**Fracture resistance of teeth obturated with two different types of Mineral Trioxide Aggregate Cements**

**Nidambur Vasudev BALLAL1, Sheetal RAO2, Junsang YOO3, Kishore GINJUPALLI4, Manuel TOLEDANO5, Nadin AL-HAJ HUSAIN6, Mutlu ÖZCAN7**

*1Professor, Department of Conservative Dentistry & Endodontics, Manipal College of Dental Sciences, Manipal University, Manipal, Karnataka, India.*

*2Specialization Candidate, Department of Conservative Dentistry & Endodontics, Manipal College of Dental Sciences, Manipal University, Manipal, Karnataka, India.*

*3Doctorate, Seoul National University School of Dentistry, Seoul, Korea*

*4Professor, Department of Dental Materials, Manipal College of Dental Sciences, Manipal University, Manipal, Karnataka, India.*

*5Professor, University of Granada, Faculty of Dentistry, Dental Materials Section, Colegio Máximo de Cartuja s/n, 18071 Granada, Spain.*

*6Specialization Candidate, Department of Reconstructive Dentistry and Gerodontology, School of Dental Medicine, University of Bern, Switzerland.*

*7Professor and Head, Dental Materials Unit, Center for Dental and Oral Medicine, University of Zurich, Zurich, Switzerland.*

**Short title:** *Fracture resistance of with Mineral Trioxide Aggregate cements obturated teeth.*

All authors have made Substantial contributions to the conception or design of the work; or the acquisition, analysis,

or interpretation of data for the work; Drafting the work or revising it critically for importante intellectual content; Final

approval of the version to be published; Agreement to be accountable for all aspects of the work in ensuring that

questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Possible reviewers:

Claudia Volpato

Rodrigo Souza

**Correspondance to:** Prof. Dr. Mutlu Özcan, University of Zurich, Center for Dental and Oral Medicine, Clinic for Fixed and Removable Prosthodontics and Dental Materials Science, Dental Materials Unit, Plattenstrasse 11, CH 8032, Zurich, Switzerland. E-mail: [mutluozcan@hotmail.com](mailto:mutluozcan@hotmail.com)