

Abstract

Title: The competence of the 3rd and 6th year dental students in shaping root canal with Nickel titanium rotary instruments. = 20 words

Aim: The aim of this study was to determine the incidence of instrument separation, canal transportation, ledging, root perforation and working length errors in root canal of extracted teeth prepared with NiTi rotary instrument by 3rd and 6th year dental students.

Methodology: A total of 20 dental students from 3rd and 6th year dental students were randomized for 10 of each group.

A total of 20 simulated root canal in clear resin blocks with the same moderated curve and 80 mesial canals of mandibular molars

were used in the learning period to train all students. Following the learning period, another 40 mesial canals of mandibular molars were use to evaluate the ability of the 2 group students in shaping canal with Nickel Titanium rotary instrumentation.

The incidence of errors in shaping canal as stated in the objective of this study was evaluated by the number of canals with the errors.

Result: There was no statistically significant difference of the number of canals with all type of errors prepared by the 3rd and 6th year dental students

Conclusion: Nickel Titanium rotary instruments are safe to introduce to the undergraduate course. Teaching undergraduate students to use rotary instrument should be encourage to decrease errors commonly found with hand instrumentation.