

International Journal of Periodontics and Restorative Dentistry

July/August 2002

Volume 22, Issue 4

Healing of Osseotite Implants Under Submerged and Immediate Loading Conditions in a Single Patient: A Case Report and Interface Analysis After 2 Months

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A growing number of clinical studies show that early (2 months) and immediate loading protocols may be predictable. However, they are based on clinical stability only. The aim of this case report was to document the osseointegration status of two Osseotite implants after 2 months of healing in soft bone corresponding to type IV and subjected to two distinct mechanical environments. A completely edentulous patient received a total of 11 Osseotite implants in the mandible. Six were immediately loaded to support a provisional fixed partial denture, and five were left submerged. After 2 months, two submerged and one immediately loaded implants were retrieved and processed for histologic analysis. All immediately loaded implants were clinically stable. One histologic section per implant was obtained. All implants achieved osseointegration. The bone-implant contact was 38.9% for the submerged implant and 64.2% for the immediately loaded one. In the marrow space, both implants were covered by thin, neoformed bone trabeculae. Osseointegration can be achieved after 2 months by Osseotite implants placed in soft bone in the mandible either when immediately loaded and splinted into a provisional denture retained on six implants, or when submerged and unloaded. . (Int J Periodontics Restorative Dent 2002; 22:345-353.)

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