

# 3<sup>rd</sup> Annual World Dentists Summit & 4<sup>th</sup> International Conference on Dental Research and Dental Treatments

November 29<sup>th</sup> 2022 | Webinar

ISSN: 2471-8726

## Paradigm shifts in implant treatment to achieve long term success

### Abstract:

Statement of the Problem: The implant treatment was introduced since 1980s. Dentists experienced increased complication during long term follow-up.

### Purpose:

of this study was to study the biological and biomechanical complications to suggest new approaches to minimize the complication depending on each patient conditions.

### Method:

There were two different important variables in implant complications: biological factors and biomechanical factors. For biological study, total of 169 patients (n = implants: 349) was retrospectively included in the study. Peri-implantitis was diagnosed based on peri-implant bone loss and probing depth. Using radiographs taken 1 and 5 years following prosthesis insertion, the following features were determined: peri-implant marginal bone loss (MBL), emergence angle (EA), emergence profile (EP) and crown/implant ratio (CIR). Multivariable generalized estimating equation was used to analyse the influence of each feature on the prevalence of peri-implantitis. For biomechanical study, total number of implants was 1,289 implants were studied. Information about abutment connection type, implant locations, platform sizes was collected with presence of implant component fractures and their managements.

### Conclusion & Significance:

Over-contoured implant prosthesis was a critical local confounder for peri-implantitis. The implant splinted to both mesial and distal adjacent implant has a higher risk of peri-implantitis. In external type, screw fracture occurred most frequently, especially in the maxillary anterior region, and in internal type, abutment fracture occurred frequently in the posterior region. placement of an external type implant rather than an internal type is recommended for the posterior region where abutment fractures frequently occur

### Biography:

Seong Joo Heo has his expertise in **dental implant** and prosthodontic treatments. He was the professor at Seoul National University since 1994. He finished M.S. and postgraduate study at SUNY at Buffalo from 1987 to 1989. He had many experience in in vitro and in vivo study regarding with Biomaterials, Dental implants and **prosthodontics** He applied his research results for risk assessment for dental implants patients to minimize the complications. Also he suggested the different treatment plans for high risk patients from treatment stage to follow-up stage. He was co-chairman in scientific committee of International College of Prosthodontic meeting 2015. Visiting Professor of **Dental School** of Harvard University, USC and published more than 110 papers at peer-reviewed international journals

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**Received:** September 28, 2022; **Accepted:** September 29, 2022; **Published:** November 29, 2022