REPLACING REMOVABLE PARTIAL PROTHESIS WITH AN IMPLANT-SUPPORT FIXED RESTORATION

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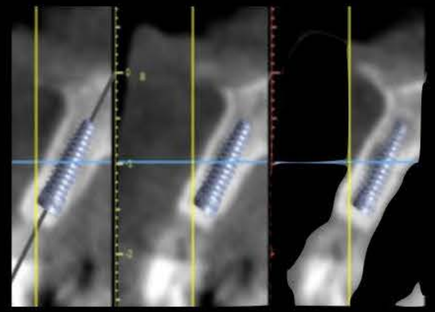
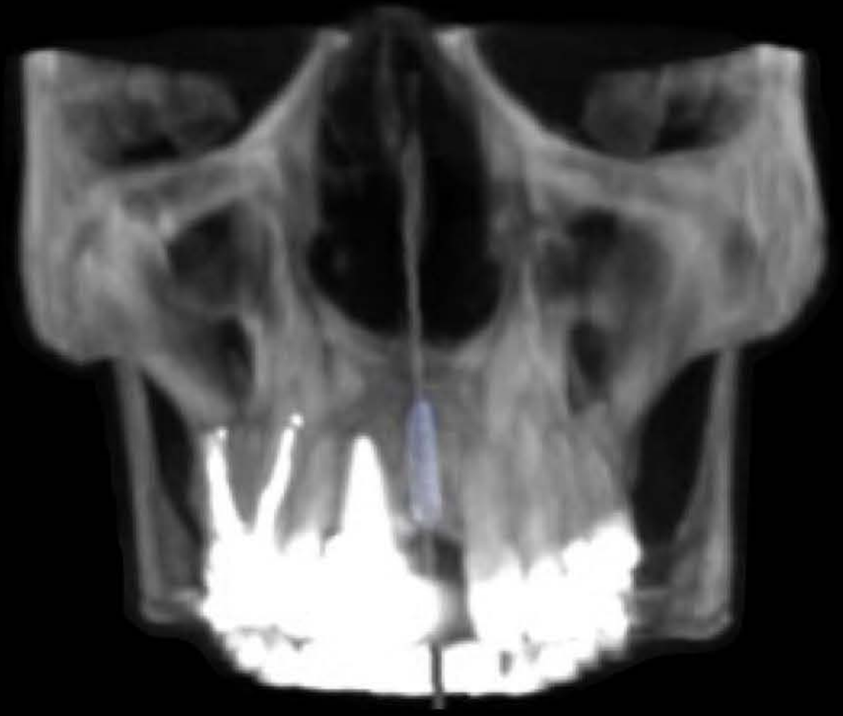
SAGITAL VIEW



3D VIEW



INITIAL CONDITION

- Missing Tooth 2.1
- Insufficient soft-tissue volume
- Falling removable partial prosthesis
- Compromised esthetics and function
- Need for predictable implant positioning

DIAGNOSTIC & PLANNING WORKFLOW

- Digital CBTC assessment
- 3D implant positioning
- Bone quality and volume evaluation
- Digital wax-up
- Esthetic - driven implant placement

RESTORATIVE PHASE

- Soft-tissue maturation and shaping
- Digital impression workflow
- Emergence profile design
- Zirconia implant crown fabrication
- Functional and esthetic integration

SURGICAL PHASE

- Minimally invasive flap management
- Connective tissue graft for soft-tissue augmentation
- Dental Implant placement 3D position
- Primary stability confirmation
- Immediate soft-tissue conditioning

OUTCOME

- Stable peri-implant soft tissues
- Improve esthetics
- Enhanced patient comfort and function
- Predictable and digitally guided final result

MISSING ANTERIOR TOOTH 2.1

- Evident anterior space compromising esthetics
- Midline diastema and irregular incisal edge display
- Reduced soft-tissue volume in the edentulous area
- Altered smile symmetry
- Patient reports functional and esthetic concerns

MAXILLARY OCCLUSAL EXAMINATION

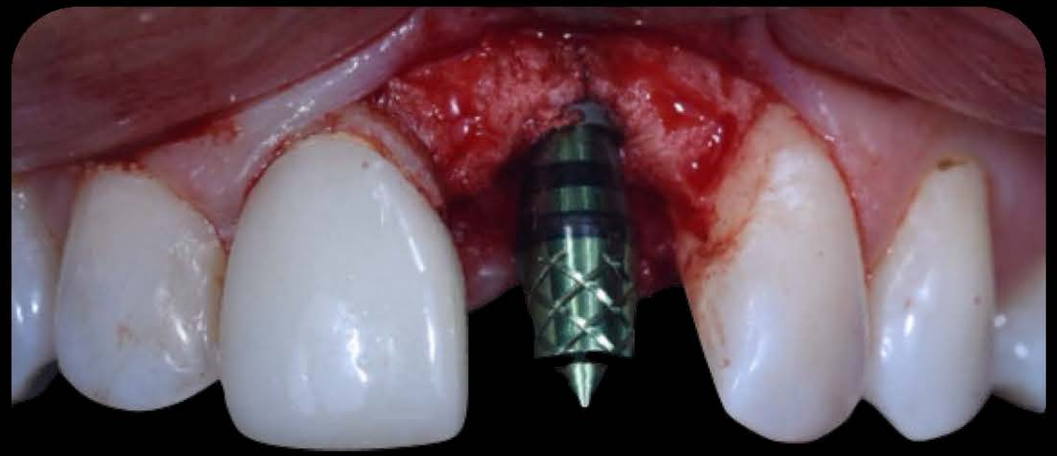
- Absence of tooth 2.1 with a well-defined edentulous ridge
- Evident soft-tissue collapse in the anterior region
- Adequate inter-arch space for implant restoration

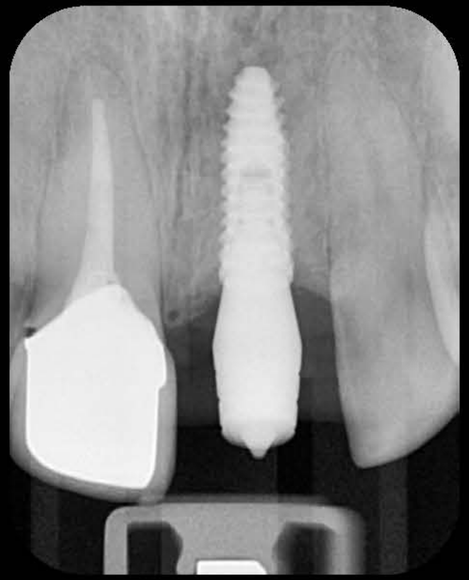
FRONTAL RIDGE EVALUATION

- Edentulous site at tooth 2.1 showing horizontal soft-tissue collapse
- Irregular gingival contour with loss of natural scalloping
- Insufficient buccal soft-tissue volume for ideal implant emergence profile
- Concave ridge morphology compromising esthetic outcome
- Adjacent teeth display normal gingival architecture, providing clear esthetic references

IMPLANT POSITIONING AND SOFT-TISSUE EVALUATION

- Correct 3D positioning respecting prosthetically driven parameters
- Adequate mesio-distal spacing maintained for papilla preservation
- Stable periimplant tissue margin with controlled flap elevation



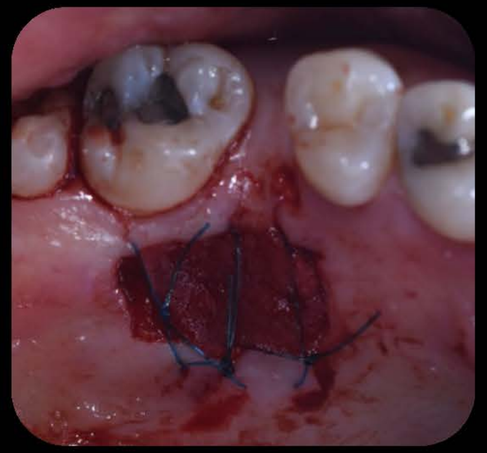


GUIDED IMPLANT PLACEMENT

- Full-thickness flap elevated to expose the anterior ridge and allow precise visualization
- Ideal 3D positioning archived:
  - -Apico-coronal: placed subcrestally for optimal emergence profile
  - -Bucco-palatal: positioned palatally to preserve the buccal plate
  - -Mesio distal: centered to maintain papilla height

DE-EPITHELIALIZED RECIPIENT SITE

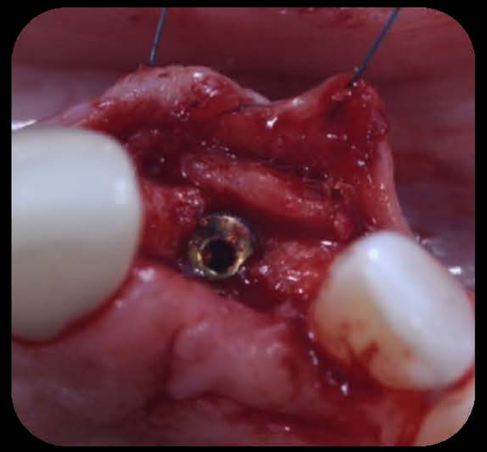
Key objectives:
- Create a vascularized recipient surface for connective-tissue graft integration
- Increase soft-tissue thickness in the edentulous ridge
- Improve long-term stability of the per implant gingival margin
- Optimize the future emergence profile of the definitive restoration



PALATAL DONOR SITE PROTECTION WITH COLLATAPE

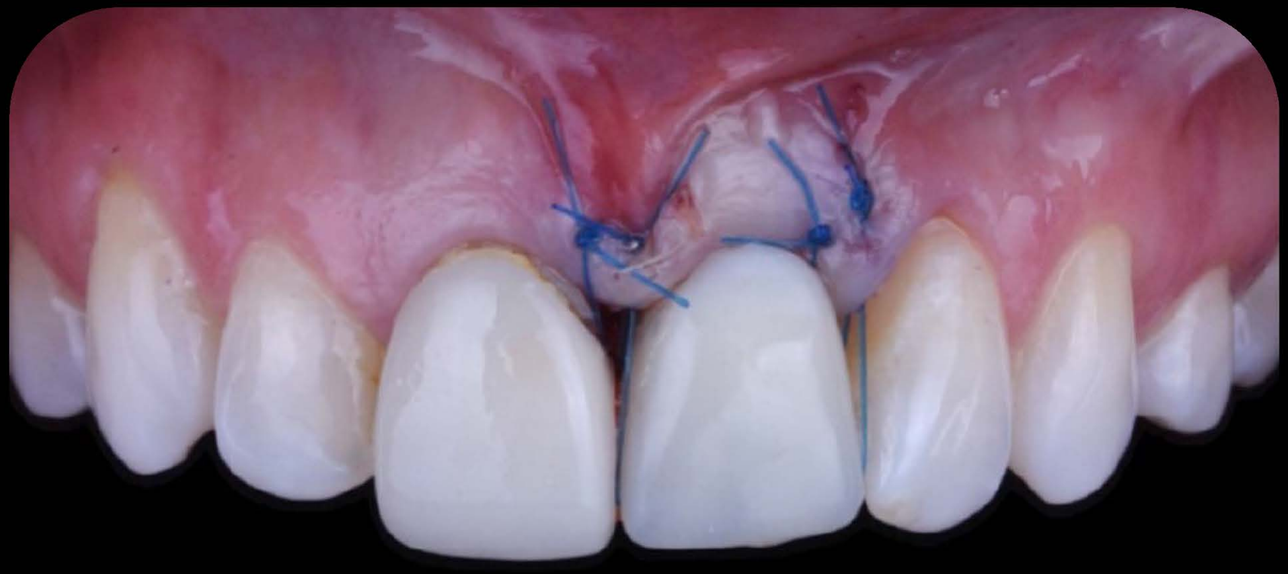
A Collatape collagen dressing was placed over the palatal donor site to protect the exposed wound surface following connective tissue harvesting

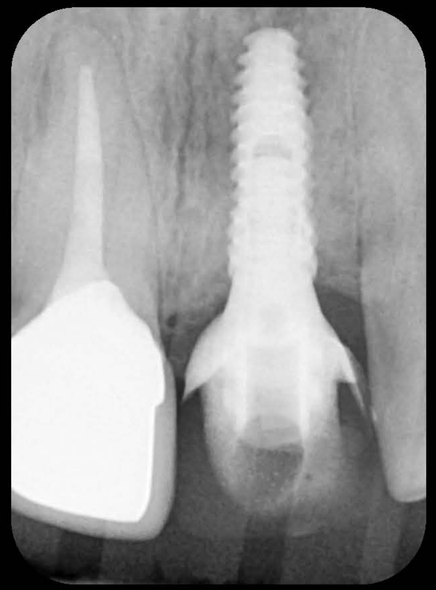
Key objectives:
- Provide a biological protective barrier over the palatal wound
- Enhance patient comfort by reducing postoperative sensitivity and bleeding
- Promote homostasis and stabilize the initial blood clot.



CONNECTIVE TISSUE GRAFT PLACEMENT

The connective tissue graft was positioned over the implant site to enhance buccal soft tissue thickness and improve the esthetic contour





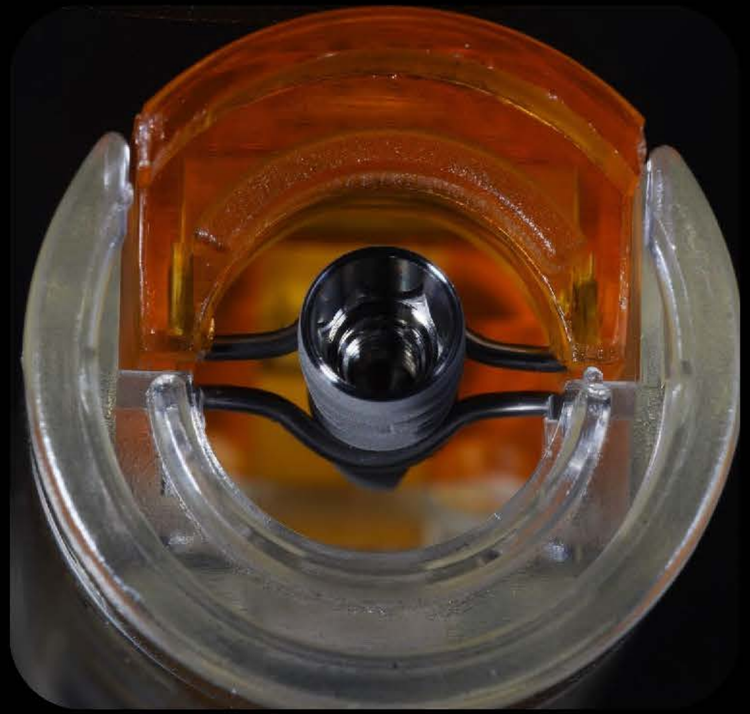
DENTAL IMPLANT PROVISIONAL CROWN

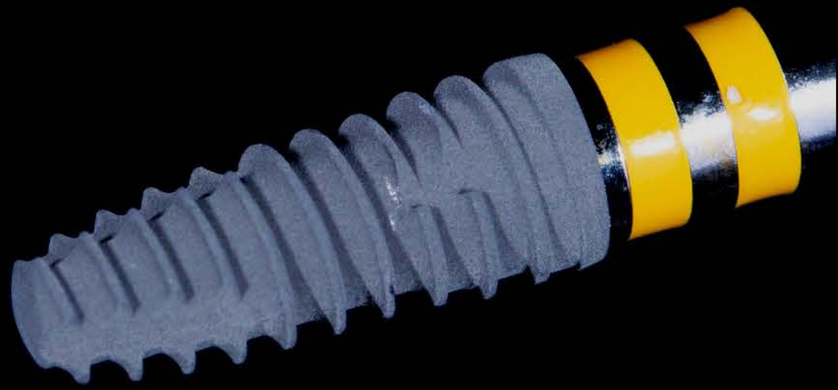
An immediate provisional crown was place to guide peri-implant soft-tissue maturation and support esthetic contour development.

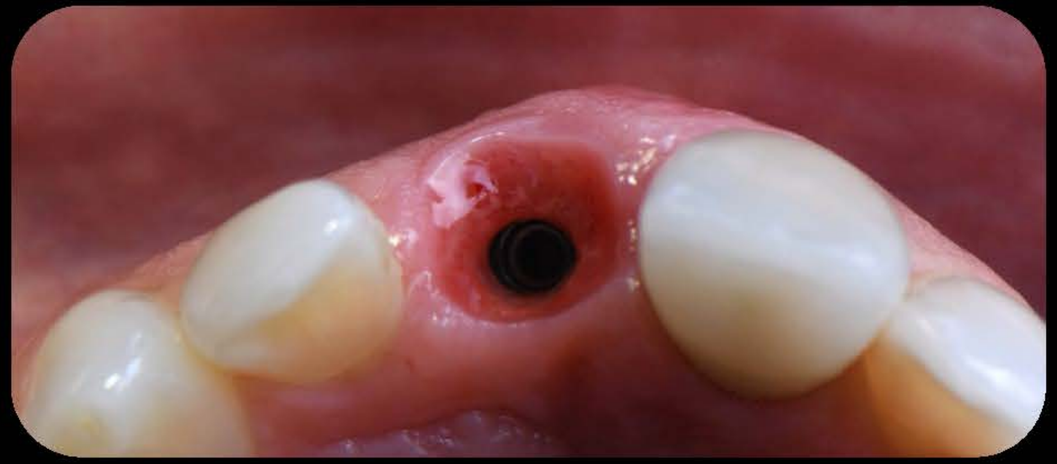
Key objectives:

- Shape the emergence profile to mimic natural cervical contours.
- Maintain papilla height and support soft tissue stability around the implant.
- Protect the surgical site and connective tissue graft during early healing.
- Provide and esthetic, functional temporary restoration during osseointegration.

The IS-III Active is a high-performance tapered implant engineered for primary stability, immediate placement, and immediate loading protocols-especially in esthetic anterior case.







EMERGENCE PROFILE DEVELOPMENT

The emergence profile was shaped to guide the peri-implant soft tissue into a natural, harmonious contour that mimics a healthy anterior tooth.

Key objectives:

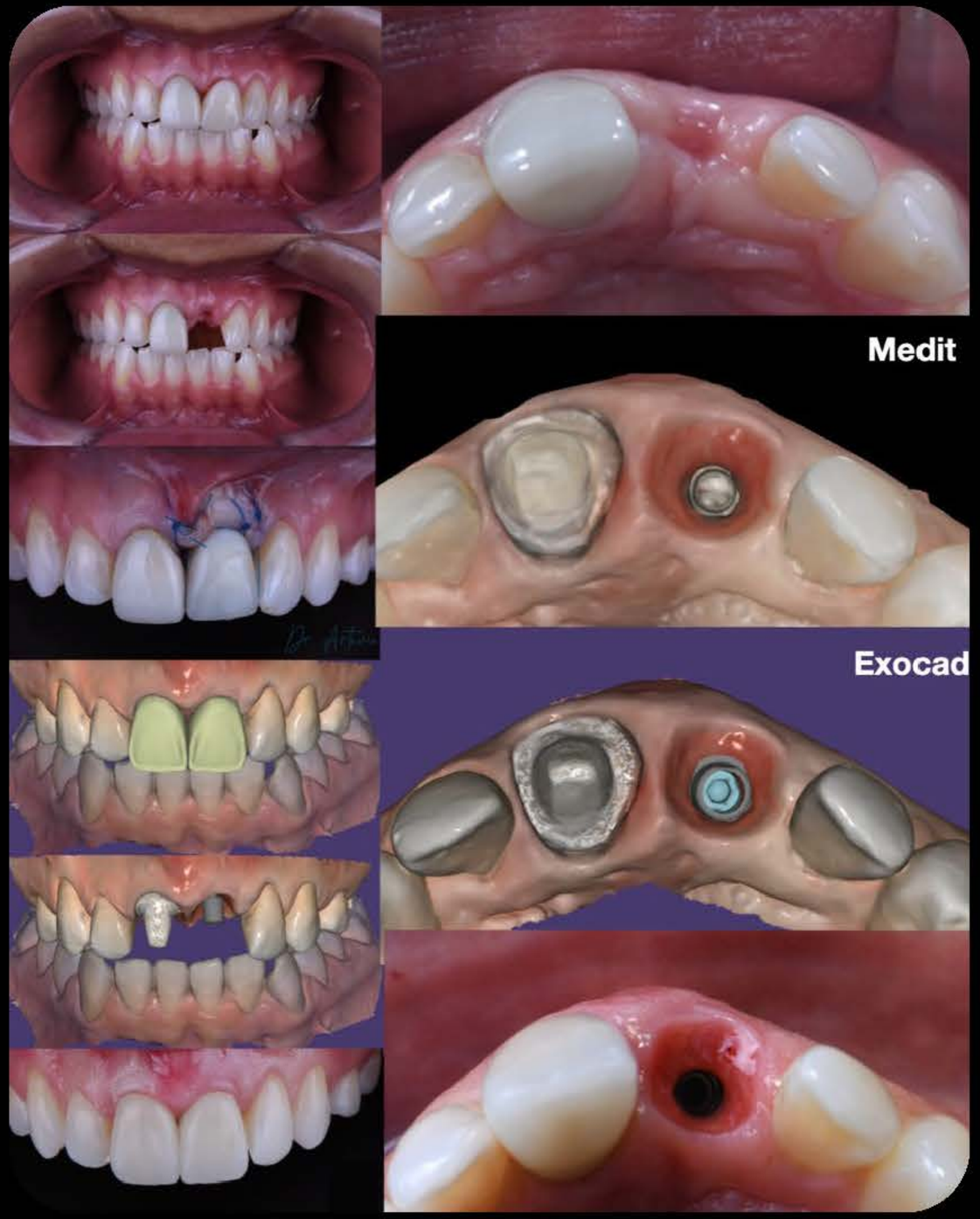
- Soft tissue Support
- Anatomical Contour
- Tissue Maturation
- Foundation for the Final Restoration

EMERGENCE PROFILE & SOFT TISSUE MATURATION SEQUENCE

- Customized provisionalization guides the soft tissue into a natural scalloped architecture.

- Buccal convexity, papilla height, and marginal symmetry are restored.

- The peri-implant soft tissue now resembles the characteristics of natural central incisor.



FINAL WORKFLOW:
DIGITAL INTEGRATION AND DEFINITIVE ESTHETIC RESTORATION

This sequence illustrates the complete clinical and digital workflow used to archive a predictable esthetic implant restoration in the anterior maxilla.

- Pre-operative Clinical Evaluation
- Soft- Tissue Healing and Maturation
- Digital Imopresion (Medit i900)
- Prosthetic Planning (Exocad)
- Abutment & Crown Integration
- Final Soft-Tissue Assessment

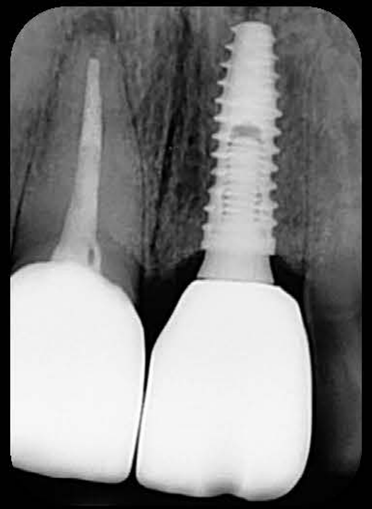
FINAL ESTHETIC OUTCOME

BEFORE

AFTER

This comparisons highlights the transformation archived through guided implant placement, soft tissue augmentation and digitally designed restorative workflows.

This case demonstrates the effectiveness of a fully integrated surgical-prosthetic workflow for achieving a predictable and highly esthetic anterior implant restoration.



A combination 3D implant surgery placement, tissue engineering, customized provisionalization, and digital restorative design resulted in a biologically stable, esthetically superior, and functionally predictable anterior implant restoration.

FOLLOW UP – 4 YEARS