

## Comparison of removal potency of different intracanal medicaments

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**Aim:** To compare the removal potency of calcium hydroxide [Ca(OH)<sub>2</sub>], triple antibiotic paste (TAP) and doxypaste using manual irrigation with sodium hypochlorite (NaOCl). Design *In vitro* experimental study. Place and Duration of the study The study was conducted at DIDC and DRIBBS, Dow University of Health Sciences and Department of Material Sciences, NED University of Engineering and Technology in December 2015. Methodology 30 extracted single and multirooted teeth having 45 canals were prepared using k files upto MAF. The canals were divided into 3 groups (15 canals in each group) receiving Ca(OH)<sub>2</sub>, triple antibiotic paste and doxypaste respectively. After storing these teeth in incubator at a temperature of 37° C with 95% humidity and darkness for a period of 15 days, these medicaments were removed by manual filing followed by irrigation with side vented needle at 1mm from working length using sodium hypochlorite. All samples were then observed under a stereomicroscope after sectioning. The results were analyzed on SPSS Version: 16 using kruskal-Wallis test (P-value 0.05).

**Result:** Remnants of medicaments were found in all three of the experimental groups with calcium hydroxide being associated with highest amount of residues (33.3%) which was more than 2 times greater than triple antibiotic paste (11.6%) and 6 times greater than doxypaste (5.72%).

**Conclusion:** Failure in removing these medicaments completely from the canal walls may adversely effect the endodontic treatment outcome by compromising the efficacy of the sealer.

## Biography

Dr. Muhammad Adeel Ahmed is currently working as an Assistant Professor in the Department of Endodontics at Dow University of Health Sciences. He has completed his Membership from Royal College of Surgeons of Edinburgh (United Kingdom) in 2011 and four year Fellowship in Endodontics from Pakistan College Physicians and Surgeons in 2013. At present, he is enrolled in indigenous PhD program at Dow University of Health Sciences. He has Seven publications in peer reviewed journals. He is also Dental Postgraduate Programs Co Ordinator and Supervisor for Master's Program at Dow University of Health Sciences.

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