procedure that can be completed with just one instrument. Will “Single Instrument Endodontics” be the last nail to be driven on the coffin of quality Endodontics?

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Beena Rani Goel
MDS FIARE (USA)