



NATIONAL AUTONOMOUS UNIVERSITY OF MÉXICO.

FACULTY OF DENTISTRY.

DEPARTMENT OF ORAL IMPLANTOLOGY.

IMPLANT PLACEMENT IN BONE DEFECT WITH RIDGE SPLIT TECHNIQUE IN THE ESTHETIC ZONE.

DDS. Tomás Armando Villela Rivera, DDS. Marisol Perez, DDS. PhD Valentina Garcia L.



INTRODUCTION:

The ridge split technique, ridge expansion, was introduced in the early 1970s to perform horizontal ridge augmentation while maintaining periosteal attachment by careful expansion of the cortical ridges. This surgical technique shows high success rates; therefore, it appears to be a predictable alternative for implant placement, in narrow alveolar ridges. The horizontal ridge increase obtained by this technique is between 1mm and 4mm, with a greater increase noted in the maxilla (3-4mm) compared to the mandible (1-1.5mm).

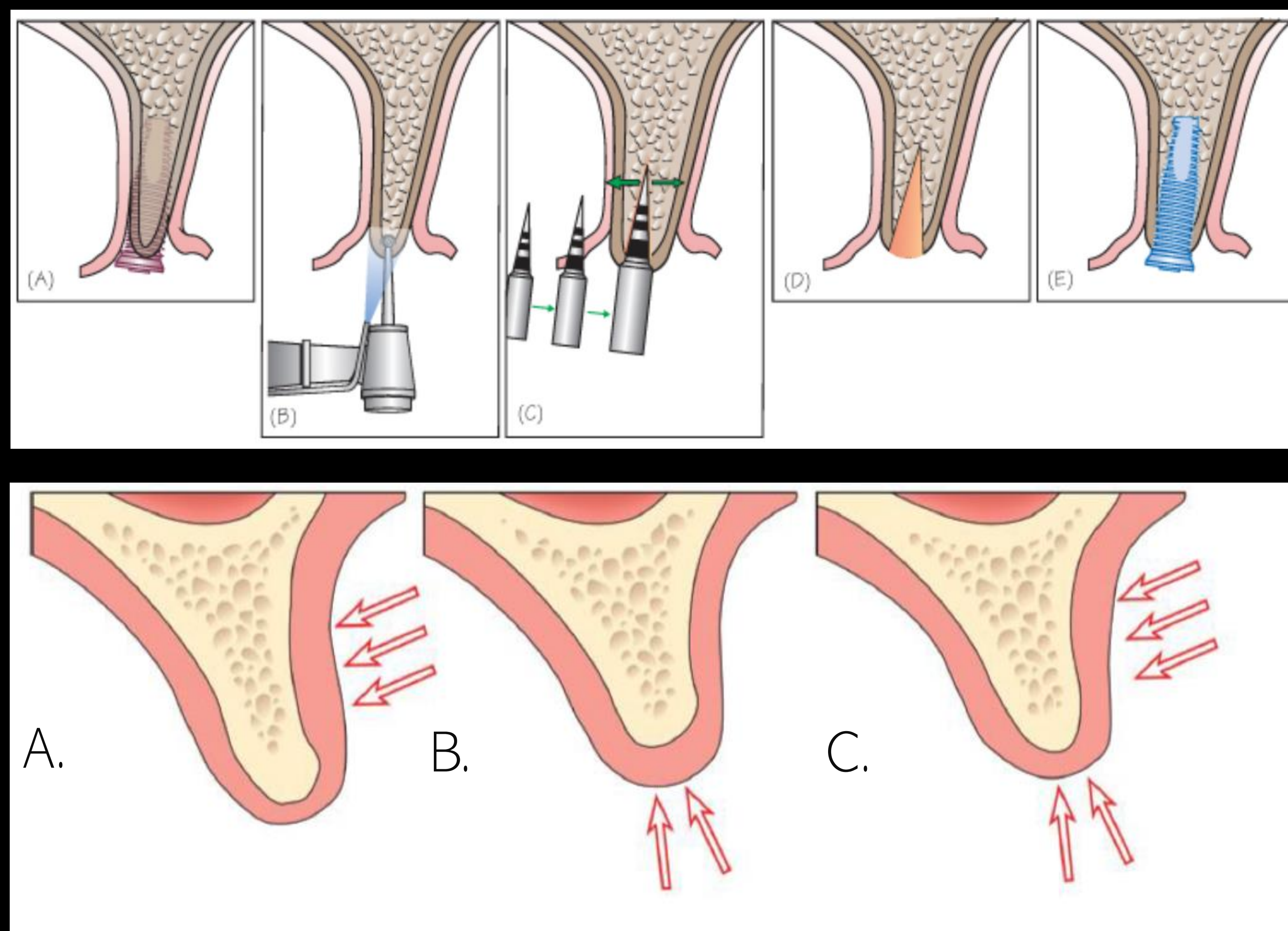


Figure 1. INTRODUCTION. B) Classification of soft and hard tissue defects. Seibert (1983). A. Class I: Bucco-lingual tissue loss with normal apico-coronal height. B. Class II: Apico-coronal tissue loss with normal bucco-lingual thickness. C. Class III: Combined defect in both

OBJECTIVE: To report the results of the ridge split technique in the esthetic zone

CLINICAL CASE:

Below is the clinical case of patient 40 years old, who had a combined bone defect in which 2 implants number 12 and 21 were placed in the anterior zone.



Figure 2. intral oral photography. A) Frontal provisional photography B) Frontal whit out provisional photography C) occlusal whit out photography

PLANNING PROTOCOL.

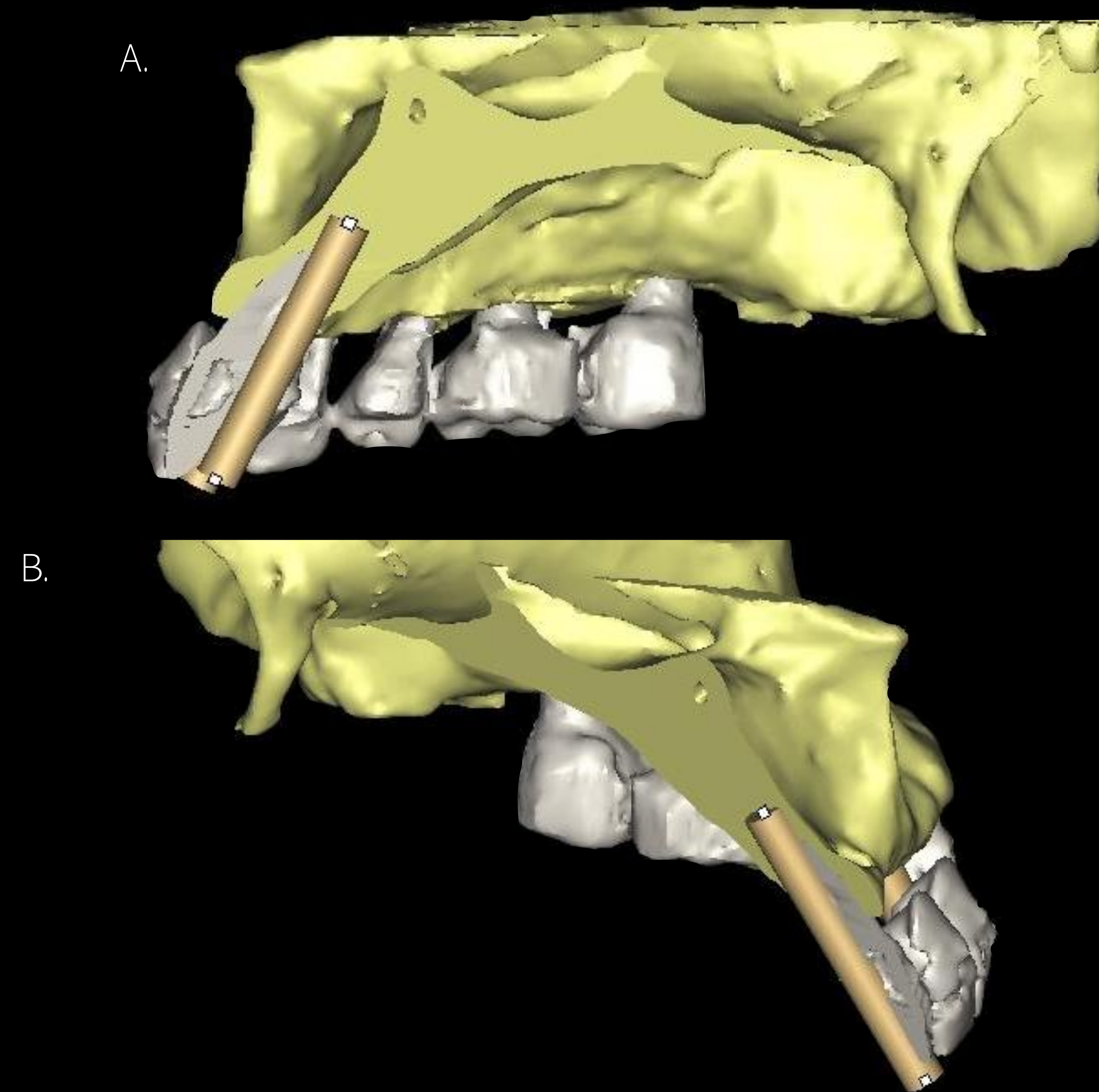


Figure 3. Digital diagnostic. A. segmented Lateral view, right side B. Segmented lateral view left side.

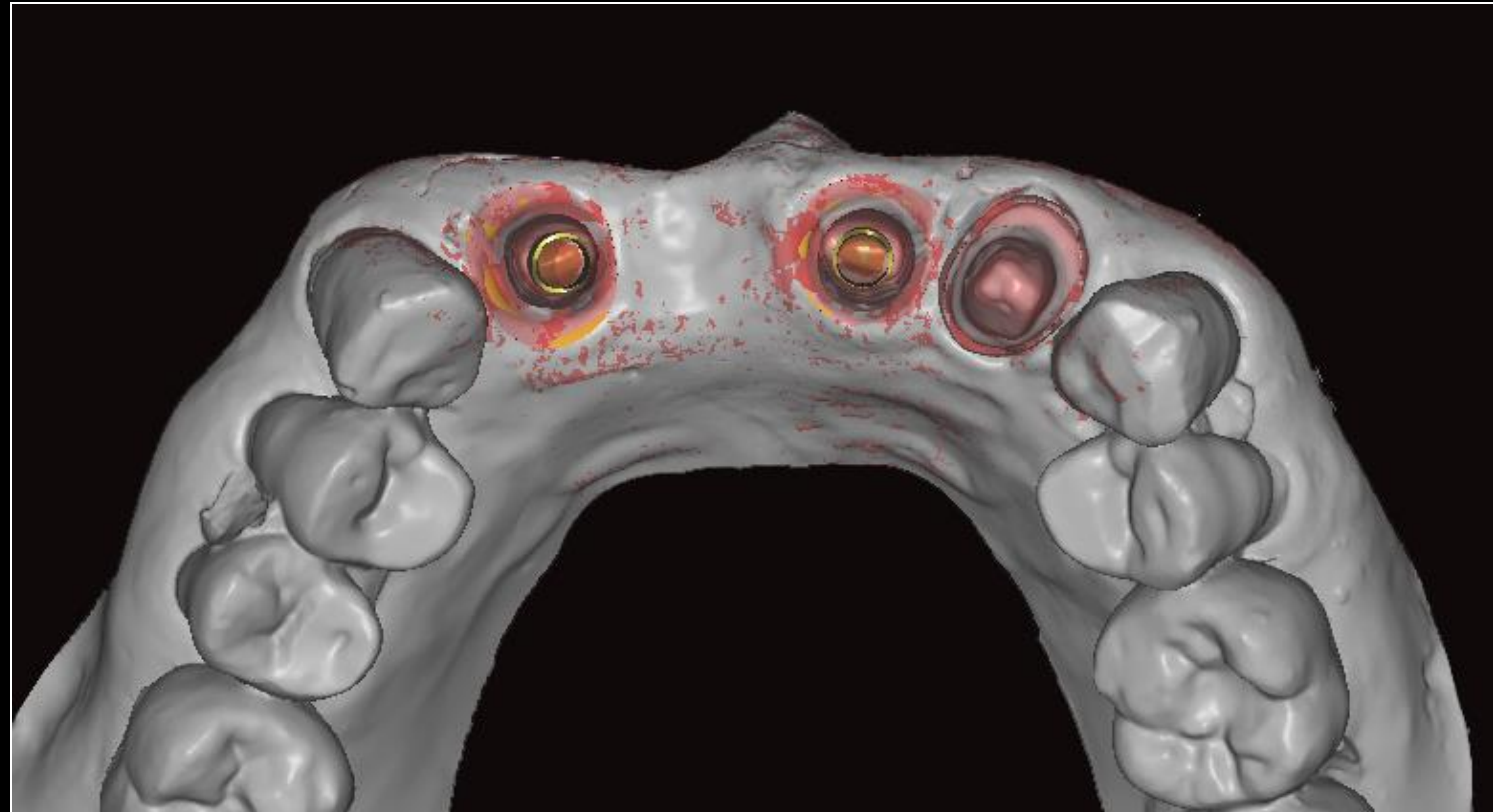


Figure 4. Digital planning A Oclusal view of the implant planning.

SURGICAL PROTOCOL.

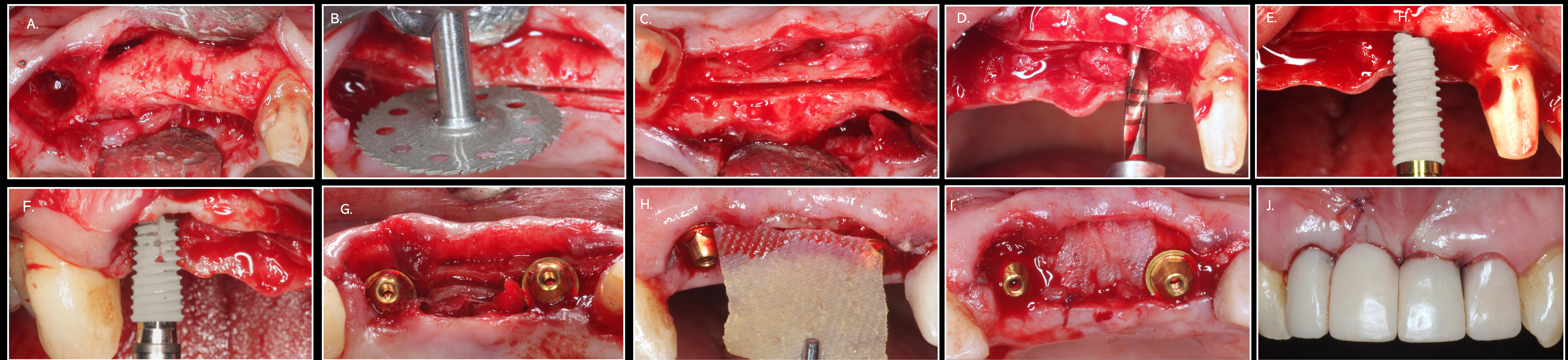


Figure 5. Surgical protocol. A. Open the flap. B. Division of the crest with a diamond disc. C. Division crest D. Milling protocol E. Implant placement number 12 , F. Implant placement number 21 G. Multiunit placement H. Dermic matrix graft I. Dermic matrix graft placement J. Immediately loading.

POST-OPERATIVE RESULTS



Figure 6. Post-operative Results A. 4 Provisional 4 months after the surgery B. Oclusal view without provisional and papilla formation C . Frontal view without provisional and papilla form

PROSTHETIC PROTOCOL.

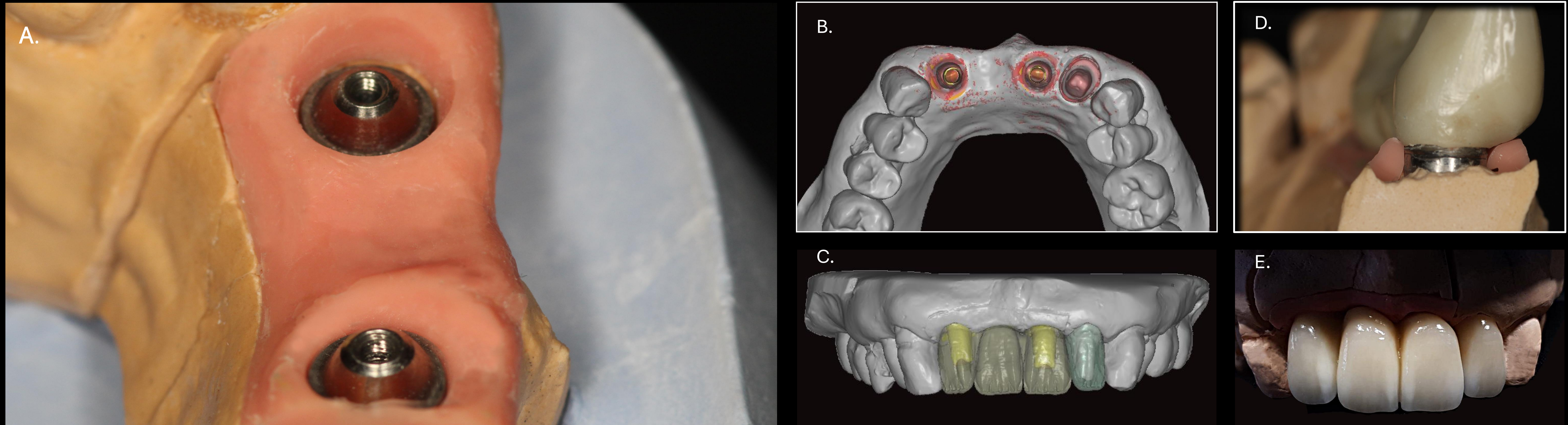


Figure 7. Laboratory protocol A. Model cast with multi unit analog and profile emergency B .scanning model cast C . Digital design zirconia cut-back D. lateral view with a proper profile emergency design. E. Final restoration.

RESULTS.



Figure 8. final restoration A. titanium milled abutment B. Cemented restauration.