

## SEALING ABILITY OF RESTORATIVE MATERIALS?

### Vanishree

SEGi University, Malaysia

**E**ndodontic mishaps or procedural accidents are unfortunate occurrences that can occur during treatment. Furcation perforation is one of the causes for endodontic failure. Several materials have been used to repair perforations like amalgam, zinc oxide eugenol cements, composite resins, resin-glass ionomer, hybrids, MTA and the most commonly used glass ionomer cement. The new materials named MTA repair HP – high plasticity MTA (Angelus®, Brazil) with the intent to improve some of those characteristics and Biodentin, a promising material for dentin-pulp complex regeneration have recently been introduced. Biodentine has the potential of making major contributions in the field of dentistry by maintaining the teeth in a healthy state through numerous exciting clinical applications. MTA repair HP and Biodentin need to be evaluated for repairing perforations. We have compared and evaluated the sealing ability of three different materials when used to repair the furcal perforations in permanent molars using stereomicroscope. A standard access opening was made in 42 extracted permanent molars and perforated at the center of the pulp chamber with the standard diameter. Three groups were made of 15 teeth each for glass ionomer cement, MTA repair HP and Biodentin followed by dye penetration and two teeth as positive controls. Teeth were stored in room temperature for 24 hours to allow final setting. Teeth were sectioned longitudinally and observed under stereo microscope for microleakage. The study demonstrated that, Biodentin showed good sealing ability compared to MTA repair HP and conventional glass ionomer cement. A new high plasticity cement called MTA repair HP and Biodentin were compared against most commonly used conventional glass ionomer cement for perforation repair with minimal laboratory procedures.

## BIOGRAPHY

Vanishree has completed her masters in Pediatric Dentistry from Rajiv Gandhi University of Health Sciences (India). She is working as a Lecturer at SEGi University, Kota Damansara Malaysia. She has published more than 18 papers in reputed journals. She gave six presentations on original research at National Conference of Indian Society of Paedodontics and Preventive Dentistry.

[vanipedo2010@gmail.com](mailto:vanipedo2010@gmail.com)

