HYEON-CHEOL HENRY KIM

CV

Dr. Kim graduated from Pusan National University School of Dentistry on 1995. He finished the Resident program for the specialty of Conservative Dentistry at the Pusan National University Hospital and got his PhD degree in the same University on 2005. Since 2004, Dr. Kim has been working as a full-time faculty at the Pusan National University School of Dentistry. He is the Chair in this Department of Conservative Dentistry and also taking in charge of Vice Dean at the Pusan National University School of Dentistry since 2015. Dr. Kim worked at the University of Minnesota BioEngineering Laboratory, School of Dentistry, University of Minnesota as a visiting research scholar to study about bone cement, biomaterial and biomechanics during the year 2008. He has published many articles in the peer review international journals such as Journal of Endodontics, International Endodontic Journals. and etc. Dr. Kim also works as a Scientific advisory board member for the Journal of Endodontics and taking the position of Associate Editor for the European Endodontic Journal and Restorative Dentistry & Endodontics. He has been actively giving a lecture about the contemporary clinical Endodontics not only in Korea but also in many countries of global society.

PROFESSIONAL QUALIFICATIONS

Visiting professor at University of Minnesota Bio-Engineering Laboratory, School of Dentistry, University of Minnesota, Minneapolis, MN, USA (2008)

Council, The Korea Food and Drug Administration (2011-2013)

Director, Department of Education and Research, Pusan National University Dental Hospital (2010.9-2014.8)

Director, Dental Research Institute, Pusan National University Dental Hospital (2013.22015.1)

ACTIVITIES IN ACADEMIC SOCIETY

Asian Pacific Endodontic Confederation, Council (2014-2017), Secretary (2017present)

Korean Academy of Endodontics, Director, Scientific Committee (2009- 2014), Treasurer (2014-2015),

Director, Communication department (2015-2017), Secretary (2017-present) IFEA WEC 11th WEC Seoul Korea Local Organizing Committee,

Director of Scientific Committee Korean Academy of Conservative Dentistry, Director, International Relationship (2011-2013), Training and Test Affair (2015-2017), Director of Scientific committee (2017-present)

Korean Academy of Microscope Dentistry, Director, Scientific Committee (2013-2017), Secretary (2017-present)

Associate Editor, European Endodontic Journal Associate Editor, Restorative Dentistry & Endodontics Scientific advisory board, Journal of Endodontics Main Research Scope NiTi endodontic instruments, Fracture resistance, Fatigue analysis, Endodontic materials, Clinical endodontics .

EVIDENCES FOR SHAPING FILES SELECTION AND PRACTICAL USAGE

Endodontic treatment is mainly purposed to reduce/remove microorganisms and infected tissue from the root canal system. To reach this goal, clinicians may need to keep the principles from the diagnostic procedures to post-endodontic restoration based on the rationale of endodontics. It is absolutely important to have knowledge on modern endodontic methods and concepts, through which we can maintain a high success rate of treatments. Nickel-Titanium (NiTi) endodontic files have brought a big step toward "efficient" practice of endodontic procedure. The NiTi files help clinicians not only reduce their working time but also increase the clinical success rate with minimal procedural errors. Now various kinds of NiTi instruments are the "essential" equipment for the root canal preparation over stainless-steel instruments. Recently introduced instruments made of heat treated alloy in various designs

made it possible to shape the root canals with minimal number of instruments and to preserve the root dentin integrity. Clinicians need to understand the characteristics of each instrument system which may bring a different results of root canal shape including potential aberrations and risk of fracture tendency. This lecture will give an insight based on research evidences for the selection of endodontic instruments with minimal risk of fracture as well as root dentin preservation.