

***Immediate Temporization
on Implants***

(ITI)



**Affiliated Periodontists of North
Jersey, P.A.**

Robert A. Jaffin, D.M.D.
Akshay Kumar, D.M.D.
Charles L. Berman, D.D.S.

**Diplomates,
American Board
of Periodontology**

274 State Street
Hackensack NJ 07601
(201) 489-5155

ITI Immediate Temporization on Implants

Dental Implants have become a widely accepted and predictable mode of treatment for many patients. One of the limiting factors in the past of performing implant dentistry was the delay in receiving a fixed prosthesis due to the healing time necessary for implants to osseointegrate.

In turn, patients were asked to wear a removable prosthesis that was many times ill fitting due to the need for relieving it under the implants to prevent trauma during the healing. Some patients were asked not to wear anything for 1 to 3 weeks following implant surgery. Other patients who were able to maintain a fixed temporary bridge had problems associated with frequent loosening of the bridge and tooth related complications. These shortcomings prevented many restorative dentists and patients from accepting implants as a potential mode of therapy.

In the last five years, our practice has been placing dental implants and then having you, the restorative dentist, place a fixed temporary prosthesis onto the implants the same day of surgery. This technique has eliminated the grief associated with situations described above. As a result, patients are more accepting of the desired treatment plan, the treatment steps are fewer and less complicated and the implants osseointegrated quicker and stronger.

Background

At the time that our paper was published in May 2000 *Journal of Periodontology*, we had reported on 149 implants and 27 cases with a success rate of >95%. This was the largest sample of documented patients with immediate temporization on implants in the world. As of today, we have over 1,500 implants and 150 cases with a success rate >96%. Below is a list of references that discuss the technique and rationale.

1. Jaffin RA, Kumar A, Berman, CL. Immediate Loading of Implants in Partially and Fully Edentulous Jaws: A Series of 27 Case Reports. *Journal of Periodontology*, Vol. 71, No. 5, 5/2000
2. Jaffin RA, Kumar A, Berman, CL. Immediate Loading of Dental Implants in the Completely Edentulous Maxilla: A Clinical Report. *Journal of Oral and Maxillofacial Implants*, Vol. 19, No.5, 2004
3. Szmukler-Moncler. Time of loading and effect of micromotion on bone-dental implant interface: review of experimental literature. *J Biomedical Mater Res*, 43(2): 192-203, 1998
4. Piatelli A, Corigliano M, Scarano A, Costigliola G, Paolantonio M. Immediate loading of titanium plasma-sprayed implants: an histological analysis in monkeys. *J Periodontol* 1998; 69:321-327
5. Tarnow D, Emtiaz S, Classi A. Immediate loading of threaded implants at stage one surgery in edentulous arches. Ten consecutive case reports with 1-5 year data. *Int J Oral Maxillofac Implants* 1997;12:319-324

Indications

- 1) Patients that present with a single tooth that is fractured or with recent infection, or with advanced decay, and requires the tooth to be extracted. Tooth can be extracted and the implant placed at the same time and then a temporary restoration attached onto the implant to satisfy the esthetics needs of the patient.
- 2) Patient presents with a full arch of teeth or C & B and either due to perio, endo, recurrent caries, etc., multiple teeth require extraction. If the patient commits to a fixed reconstruction utilizing implants, it is possible to extract all teeth and place implants the same time and fabricate a fixed prosthesis onto the implants.

Prerequisites

- 1) In order to apply this technique, the patient must have good bone volume and good bone quality. This can be determined by a dental CT Scan (Sim/Plant).
- 2) The opposing arch should have a full complement of teeth (usually at least 1st molar to 1st molar).
- 3) The patient must be compliant.

Technique

Presurgical planning is done in conjunction with restorative dentist - wax up of final tooth position, surgical stent (template).

Restorative dentist can either have ready a pre-fabricated temporary that must be relined with acrylic after the patient returns with implants/abutments in place or can make a chairside temporary .

The temporary shell should closely follow the surgical template in order to minimize the amount of adjustment in the mouth.

The surgical procedure involves extraction and implant placement. Abutments are placed into the implants by the surgeon and plastic sleeves attached to the abutments. These can be picked up into the temporary bridge thus reducing the risk of acrylic flowing into the wound site.

The patient arranges to go to the restorative dentist after the surgery for seating of the temporary prosthesis. For single teeth, the restoration is left out of occlusion and for full arches or large partial arch cases, a mutually protected occlusal scheme is designed. From previous experience, we feel at no time should the temporary restoration be connected to natural teeth.

Every effort must be taken to prevent loosening or dislodgment of the temporary prosthesis during the healing time. The healing time varies from 8-10 weeks depending on the bone quality. After the designated healing period, the temporary prosthesis is removed and the implants checked for integration .Once osseointegration is confirmed, the final prosthesis can be fabricated.

Patient Response

Patients have been amazed with this procedure. They claim minimal discomfort and are thrilled with not having to wear a removable prosthesis. There have been very few complications associated with this procedure.

If you are interested in learning more about this technique or have a patient that may benefit from this service, please feel free to contact us.

For more information, please visit our web site at www.affiliatedperio.com