Use of rotary Nickel Titanium endodontic instruments by Dental practitioners in Pondicherry: A questionnaire-based study.

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Commentary:
The exponential growth in endodontic technology in the last two decades has resulted in easier, faster, and more importantly predictable endodontics1. The advent of nickel-titanium (NiTi) instruments has led to a paradigm shift in the shaping of root canals from hand to rotary systems. NiTi instruments are two to three times more flexible and result in fewer procedural errors as compared to stainless steel instruments2. However, fracture susceptibility is considered as a major disadvantage of these instruments3. There is an individual variation in choice and method of use of rotary NiTi instruments4. Although most dental practitioners use rotary technology, there is very limited information regarding the incorporation of rotary NiTi instruments and techniques in clinical practice by general dental practitioners and endodontists5,6.

The objective of this questionnaire was to collect data regarding recent trends in rotary NiTi instrumentation among dental practitioners in Pondicherry. The study sample comprised of dental practitioners selected randomly from Pondicherry (n=70). The questionnaire was validated and informed consent was obtained from participants. Data regarding demographics, rotary NiTi usage techniques, and associated problems with rotary NiTi usage were collected. Results showed a disparity in rotary NiTi instrumentation among dental practitioners based on the experience. Recently graduated general dental practitioners (less than 5 years after graduation) used rotary instrumentation for all the cases (48.7%). 71.4% of dental practitioners use NiTi instruments up to five times before discarding the instrument. Crown down technique was the frequently used technique (76%). Protaper gold was the most commonly used file system (85%), flexibility, and ease of availability being the reason for its use. In general, 58.5% of Dental Practitioners in Pondicherry use rotary NiTi in their practice. The incidence of instrument separation was minimal and did not avert the dental practitioners from adopting this technology.

References

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