

Surgical and prosthetic concepts for predictable immediate loading of oral implants.

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Abstract

Immediate loading of oral implants is an established concept for lower jaw restoration using four intraforaminal implants splinted together with a bar. There is a lot of misunderstanding in the literature and not exact definition of the term "immediate loading." Moreover, the number of implants to restore edentulous jaws is relatively high to compensate for the loading forces and dependent on the bone quality and quantity. This report presents the different surgical and prosthetic concepts for immediate loading to get long-term success in the upper and lower jaw. When the primary stability is adequate, only six implants may be loaded immediately after surgery, if the implants are splinted using a provisional fixed restoration. Using a number of six primary stable implants, it is possible to restore edentulous jaws independent on the clinical situation. This concept may be used successfully in the posterior part of the mandible when three implants are splinted with provisional crowns and loaded immediately. The biomechanical aspects, the implant design and surface seem to be of great importance for the long-term success in compromised and advanced surgical cases. In conclusion, immediate loading of oral implants may be successful if a primary stability as well as immobilization (splinting) immediately after surgery are taken care.

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