



Clinical Application of Transitional Implants as Long Term Support for Implant Supported Overdentures

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Resorptive and aging pattern often result in limited residual alveolar bone for the edentulous patient. Well fabricated mandibular complete dentures do not always provide enough retention and comfort to these patients. Implant supported overdentures have been reported to be a viable treatment modality for the fully edentulous maxilla and mandible. However many patients are not candidates for conventional dentures or conventional implant supported overdentures because of limited bone availability, anatomic limitations caused by atrophy of the remaining alveolar bone, or cost. Small diametered transitional implants can provide extended application for the fully edentulous patients who are not candidates for standard size implant placement due to the above mentioned reasons. The prosthesis will provide the patient with comfortable long term function while preserving the remaining alveolar bone

Methods of Temporization

1. Full/Partial removable denture
2. Resin bonded splin
3. Fixed partial denture
4. Staged or Serial extraction
5. Transitional Implants

Rationale for Use TIs

1. Provide comfort and function
 - patient unwilling to wear removable appliance
 - insufficient teeth for serial extraction cases
2. Protect 1 implants from transmucosal loading
3. Protect grafts from transmucosal loading

Patient Advantages

1. No removable appliances
2. Better acceptance of implant healing time
3. Better acceptance of implant site augmentation
4. Improved provisional esthetics
5. Less post surgical adjustments of temporaries

Operator Advantages

1. Work as an implant team
2. Improves referral base Dentist/Patient
3. Greater implant treatment plan acceptance
4. Improved success rates-implant/ridge augmentation

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REFERENCES

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2. Froum S, Cho YS, Cho SC et al. Immediate Loading of a Screw Retained Transitional Implant for Long Term Function in the Esthetic Zone: Case Report. Submitted to *Implant Dentistry* 2003.
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Various Clinical Applications of Transitional Implants



Fig 1 Pre-op Panorex



Fig 2 TIs and Primary Implants



Fig 3 Need Extra Supporting



Fig 4 Provisional FPD-Teeth & TIs



Fig 5 Block Bone Graft



Fig 6 TIs Protecting Graft



Fig 7 Insufficient M-D Space



Fig 8 TI on #10 (1.8 x 10mm)



Fig 9 Periapical View of #10i



Fig 10 3 Months Post-op.

Transitional Implants as Long Term Support for Implant Supported Overdenture



Fig 11 54 YO Female



Fig 12 Lateral View



Fig 21 Pick-up of Metal Housing



Fig 22 Relief of Buccal Flange



Fig 13 Pre-op. Panorex



Fig 14 Severely Resorbed Ridge



Fig 23 Ball-Shaped TIs & Hand Driver



Fig 24 4 Retentive TIs & 2 GuideTIs



Fig 15 Midcrestal Incision



Fig 16 1.2mm Twist Drill



Fig 25 Tension Free Suture



Fig 26 Fit Checking for Clearance



Fig 17 Guiding TIs (1.8 x 5mm)



Fig 18 Marked Vacuum Formed Shell



Fig 27 Sealing Verified Visually



Fig 28 Soft Relining with Silicon



Fig 19 Hollow-Out of Denture



Fig 20 Metal Housing over Guiding TIs



Fig 29 Denture Placed over TIs



Fig 30 Post-op. Panorex