

Immediate Implants in the Esthetic Zone

Avoiding complications

Peter O. Cabrera, DDS
Periodontics
Dental Implants

939 W. North Ave. - Suite 700

Chicago, IL 60642

www.PerioimplantChicago.com

312-949-7939

Immediate implants at the time of extraction, provide an attractive option for many patients. In addition to the convenience of a single surgery, immediate placement and temporization can help create an esthetic result.



Pre-surgical view



Two week post-op

Background

In our practice, we began placing immediate implants along with temporization approximately 20 years ago.

While there is a high short term success, experience has taught us that these types of implants can and do develop problems. These problems can be dramatic, especially when the patient's expectations have been built up.

We have now had the opportunity to follow our cases for some time. This experience has given us the opportunity to understand the 5 key elements for **SUCCESS**.

Five Key points

- ▶ Periodontal Health
- ▶ Anatomy/ Biotype
- ▶ Atraumatic Surgery
- ▶ Occlusion
- ▶ Emergence Profile

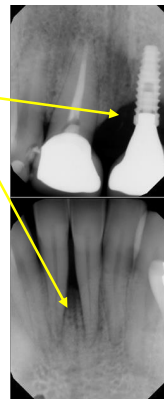
Periodontal Health

Periodontal pathogens affect implant health. Prior to initiating any implant procedure, the patient must be in excellent periodontal health.



Severe Marginal inflammation around teeth and implant

Bone loss affecting natural teeth as well as the implant

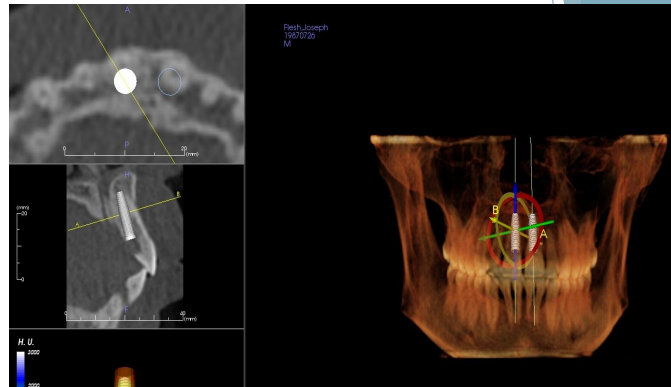


We are seeing an increasing number of patients where implants have been placed in periodontally compromised patients with subsequent problems around the implants.

Anatomy- Biotype

Bone width and angulation of the alveolar process need to be understood before considering immediate placement.

A CBCT and treatment planning software are critical in proper palatal and apical position

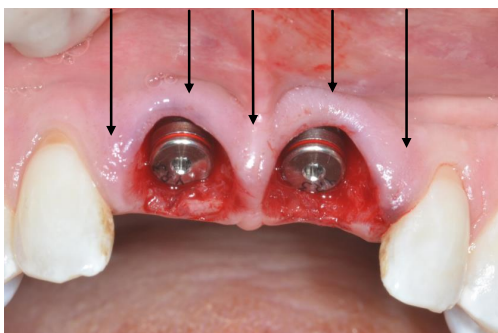


A thick Biotype is much more predictable and forgiving from both a surgical and restorative perspective. Patients with a very thin biotype may not be good candidates for immediate placement. Both bone and tissue thickness are important.



Atraumatic Surgery

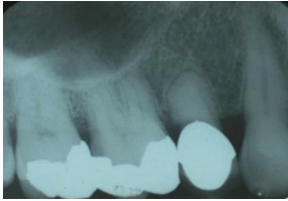
By utilizing basic periodontal plastic surgery principles, soft tissue contour is preserved. Tissue preservation is important in all dimensions.



Equally important is preservation of the interproximal bone which will provide support for the papilla.

Occlusion

The restoration must be free of contact in occlusion as well as in all excursions. Essentially, the transitional restoration is a facing that provides an immediate esthetic solution without function or micro movement for several months.



Extraction and immediate implant placement along with abutment.



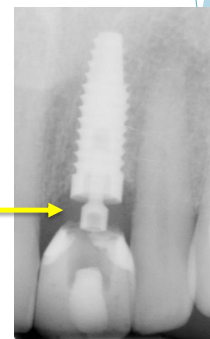
Restoration out of contact in all dimensions

NOTE: Patients with deep bites where it is difficult to get complete occlusal clearance are typically NOT good candidates for immediate placement and temporization--

Clean Emergence Profile

The subgingival portion of the temporary must follow the contour of the extracted tooth and needs to be perfectly smooth.

Note: Some temporary abutments are not radiopaque so proper seating and emergence profile need to be confirmed clinically



Through atraumatic surgery and development of a proper emergence profile, key soft tissue anatomy was preserved.



Properly developed emergence profile



Backup Plan

Final thoughts

Even with perfect preparation and under ideal circumstances, it may not be feasible to either place the implant at the time of extraction or temporize the implant.

Severely broken down teeth can fracture below the bone and may require bone resection in order to remove the tooth fragments. Under some circumstances, it is inadvisable to place the implant at the time of extraction. Instead, we may need to rebuild the bone and place the implant several months later.

Temporizing the implant in cases of very low insertional torque, may lead to implant loss. These are the most difficult cases, as there is usually accompanying bone loss which will require a more extensive ridge augmentation and additional waiting time for the final restoration. In these cases, esthetics may be severely compromised. Patient disappointment and frustration can be difficult to manage if expectations have not been properly set.

An explanation BEFORE a problem develops is called a REASON.

An explanation AFTER a problem develops is called an EXCUSE.

Patients need to be educated on the entire process and that our goals of immediate implant placement and immediate temporization may not be feasible. Decisions are made as we progress with the surgery.

The backup plan is usually a removable transitional appliance. Whether a flipper or an Essix, the appliance needs to support the tissue in the same manner as an immediate temporary.



The transitional appliance follows the exact contour of the tissue to help support and preserve the anatomy. Note: There is no flange on the appliance.



Immediate post surgical insertion



Ideal tissue contour at 4 months