

Single Cone Obturation Technique Utilization in U.S.- and Canada-Based Pre-doctoral Endodontic Programs

Andre L LaRue¹, Rahul Paul¹, Ryan Fahmy¹, Yuhong Lin¹, Scott Makins¹, Leticia Guajardo¹

The University of Texas Health Science Center at Houston, School of Dentistry, Houston, Texas, USA.

Objectives: Historically, pre-doctoral endodontic programs have taught cold lateral condensation as the technique of choice for obturation and continue to do so despite the growing body of evidence for high-quality outcomes of other techniques such as single-cone obturation. Cross-sectional analysis will be performed to assess the prevalence of Single-Cone obturation technique in accredited North American Pre-Doctoral Dental programs. This study's findings will be corroborated with a current literature review to evaluate trends in endodontic education within pre-doctoral dental curricula. All information collected will not have protected health information.

Experimental Methods: A Qualtrics survey was sent via Qualtrics to 76 accredited pre-doctoral, D.D.S., and D.M.D. programs throughout the U.S. and Canada. A comprehensive list of United States schools was compiled through publicly available resources from the U.S. Commission of Dental Accreditation (CODA). Canadian dental schools were collected through the Commission on Dental Accreditation of Canada (CDAC). Schools were asked a series of conditional survey questions to maximize relevancy based on the school's pre-doctoral curriculum.

Results: Of the initial 76 sample pool, 25 pre-doctoral programs completed the survey. 14 (53.8% = $(14/24)100$) reported utilizing Single Cone Obturation and ((46.2%/24)100) did not. Since the prior version of this study, there has been a net positive change in the results of +22.8% ($((53.8 - 31)/100) = 22\%$) of schools offering Single Cone obturation to their pre-doctoral students. Of the 41% of the respondents, ((10/24)100) programs who do not use Single Cone obturation, 90% (9/10) have no plans to incorporate it soon, while 2 (6%) programs do have plans to incorporate Single cone obturation into their pre-doctoral curriculum.

Conclusion: The data set has a limitation due to the limited sample size of the available respondents.

This study was supported by the UTSD Student Research Program.