

# The perceptions of a David in a land of Goliaths

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**When you are competing against giants** in a field that has become tremendously lucrative for these giants, you could easily feel out of your depth and should beat a hasty retreat, lest you encounter their true wrath. It is undeniable that we are exposed to the all-encompassing marketing power of these giants. We recognise their ability to dominate endodontic education in the schools (both undergraduate and graduate), commercial exhibits and lectures at all the major meetings, and the majority of the articles published in trade journals, all nicely capped off with an army of salespeople who make sophisticated pitches to dentists to buy one or another of the expensive rotary NiTi systems.

We, however, have one over-riding advantage: we work with the simple but powerful idea that we have a safer, far more cost-effective and efficient way to perform endodontics that is so strongly based in commonsense that for those who expose themselves to these alternative concepts the acceptance rate will be extremely high. We don't have to see many people to convince a small portion that they should adopt our approach, as the logic and application of our approach is readily accepted by a large percentage of the far fewer dentists we come in contact with.

We have no other choice than to think this way, and it has done very well for us these past several years. We created an endodontic system that meets our needs because the products that had been heavily promoted in the marketplace did not. It is an absolute essential that the instruments not break. For us, there is no compromise on this point. We don't want to know they won't break if we only use them once, use them lightly with several iterations of recapitulation, not use them in highly curved, dilacerated, bifurcated or merged canals.

We want to know that these instruments used in the recommended fashion will not break—period. This was not a requirement before the use of rotary NiTi because while breakage occasionally occurred, it was a rarity. Once I had used rotary NiTi, I appreciated the greater tapered shaping, but this advantage did not outweigh the trepidation I had when using them. We came up with a system that incorporated the shaping associated

with NiTi—but without breakage as a worrying side effect. I clearly remember presenting a lecture at a fairly large dental meeting to introduce our concepts. After the lecture, one of the dentists I was friendly with asked a younger dentist if he was interested in the system. The dentist responded that he wasn't interested in what I was talking about because it could not possibly be true. If it were, everyone would be using it.

The dentist's response was an insight into human nature. What I gathered from this remark is:

1. If it sounds like it is too good to be true, then it is most likely not true. Having come to this conclusion, there is little follow-up to see if by chance it actually is true. It is more comforting to dismiss it. This reaction is even more likely if a dentist's attention for new endodontic systems has already been captured by one of the expensive systems offered by the major manufacturers.

Against my single endodontic lecture, the dentists attending the lecture had seen and heard about rotary NiTi systems at other lectures, in articles and testimonials, all by well-known opinion leaders and the ever-present salespeople who convince clinicians to buy their latest system. It is difficult not to give credence to a flow of information that appears to be coming from diverse sources, but in reality is being centrally choreographed.

2. Once an expensive system has been paid for, it is only natural the dentists would wish to defend their decisions, that they made the right choices to make their efforts better and more productive. For many dentists, increased usage familiarises them with the rotary systems' limitations and they thus begin to take the precautions that are necessary for safe usage. It is an unusual phenomenon of rotary NiTi that the more a dentist learns how to use these instruments, the more selectively they are employed. Case selection becomes an important part of treatment.

Case selection has become increasingly necessary simply because there are many situations that can lead to instrument separation. I cannot think of another innovation in dentistry for which the more a dentist

learns how to use the instruments, the less they are used. Now depending upon your point of view, you could consider the selective use of these instruments as a study in sophistication, that only the best and most trained dentists will use them safely and this is somehow a plus. Learning to use a system that is defined by a narrow window of success may appear to be a study in professional growth. I consider it as just the opposite: the need to expend a great deal of energy in mastering a system that will produce results that are (at best) no better than those attained by simpler, far less expensive and far safer approaches.

I teach many dentists, and when a dentist comes to me to learn I always ask him or her what he or she is presently using. The other night I was teaching a dentist from Virginia who came to our NYC endodontic office.



Fig. 1



Fig. 2

**Fig. 1** Undistorted shaping even in long, curved roots.

**Fig. 2** Canals with curves greater than 90° can be shaped without concern for instrument separation.

She had been using the GT rotary NiTi system. I asked her if she is concerned about separation and she said she'd only broke one instrument in the past few years.

Despite that single incidence of breakage, she now takes extreme precautions not to separate an instrument. I then asked her how she handles curved canals and she said if they are mildly curved, she would use the GTs in a double sequence (otherwise known as recapitulation) after shaping the canals up to a #15 or 20 using K-files. If the canals are more than mildly curved, she would send the patient to the specialist.

As an endodontist, I have no problem in having patients sent to me, but from an academic point of view, I don't like systems whose vulnerabilities are so obvious they force a dentist to refer. It should not be the vulnerability of the system that determines a referral. A good reason to refer is the referring dentist not being able to negotiate calcified canals, or failing at finding them. Fear of instrument breakage should not be a reason.

Ironically, these referrals are made because of the fear of breakage of rotary NiTi. However, the endodontist has the same concerns, and he or she will use alternative means to shape the curved part of the canal at least up to the point at which the concern for instrument breakage has passed. Certainly, if the specialist

attains safer results using a more cautious approach, the dentist could also adopt this approach. We teach a far safer approach and those using it find the shaping of canals not only safer, but also so highly efficient that there is never any need to transition to rotary NiTi.

I have read a number of articles about the less distorted shaping that rotary NiTi produces, but these results are always in comparison to the use of K-files used with a twist-and-pull motion. When K-files are used with a balanced force technique, the results of non-distorted shaping favour the K-files. The results will favour stainless-steel instruments even more if the instrument is a relieved reamer rather than the traditional K-file and it is negotiated to the apex using a tight watch-winding motion or used in the 30-degree reciprocating handpiece. With the understanding that

both the tight manual watch-winding motion and the 30-degree reciprocating handpiece virtually eliminate all the torsional stress and cyclic fatigue that causes rotary NiTi (and for that matter, stainless steel) to break, we address the basic concerns of dentists.

Solving these basic problems gives dentists the ability to become more productive by turning out superior work on a greater variety of cases than they would have attempted in the past. Extending the dentists' skills by the invention of systems that produce compatibility between the metal and what is asked of it, is what progress is all about—despite being a David, it is worth battling the Goliaths. (I suppose you have to be a dentist to appreciate this last remark.)

For those who are interested in learning about the relieved reamers used in the reciprocating handpiece and learning how to fill canals three-dimensionally without the need for expensive thermoplastic approaches, call me at +1 212 582 8161 for a free two- to three-hour one-on-one workshop in our office. This hands-on experience will definitely open your eyes to a far safer, far less expensive and more efficient way to perform excellent endodontics. Information on additional courses can be found at [www.essentialseminars.org](http://www.essentialseminars.org).

Your wallet and your stomach lining will appreciate

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