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Program Speaker – Yoon-Hyuk Huh

Title

Optical and Mechanical Properties of Translucent Zirconia and Lithium Disilicate Glass-Ceramic

Abstract

Zirconia and lithium disilicate are representative contemporary dental polycrystalline and glass ceramics, respectively.

Zirconia has the advantage of possessing excellent mechanical properties, and lithium disilicate glass ceramic material has the advantage of possessing optical properties superior to those of zirconia. However, because of the emergence of translucent zirconia and the increase in fracture resistance of crystallized glass ceramics, the differences between the two materials has become unclear.

Therefore, rather than discussing the superiority and inferiority of these two ceramic materials, it has become more important to select in a more effective manner an appropriate clinical situation.

Accordingly, the topics of this presentation are as follows.

1. The basic characteristics of zirconia and considerations for clinical application are discussed.
2. Results of an in-vitro study on the mechanical properties between lithium disilicate and translucent zirconia (5Y-PSZ) are analyzed.
3. Results obtained through experiments on lithium silicate pressed-on-zirconia (Amber[®] LiSi-POZ) are also analyzed.
4. The polishing effects of zirconia and lithium disilicate glass ceramics are considered.

Biography

Dr. Yoon-Hyuk Huh is an Associate Professor of the Department of Prosthodontics, School of Dentistry, Gangneung-Wonju National University (GWNU), Gangneung, South Korea. He received DDS, MSD and Ph.D degrees from GWNU. He completed Prosthodontic residency at GWNU Dental Hospital. He is a certified prosthodontist of KAP (Korean Academy of Prosthodontics). He is interested in the field of Esthetic Dentistry, especially on Dental Ceramics.