



Friday, 8 May 09:45 am-10:30 am

Endodontics

BIOCERAMICS IN ENDODONTICS: FROM SCIENTIFIC EVIDENCE TO CLINICAL PRACTICE

Recent advances in endodontic materials have contributed to improving the predictability of root canal treatments, while the biological complexity of the endodontic system remains an inherent and unavoidable aspect of clinical practice. In this context, bioceramic materials should be considered as an additional option available to the clinician, as part of a broader clinical approach, to be integrated with conventional endodontic techniques. Calcium silicate-based materials exhibit favorable physico-chemical and biological properties, including hydrophilicity and bioactivity, which may contribute to an improved sealing of the complex root canal space. The availability of different formulations, characterized by distinct handling properties and setting mechanisms, allows their use in several and different clinical scenarios, depending on the operative requirements and treatment strategy. This presentation will review the current scientific evidence supporting the use of bioceramic materials and will focus on their translation into daily clinical practice. Through the discussion of clinical cases, the lecture will analyze how different bioceramic formulations can be adapted to the obturation technique in different clinical scenarios to optimize the management of the endodontic space. Particular attention will be given to a critical evaluation of the clinical advantages and limitations of these materials, highlighting their role as part of a broader therapeutic armamentarium in contemporary endodontics.

FRANCESCO IACONO



Francesco Iacono graduated in Dentistry from the University of Catania in 2007. In 2008, he completed a Master's Programme in Clinical Endodontics at the University of Bologna. His academic and research career includes international experience as Visiting Contractor at the Department of Oral Biology, Medical College of Georgia (USA), in 2008 and 2011. He has collaborated for several years with Italian universities, including the University of Bologna and the University of Modena and Reggio Emilia, serving as Adjunct Professor and being involved in teaching, research activities, and clinical tutoring. In 2015 and 2017, he received the prestigious "Francesco Riitano" Award from the Italian Society of Endodontology (SIE) for the best scientific contribution on instrumentation, innovation, and respect for root canal anatomy. He is an Active Member of the Italian Society of Endodontology and a Certified Member of the European Society of Endodontology (ESE). Dr. Iacono is the author of the book *"L'otturazione canale con cementi bioceramici"*, published by Edra in 2025, and a frequent speaker at national and international courses and congresses in the field of Endodontics.