

Role of Prosthodontics in Implant Therapy



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To date, "missing teeth" have been mainly treated by prosthodontics. Evidence that dental implants can be used successfully as prosthetic treatment has been increasing since Brånemark et al. proposed the use of pure titanium as an implant material. "Missing teeth" have recently been treated by not only prosthodontics but also oral surgery, periodontics, and the joint, since implant therapy is commonly performed.

Prosthodontists should consider the implant therapy as prosthetic method to treat missing teeth. Implant research and therapy should be recommended based on both biology and biomechanics, especially occlusal harmony, fitness and esthetics of superstructure. In this presentation, three topics of our studies will be briefly introduced;

- 1. Chronological change of bone structure around pure titanium and dense hydroxyapatite implants is demonstrated using a computer-aid system for three-dimensional examination of the bone structure.
- 2. An insertion technique, "Pilot hole preparation" is demonstrated for proper implant positioning and preoperative bone tissue stimuli.
 - 3. The examination for fitness of the superstructure and laser welding is introduced.