

Management of Soft and Hard Tissue Complication via Implant Placement Using Surgical Techniques and Prostho Perio Restorative Procedures in Esthetic Zone: A Major Junction

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INTRODUCTION

In the field of clinical periodontics, achieving an optimal outcome with implant-supported crowns in the esthetic zone is a highly challenging yet potentially gratifying endeavor. The occurrence of esthetic complications associated with dental implants in this area can significantly diminish patients' quality of life and their overall perception of implant therapy.

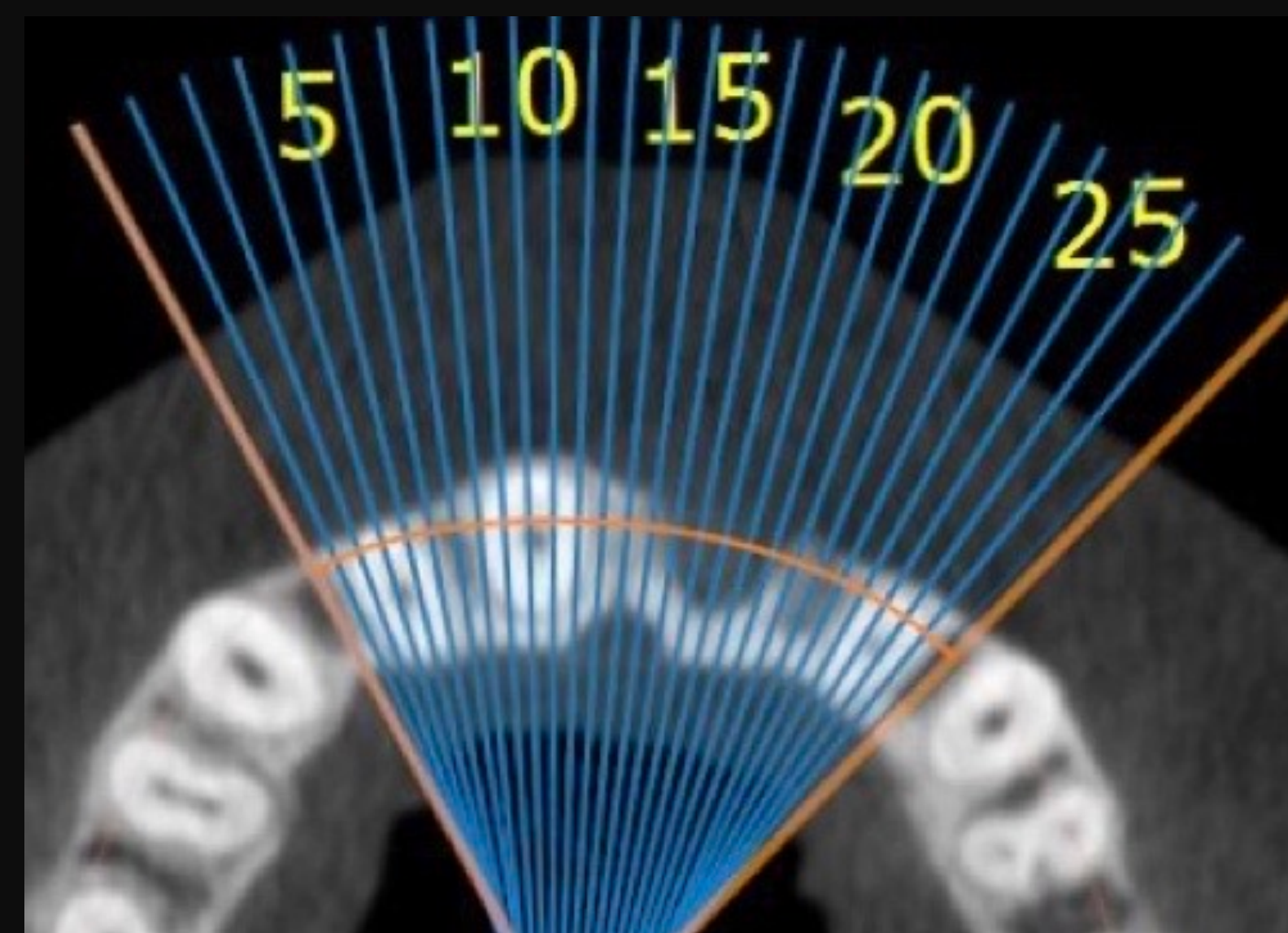
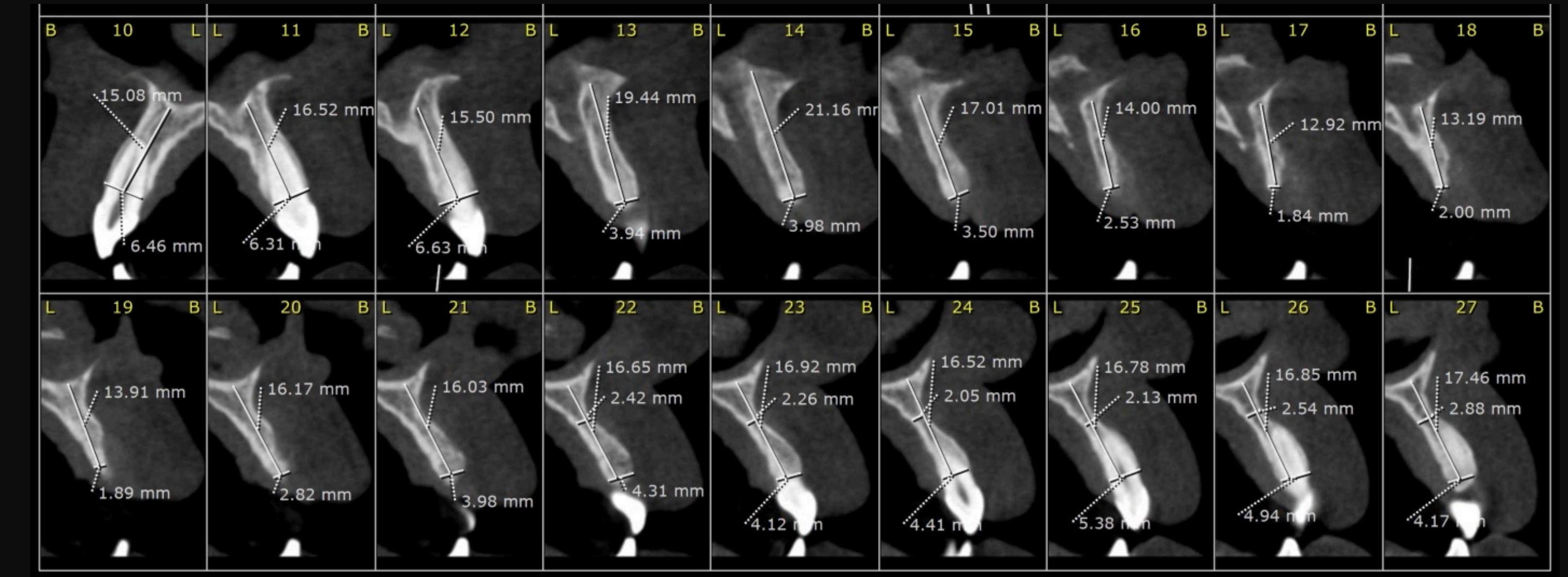


METHODS

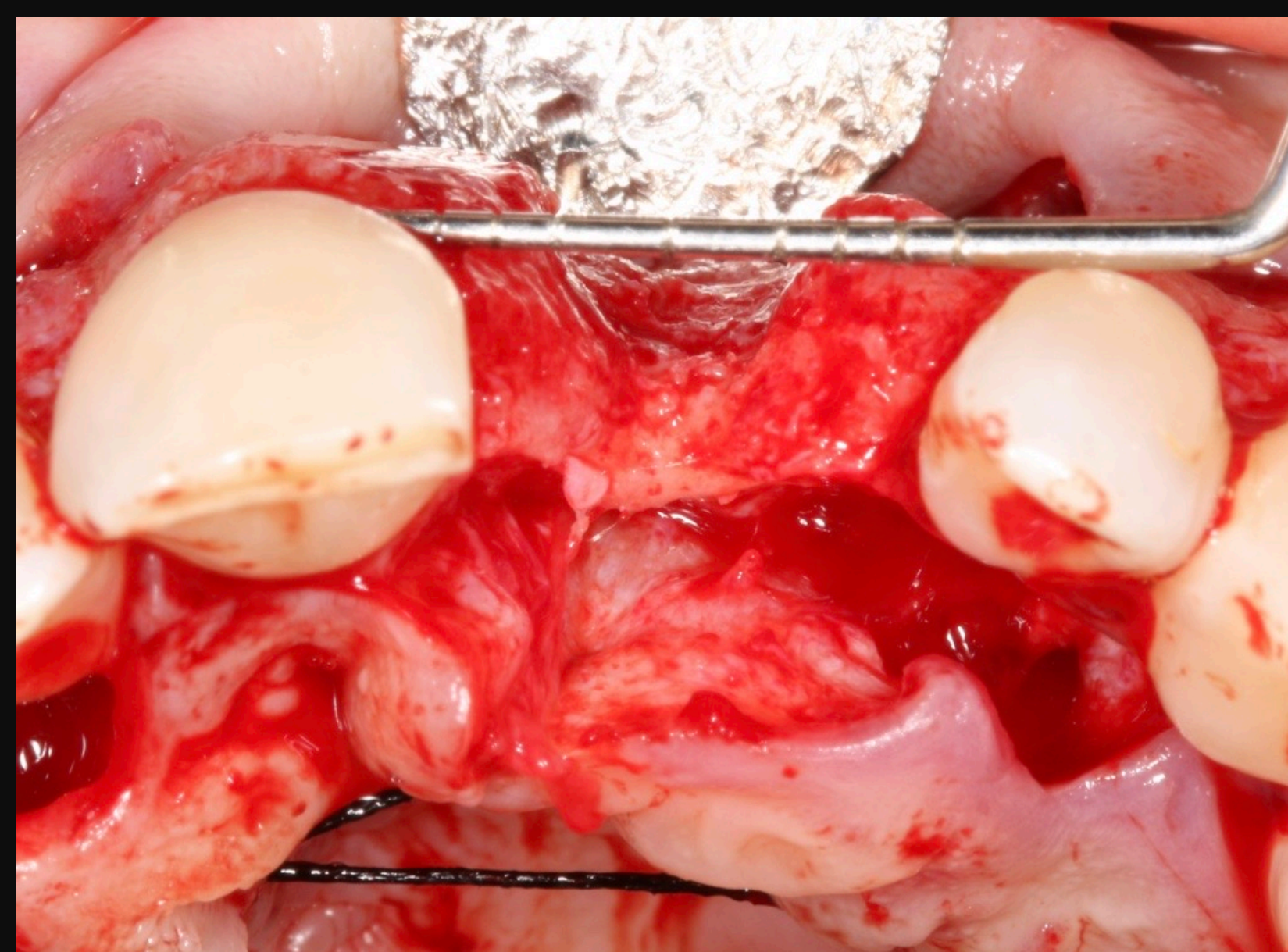
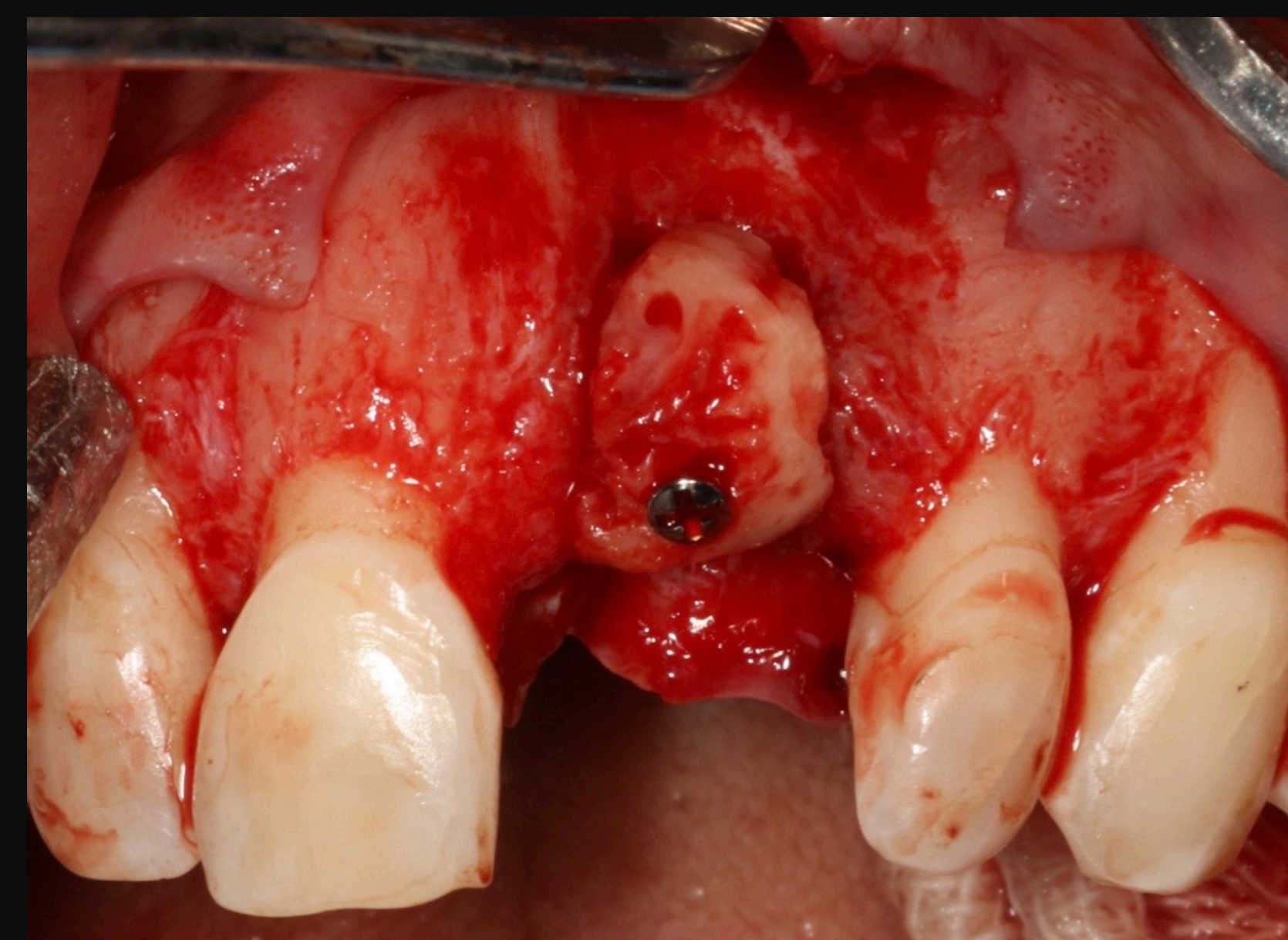
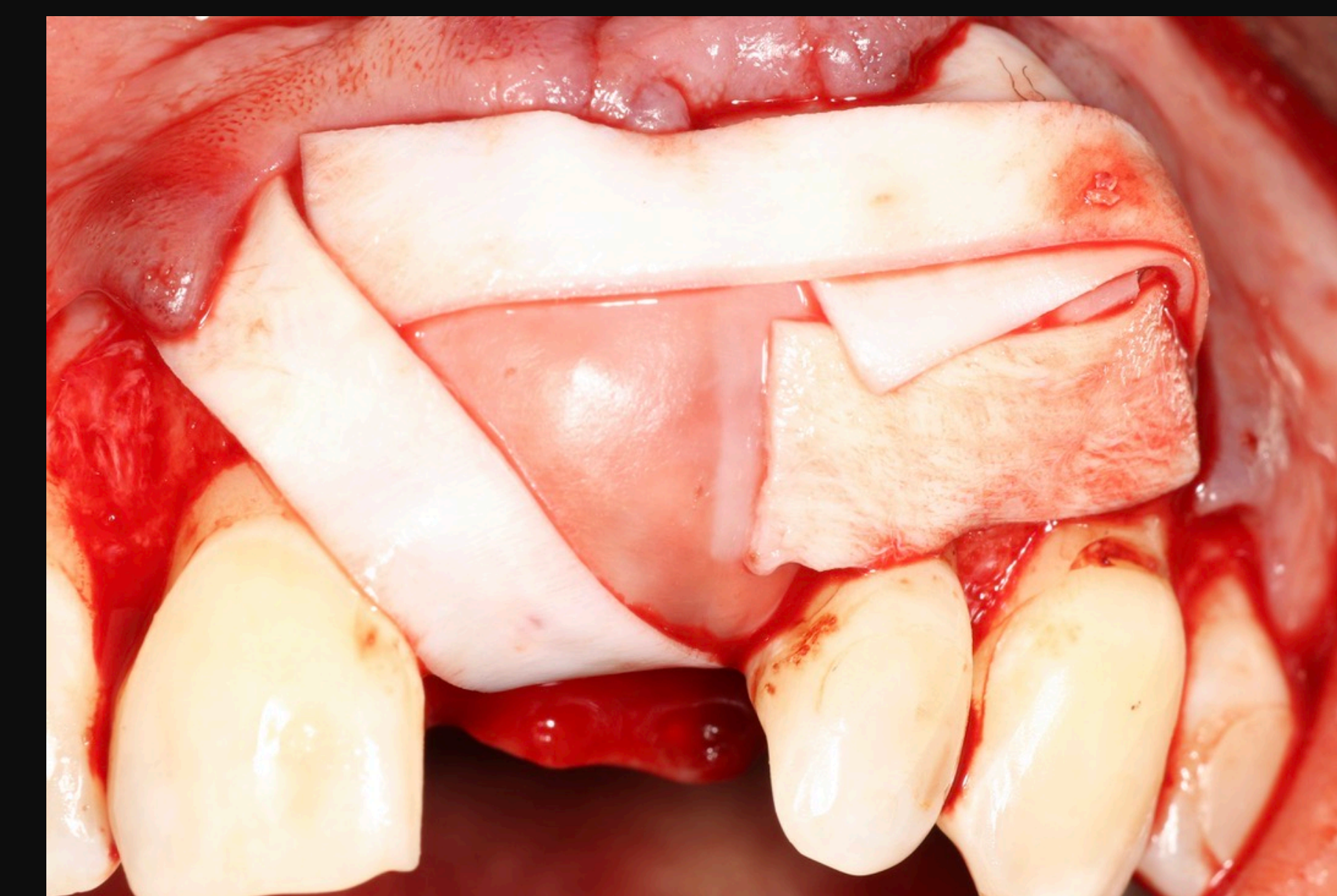
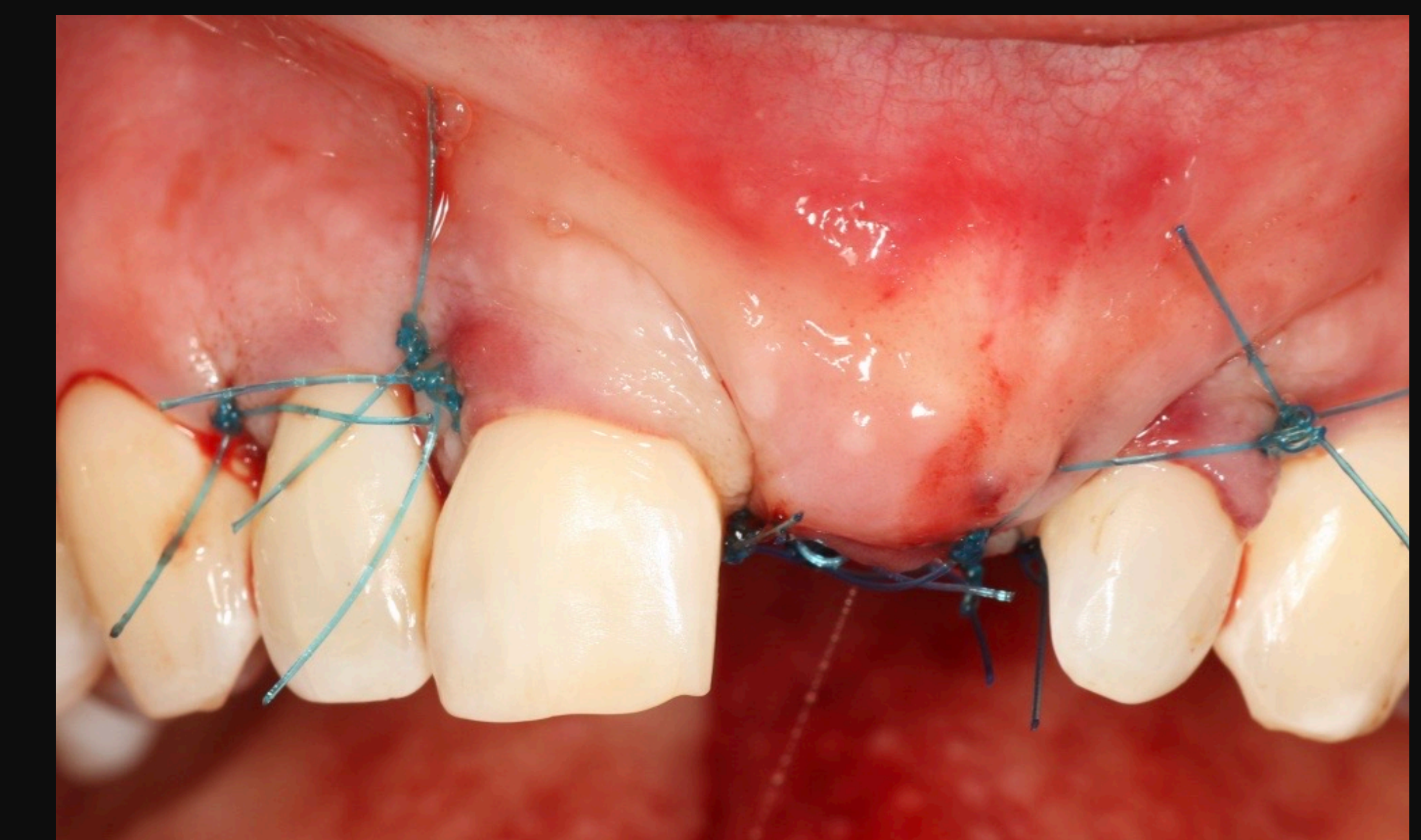
The patient presented with a missing tooth in the aesthetic zone, accompanied by insufficient soft and hard tissue in the area. To address the hard tissue deficiency, a block graft with guided bone regeneration (GBR) was performed. However, due to the COVID-19 pandemic, the patient arrived late and experienced exposure. Fortunately, the exposure was managed without the need for graft extraction. Once the conditions were deemed suitable, a guided implant was placed. However, the buccal convexity of the soft tissue in the area posed a challenge. To address this issue, a rotated pedicle palatal connective tissue graft was performed, resulting in optimal aesthetic outcomes.



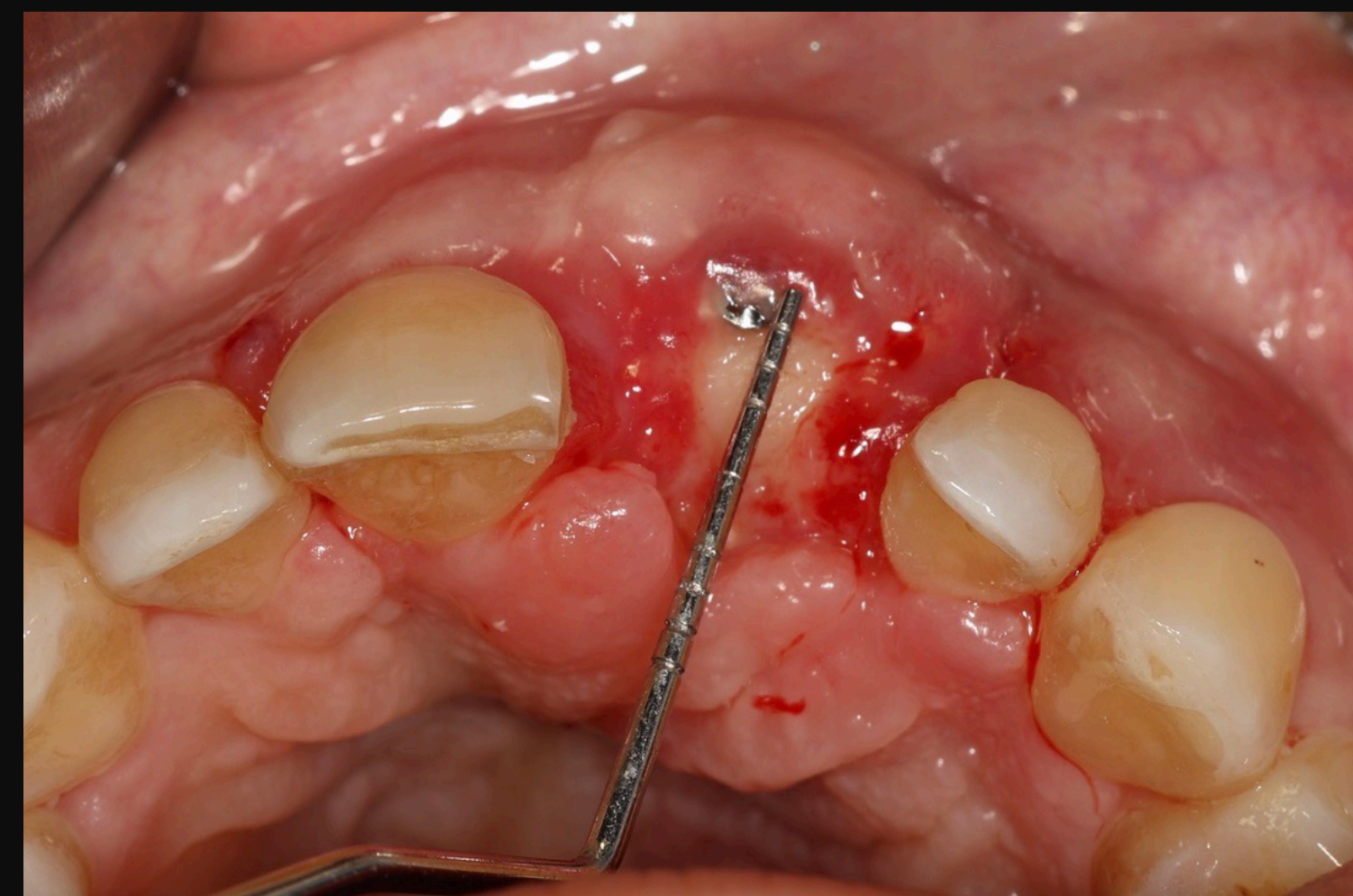
The patient with a missing tooth in the aesthetic zone



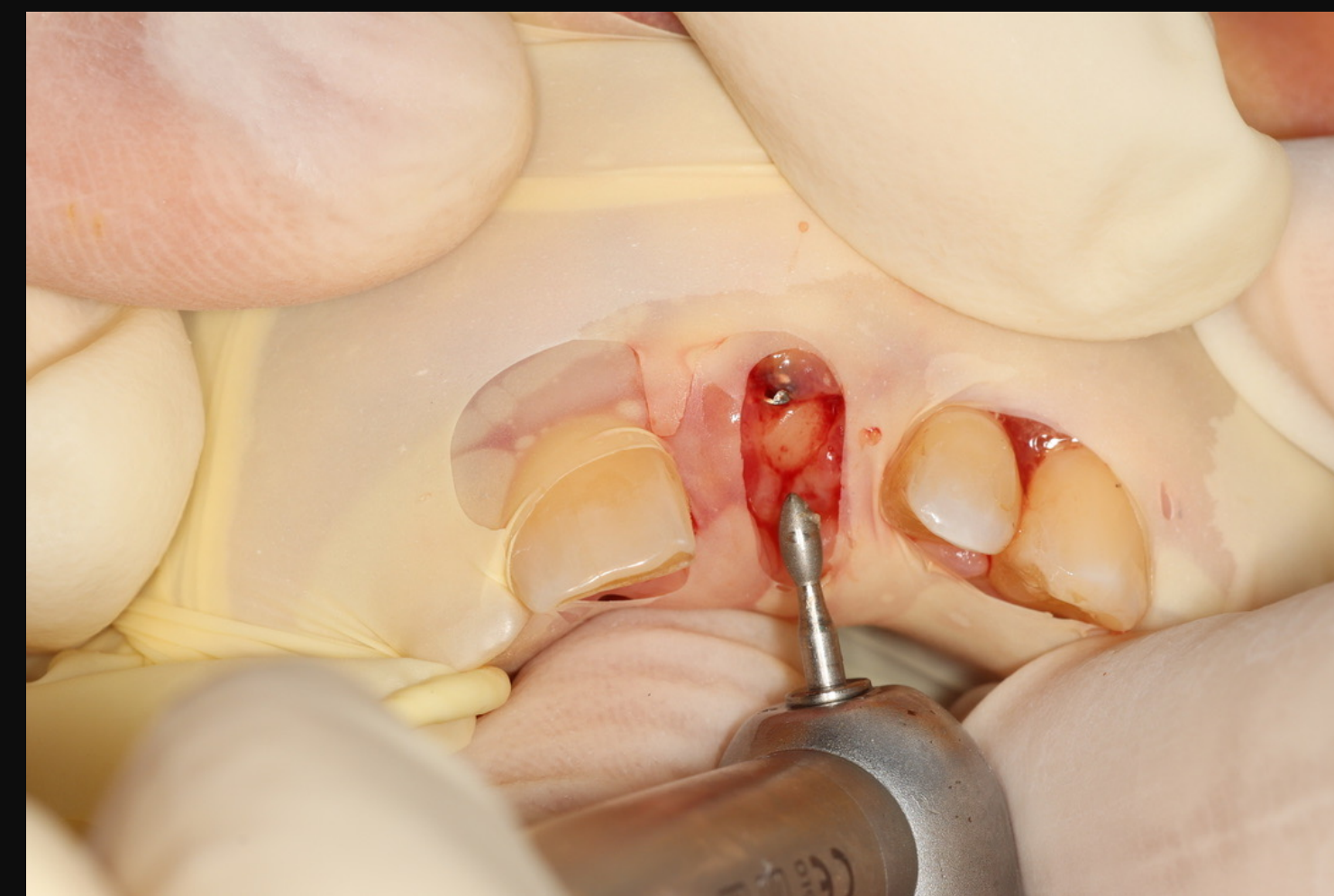
preoperative clinical and radiographic view showing severe atrophic anterior ridge of maxilla



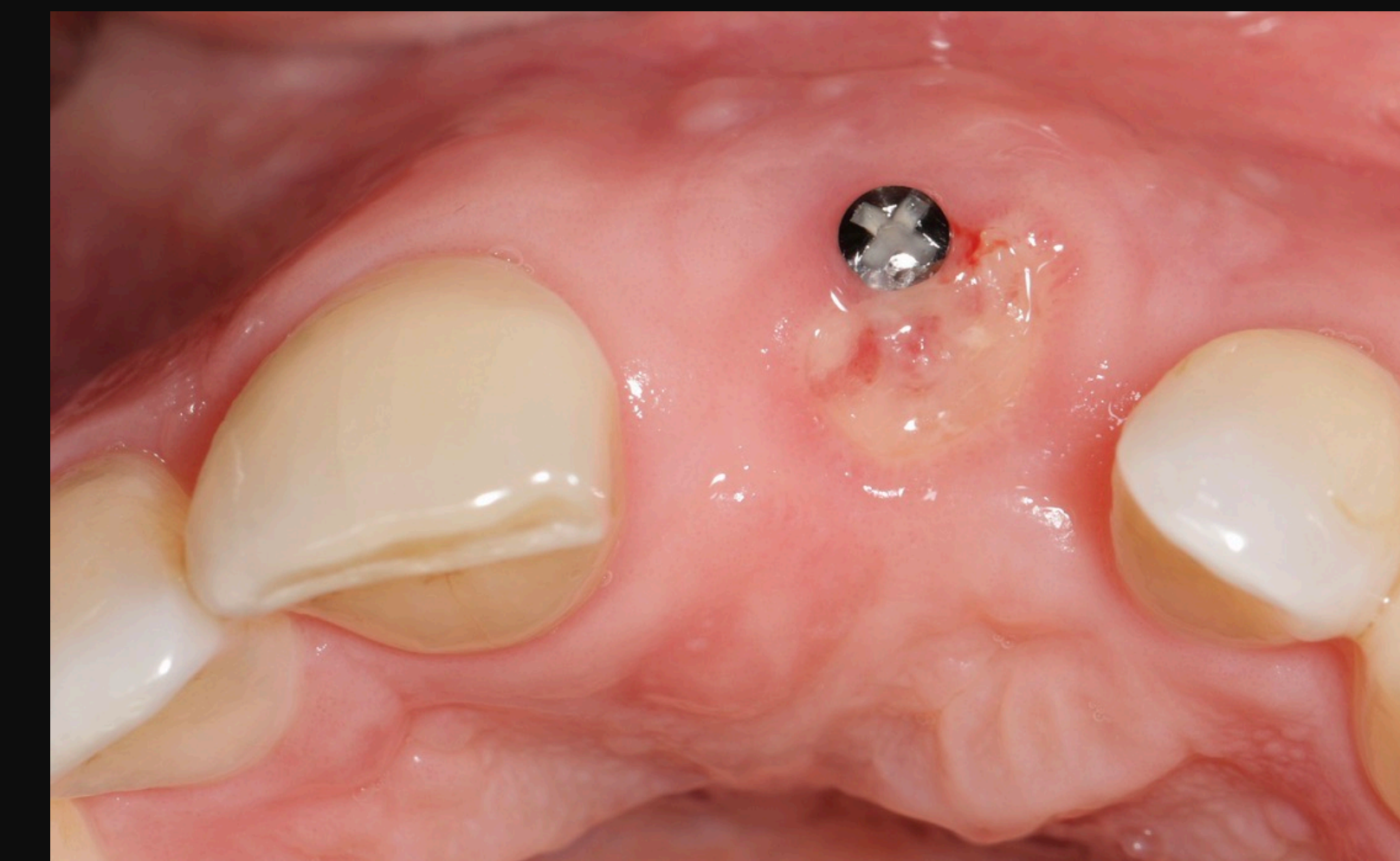
Autogenous semilunar shape bone block was harvested from fresh extraction of third molar socket with GBR



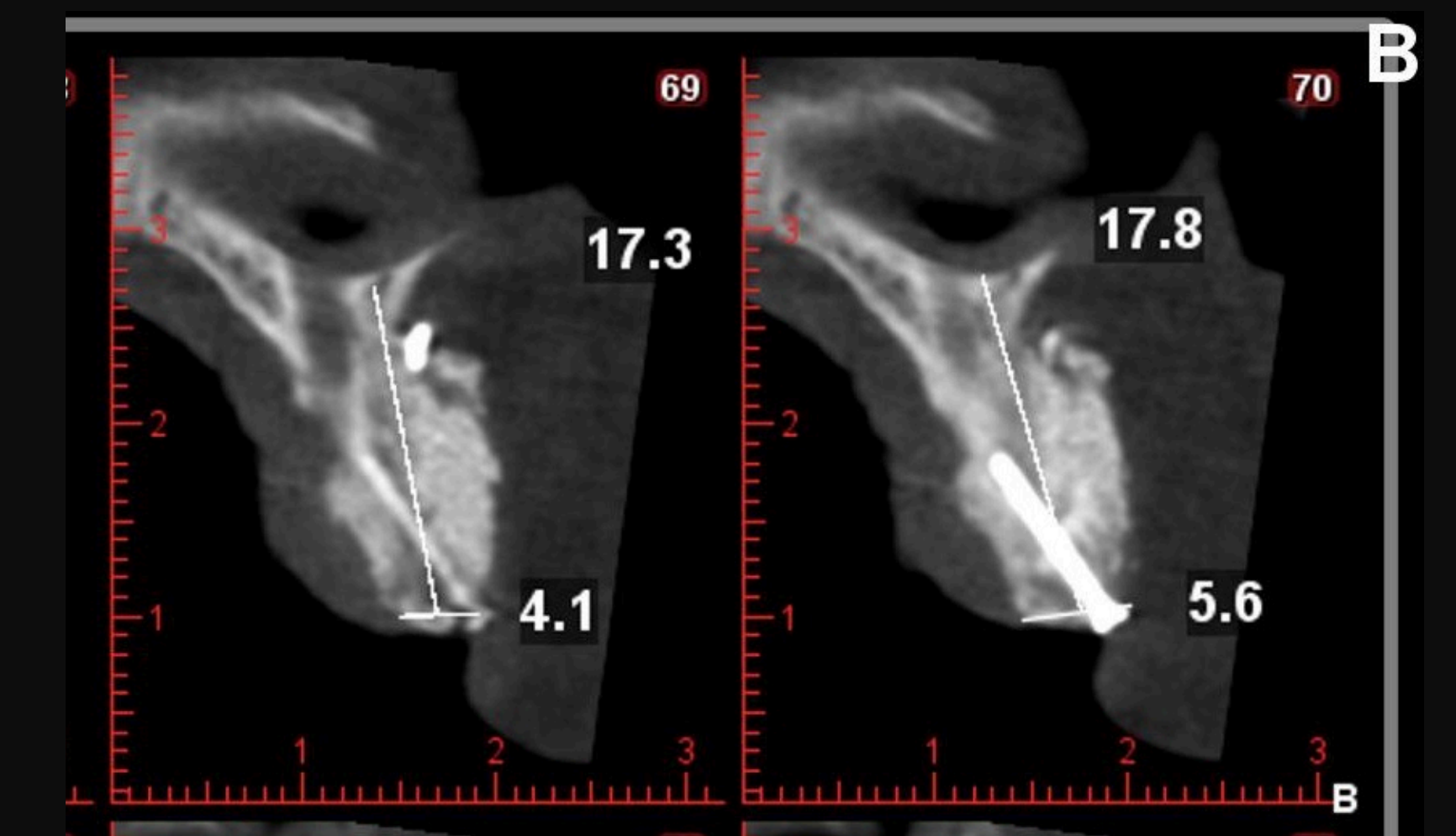
Early Bone Exposure(3 weeks after surgery)



the exposure was managed without the need for graft extraction



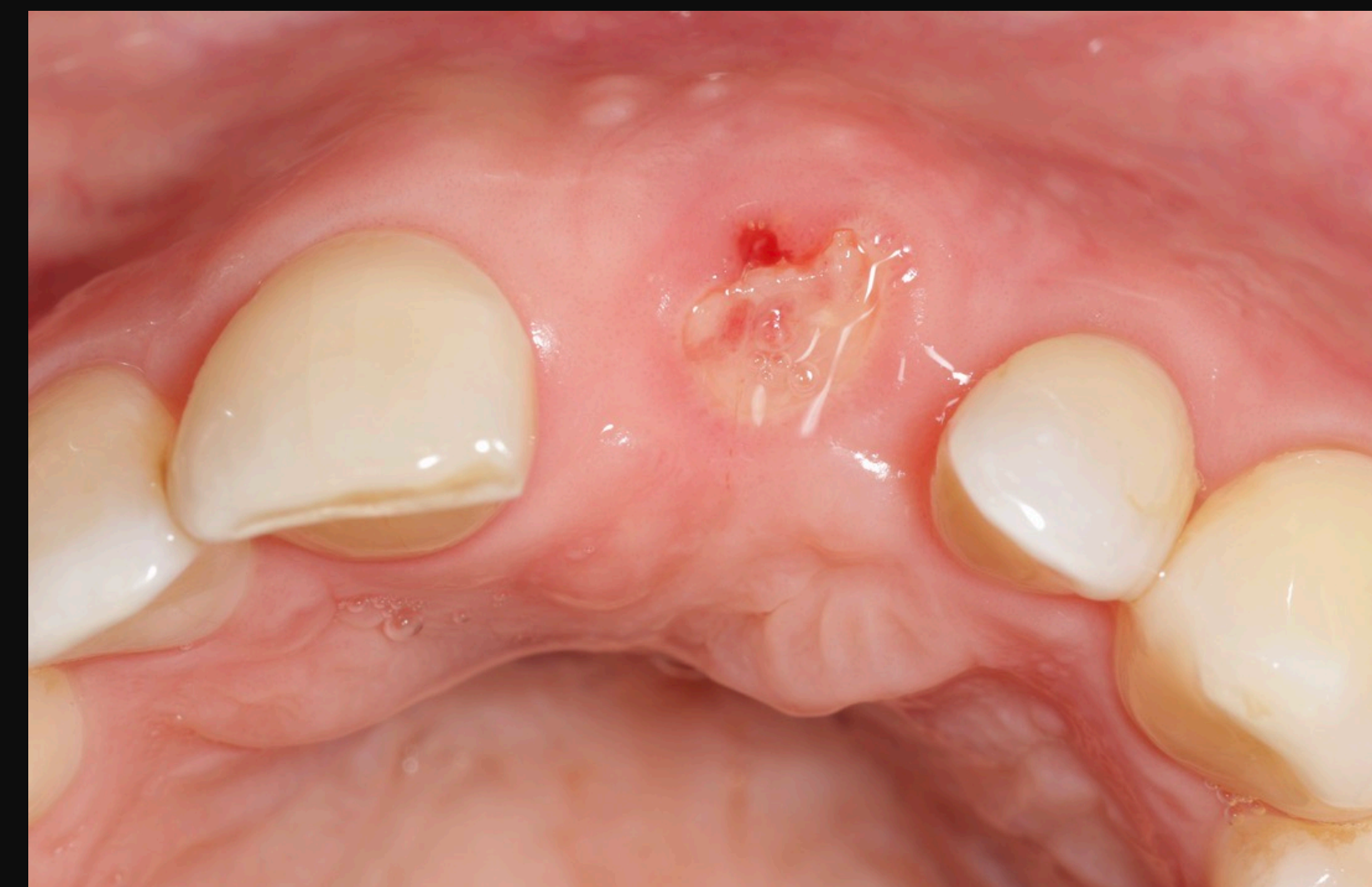
Newly formed tissue



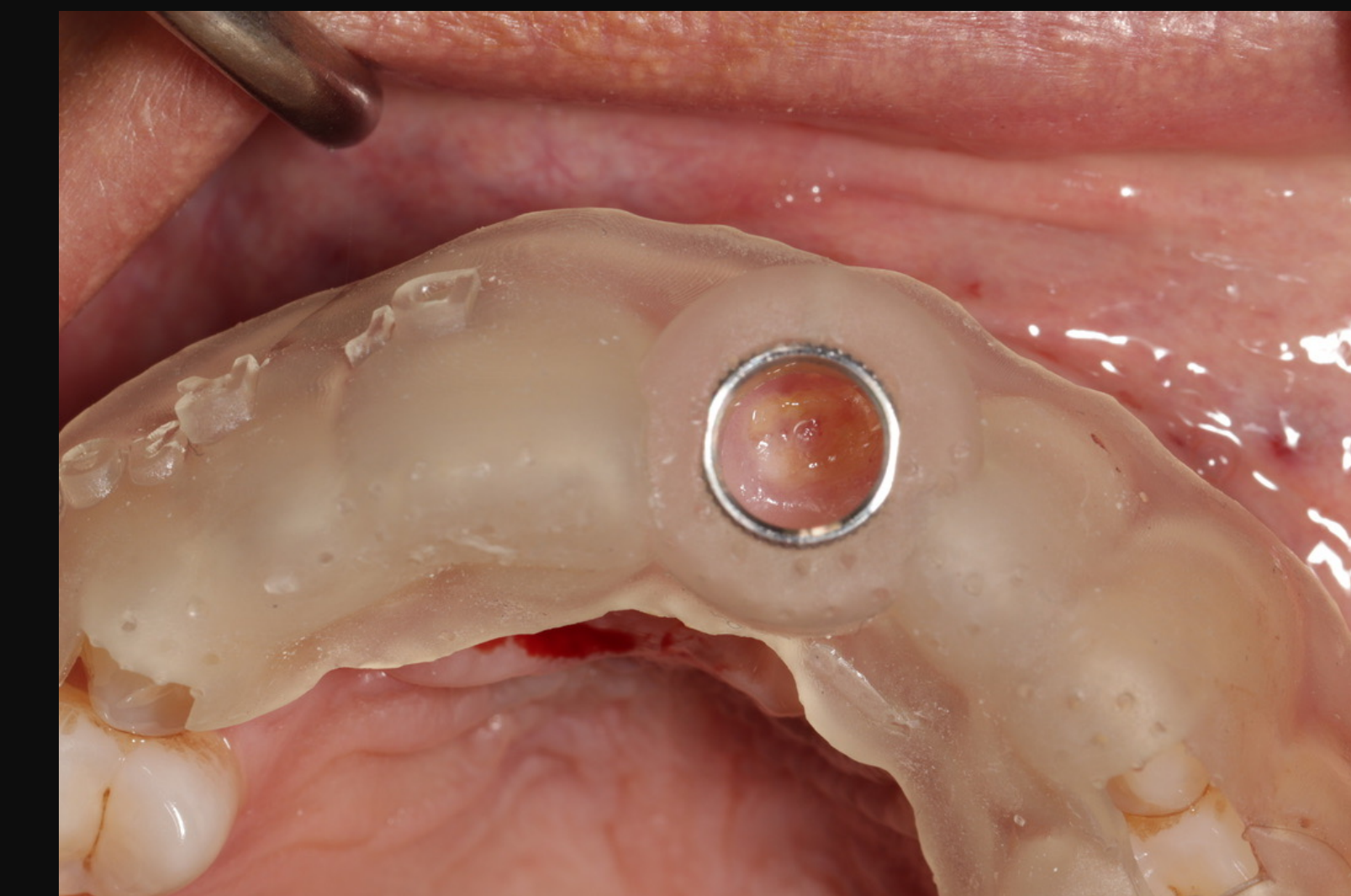
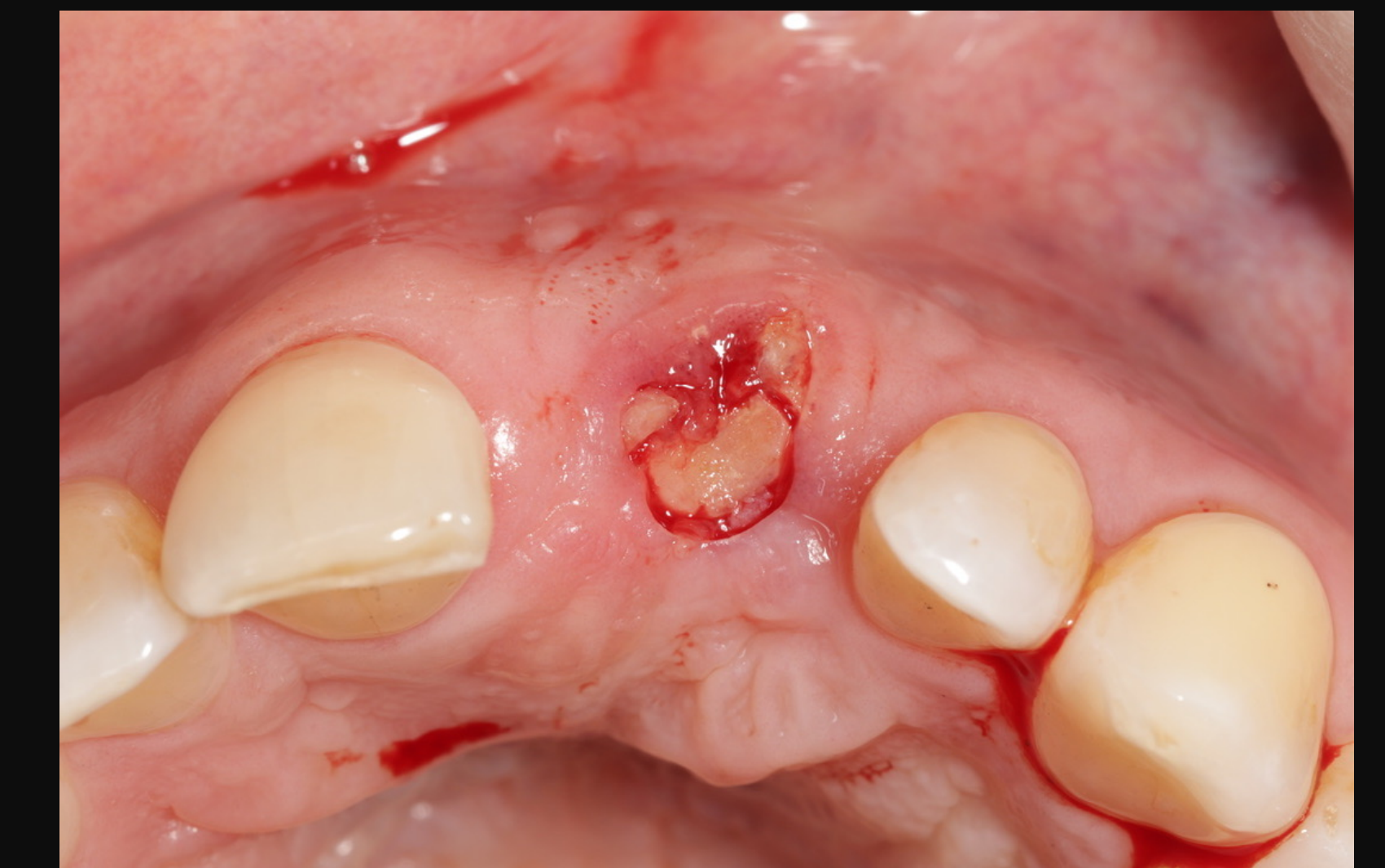
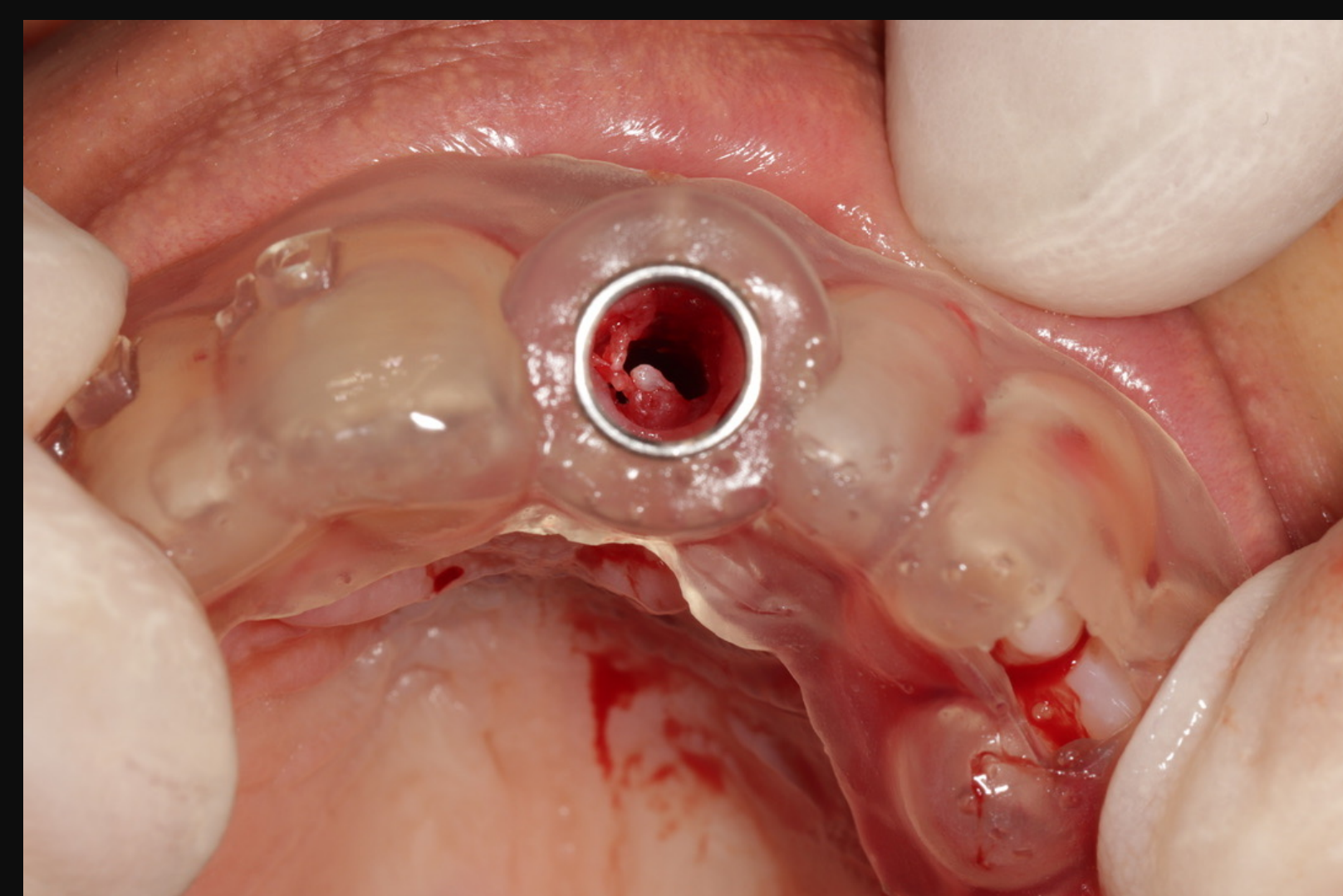
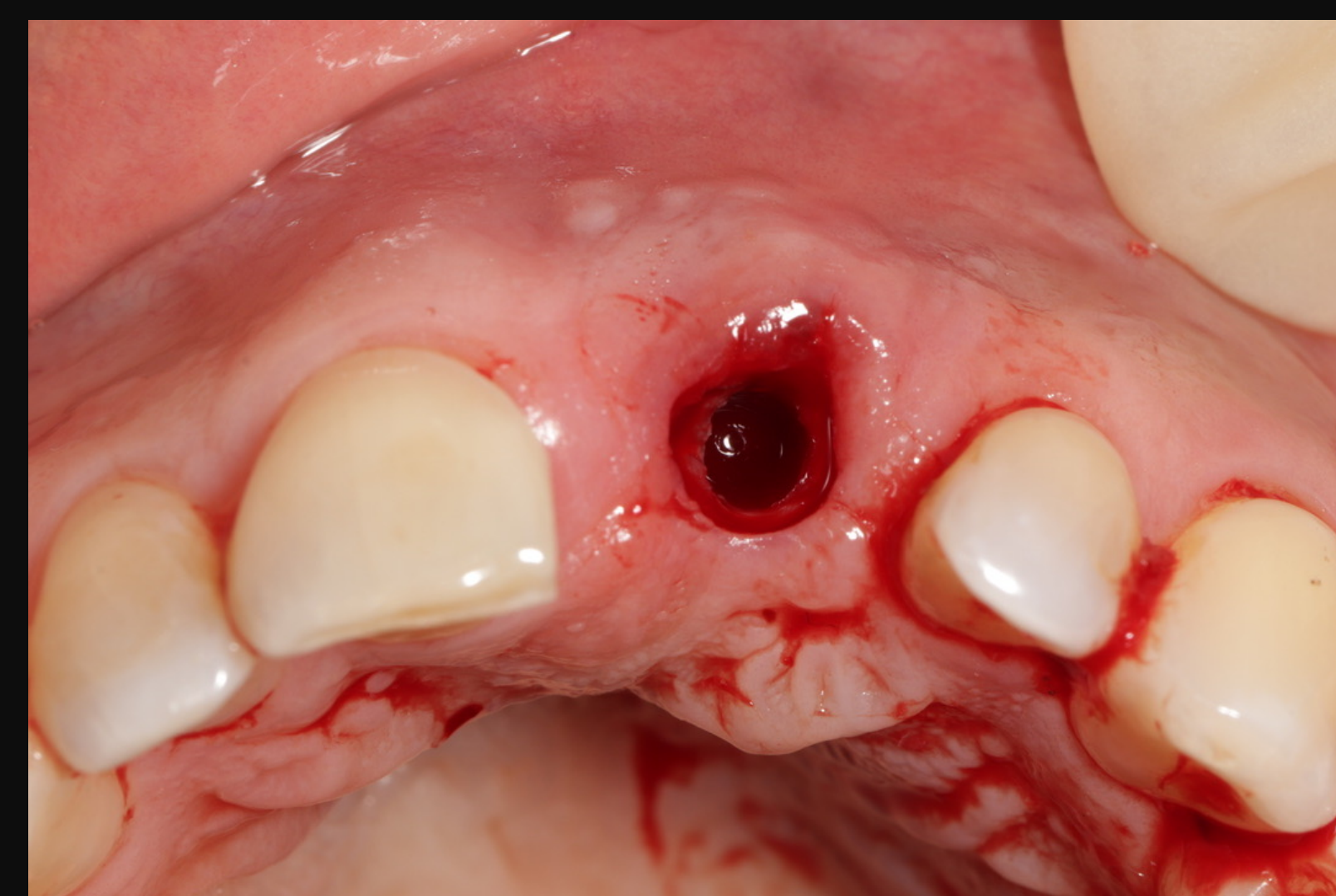
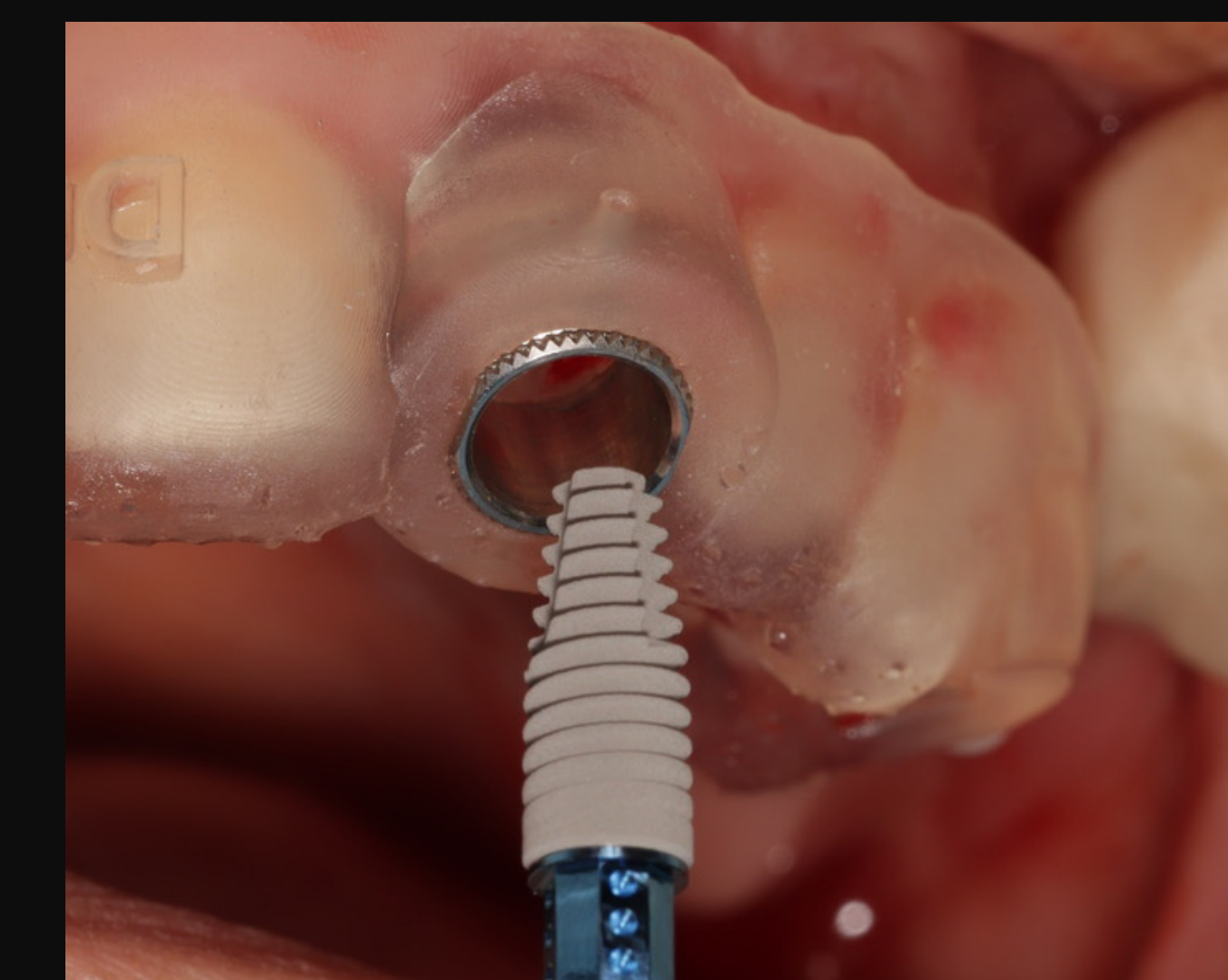
CBCT after 5 months



Ti- screw Removing (newly formed tissue)



guided implant was placed.

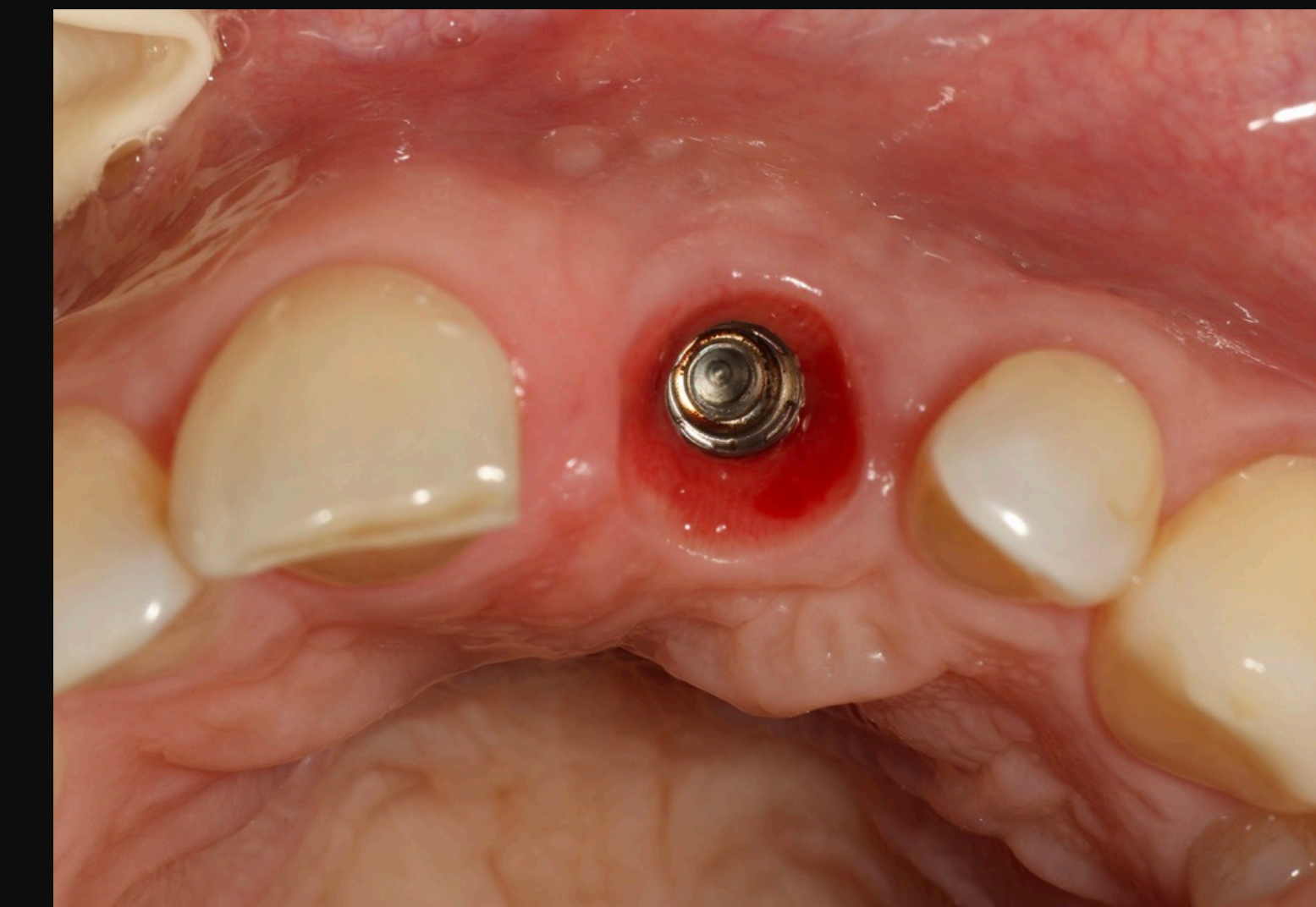


guided implant was placed.

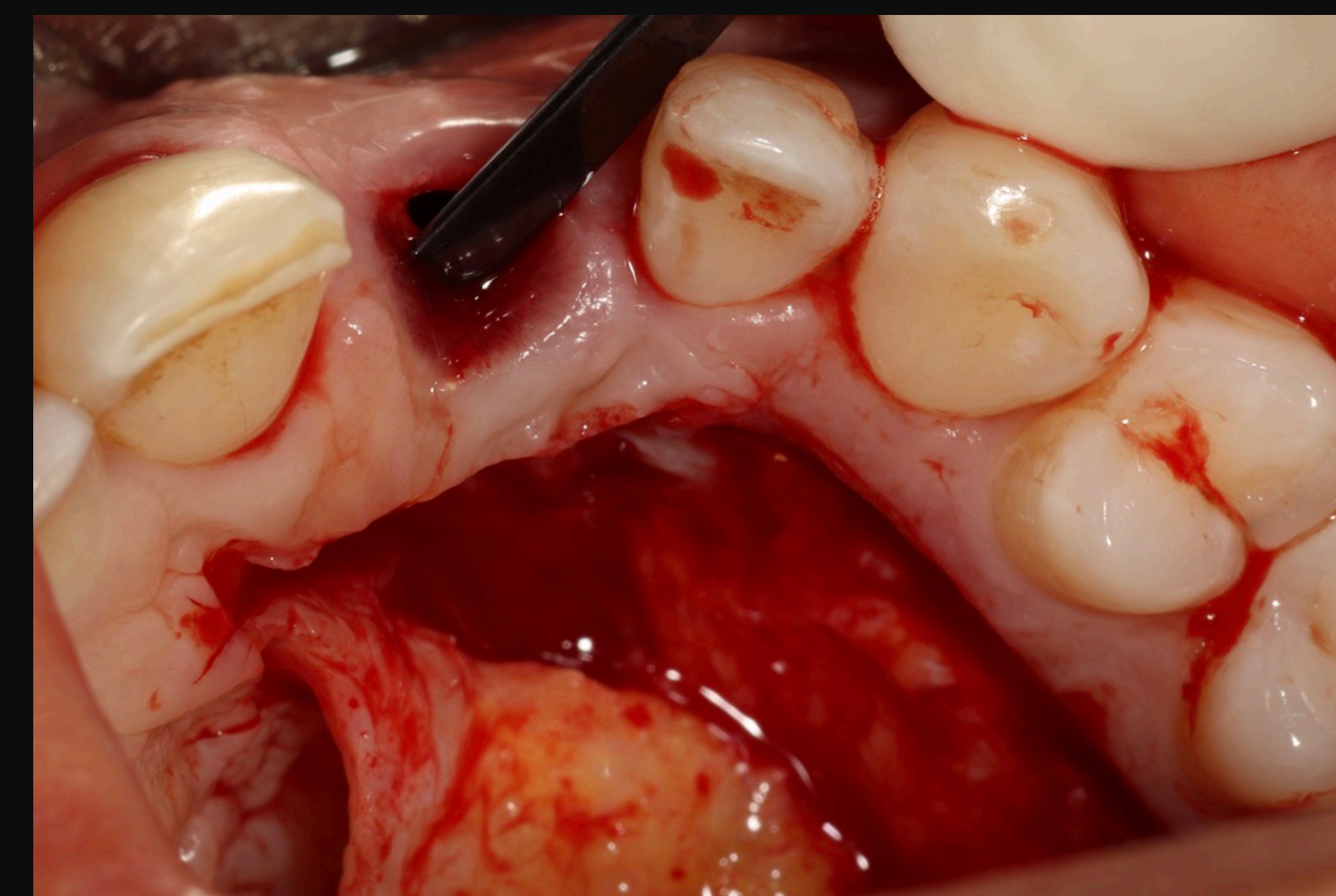
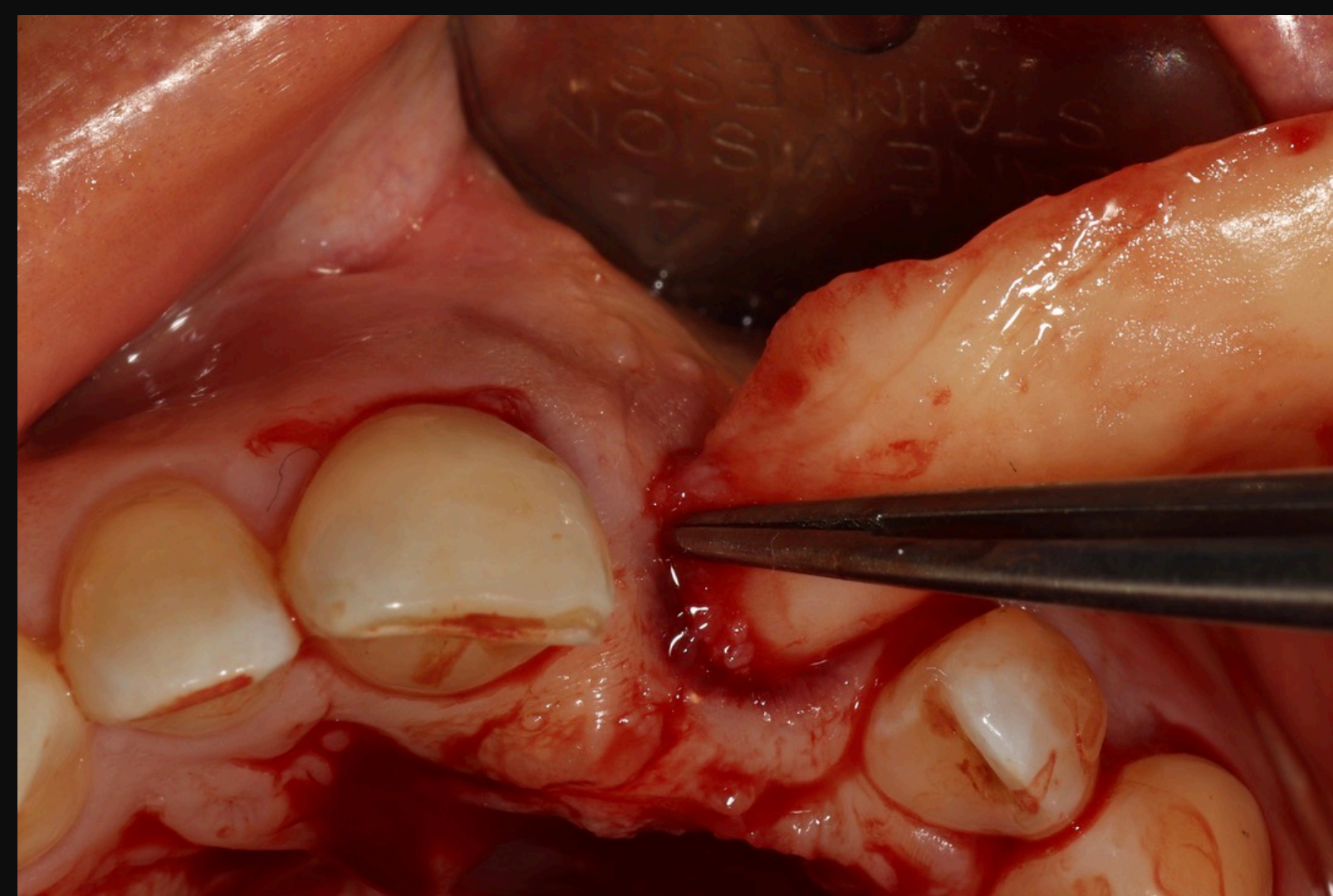
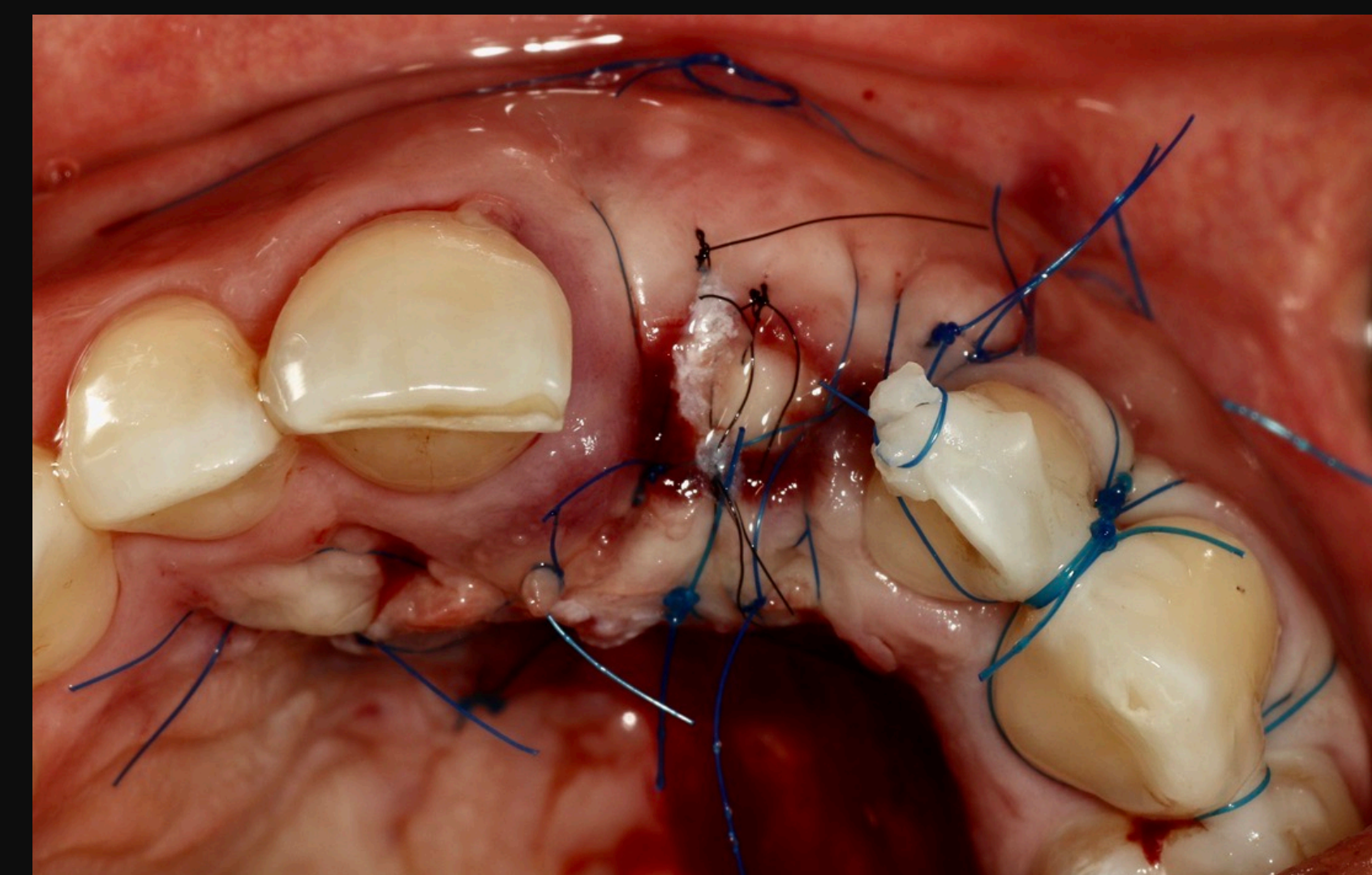




The buccal convexity of the soft tissue in the area posed a challenge



Autogenous soft tissue grafts



soft tissue contour
reconstruction.



Provisional crown

A rotated pedicle palatal connective tissue graft was performed,



Final clinical view. Note to facial
convexity reconstruction



X-ray

Creating dental papilla and gingival contour and final crown shape by Provisional Crow



Before treatment



Prosthetic rehabilitation was successful and patient received type 1 fixed prosthesis.



RESULTS

Following the second stage surgery, the patient was provided with a temporary crown and subsequently underwent restorative treatments once their condition had stabilized. The anterior teeth were laminated and an implant crown was placed, effectively resolving the patient's aesthetic concern.

CONCLUSION

In this particular instance, the aesthetic issue was addressed through the strategic placement of implants and the implementation of both hard and soft tissue grafting techniques. Following the hard tissue graft, the patient experienced a complication, which ultimately resulted in a favorable outcome.

REFERENCES

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- 2) Harvey BV. Optimizing the esthetic potential of implant restorations through the use of immediate implants with immediate provisionals. J Periodontol. 2007 Apr;78(4):770-6. doi: 10.1902/jop.2007.060278. PMID: 17397328.