

Natural tooth as surgical guide for immediate implant placement: Case report.



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Introduction

Immediate implants have several advantages: less quantity of surgeries, shorter time treatment, less bone loss. However, the technique has certain complications and must be contemplated the tooth morphology, the implant angulation, primary stability, periodontal phenotype and the management of the soft tissue. The use of additional material and different regeneration techniques must be considered. The immediate load and the prosthetic protocol must be viewed before the procedures and their trans and post-surgical variants.



Fig. 1. Initial situation.



Case Report

A 38-years-old female patient with systemic diagnosis of hypertriglyceridemia under control, was treated in the Advanced Restorative Dentistry postgraduate program. At clinical examination, the second upper right premolar presented just the root with deep pocket probing and root canal treatment, the crown was loosed due deep caries. The prognosis for this tooth was hopeless.

Fig. 2. Periodontal chart.

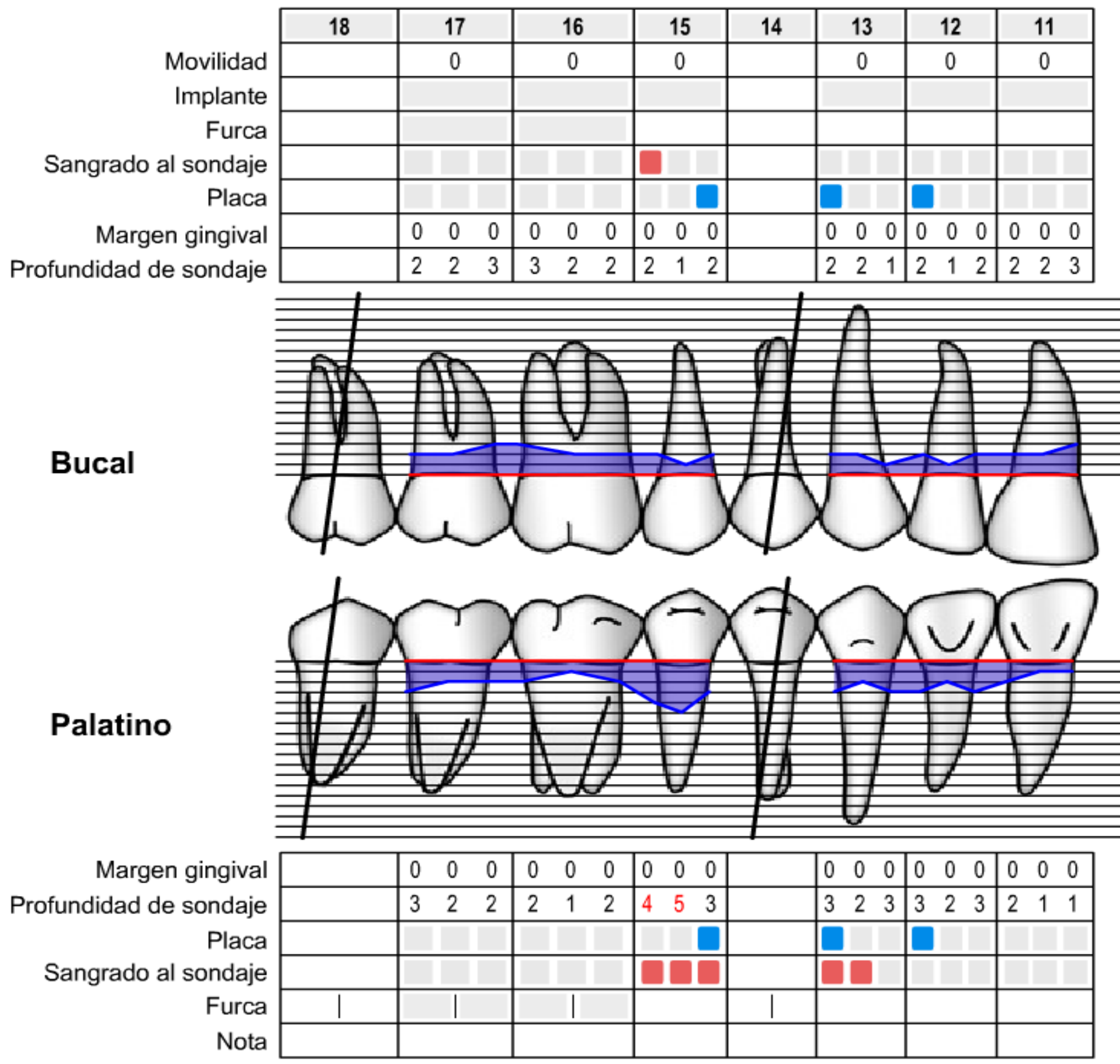


Fig. 3 A. Kan type I.

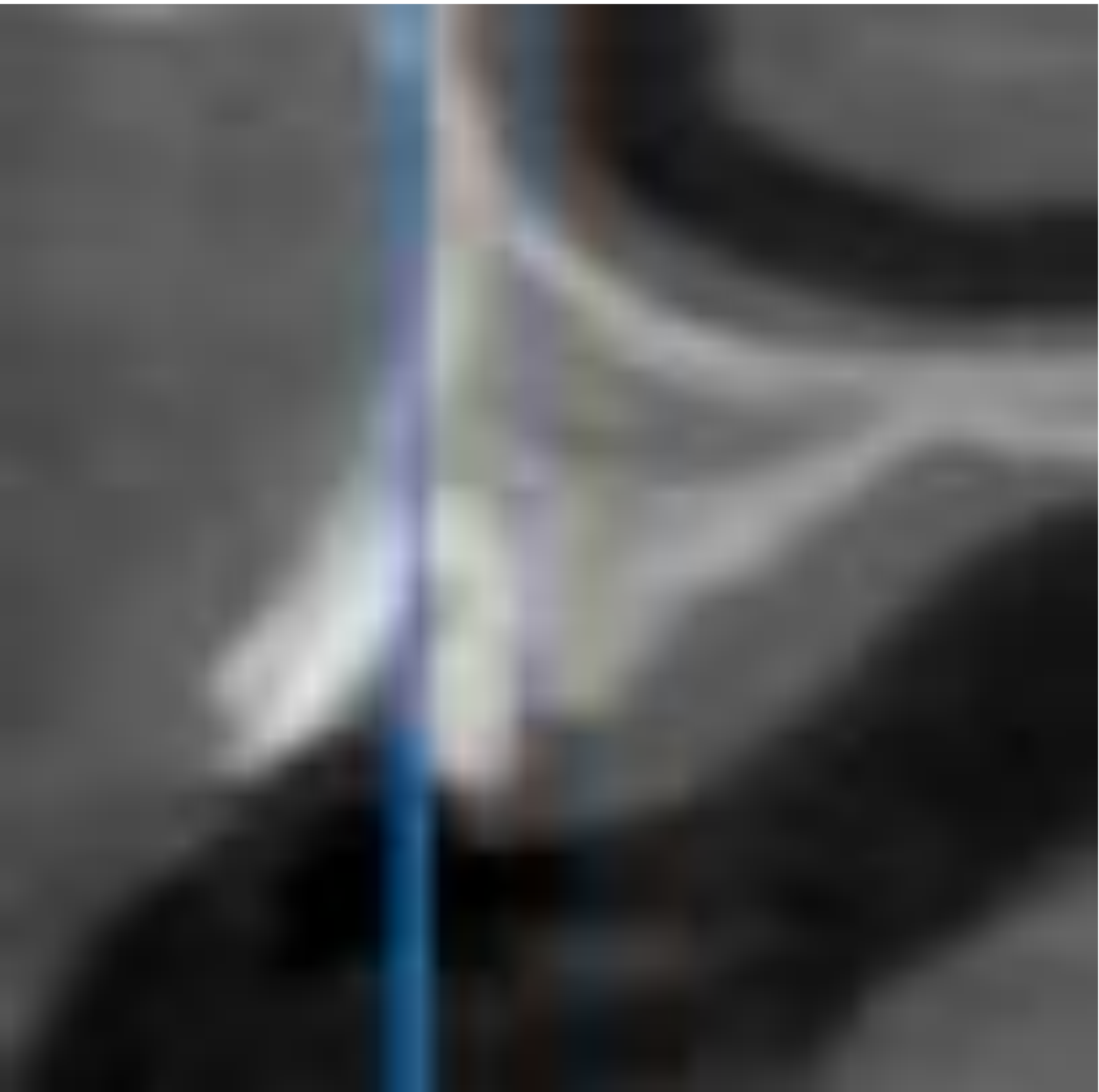


Fig. 4 A.

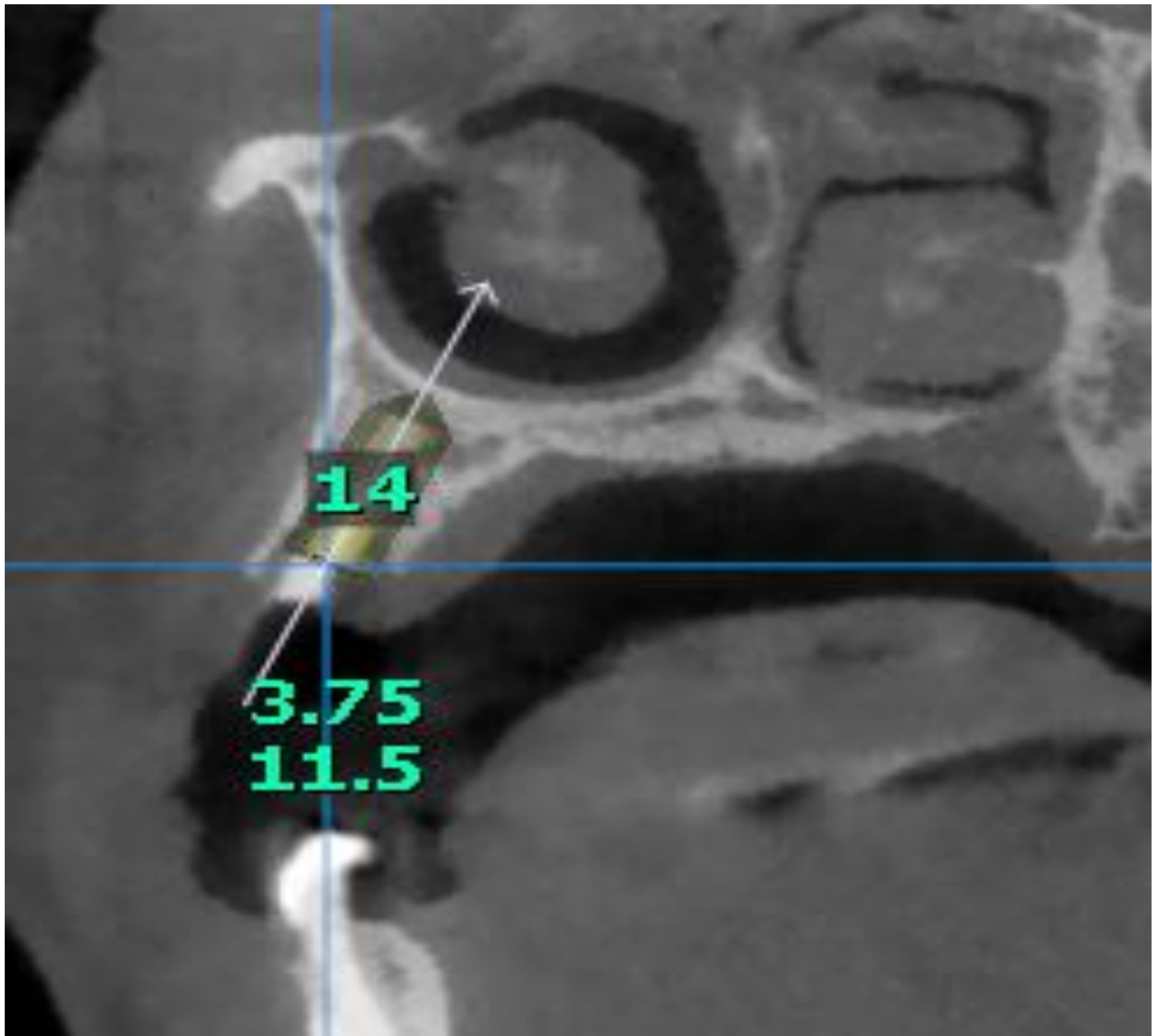


Fig. 4 B.

Fig. 4. Implantologic planning. A, B. Tomography for selection of implant diameter and length. C. Wax-up.

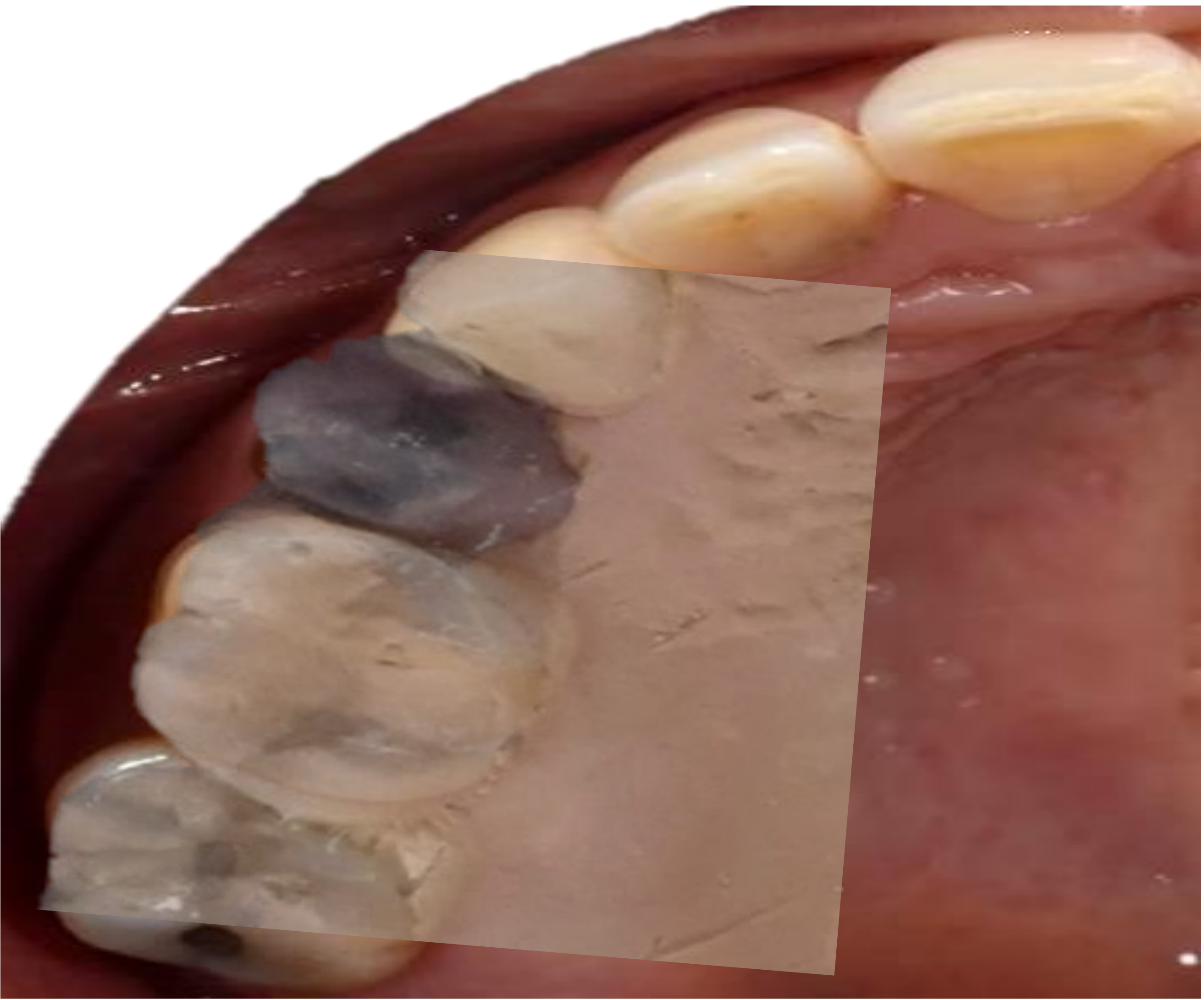


Fig. 4 C.

The treatment for that tooth is the extraction and at the same time to place an implant (C1 3.75x11.5mm) taking into consideration the CT scan and the wax-up.

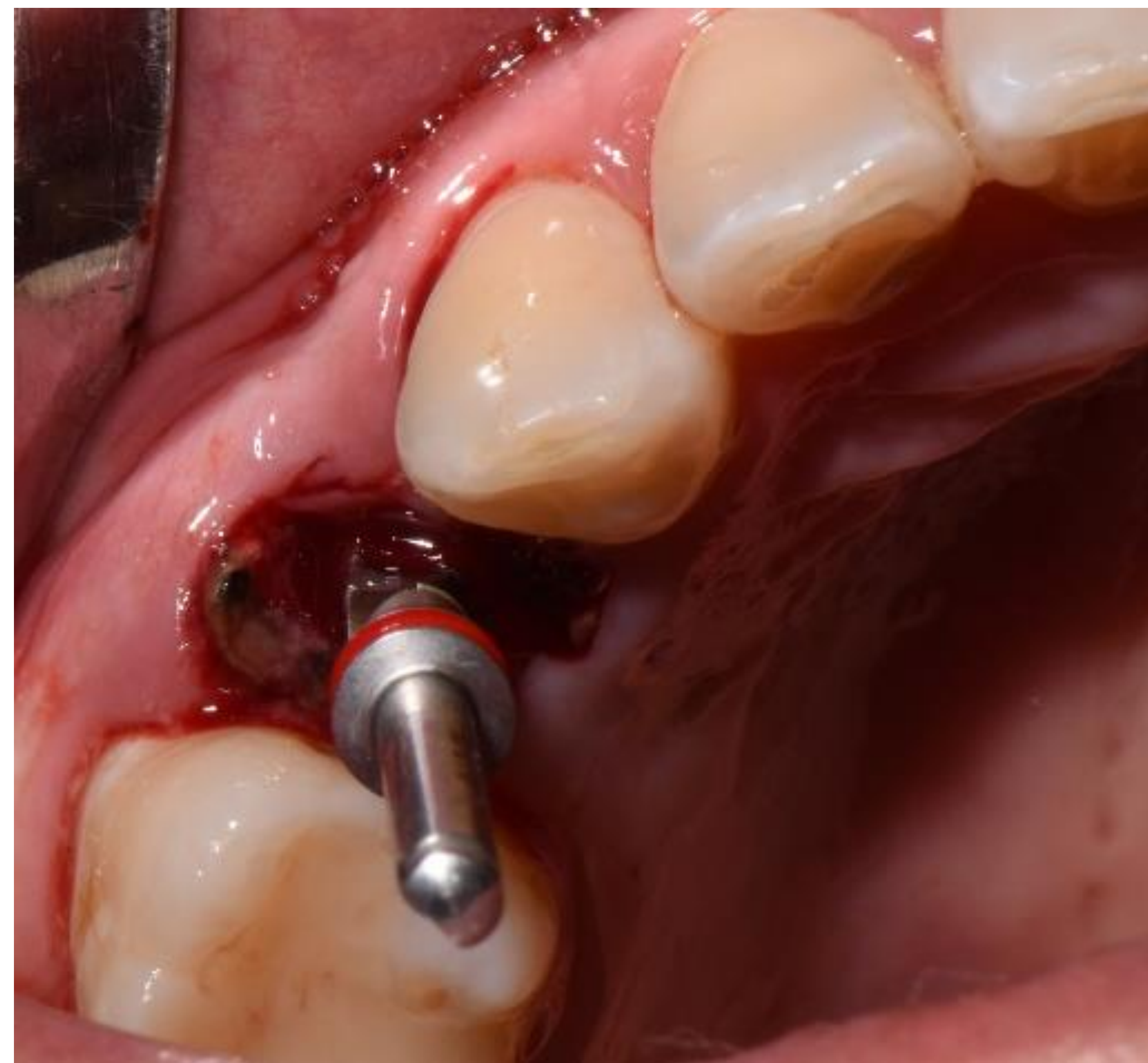
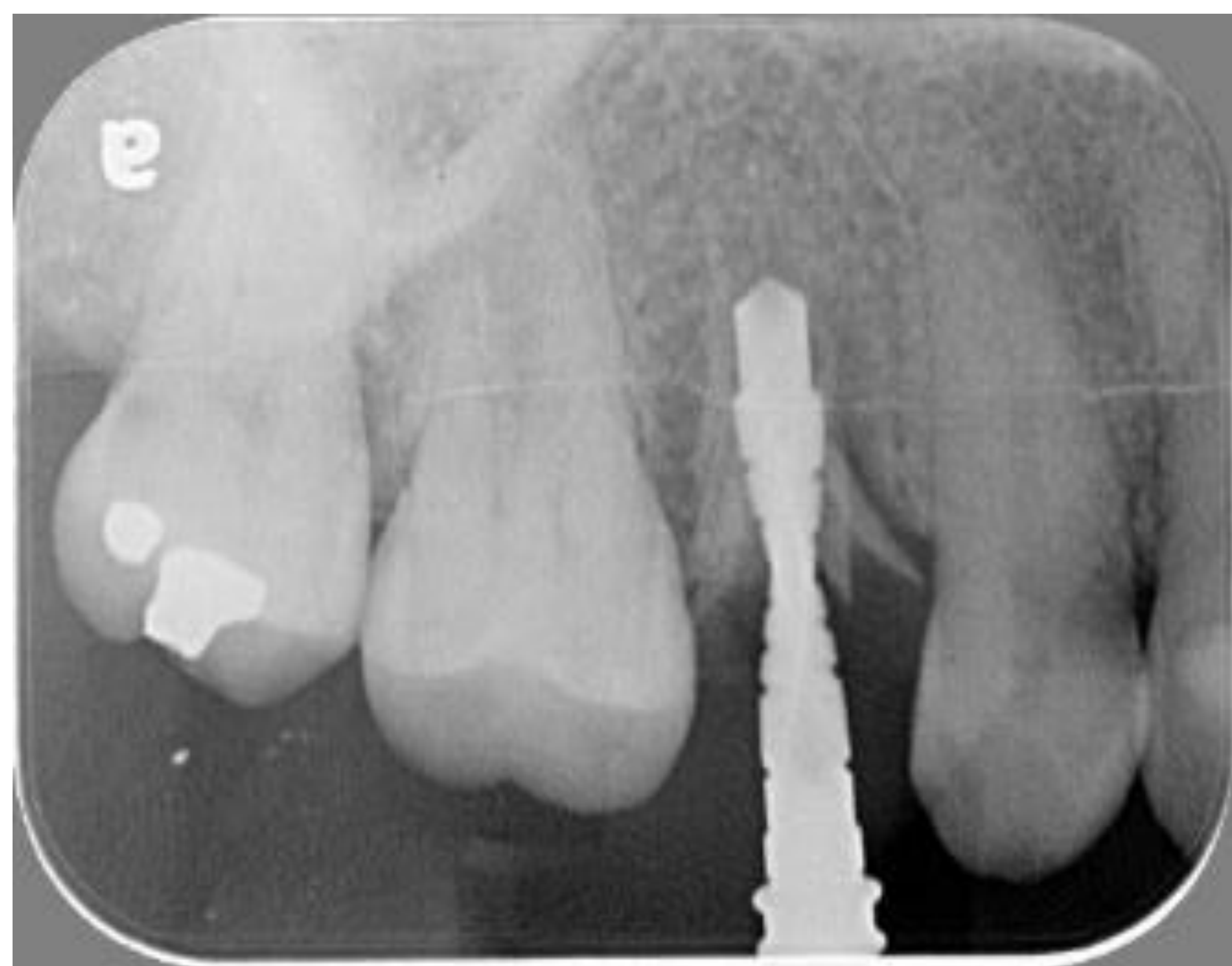


Fig. 5. Milling by anatomical guide.



The surgical procedure was performed under local anesthesia, we used the localization of the natural tooth to perform the drilling protocol, the reference was the cervical third of the root and the deep was of 2mm under the CEJ of the adjacent teeth.

Case Report

Once the drilling protocol was finished the remains of the root was extracted. The gap was filled with a bone replacement graft (inorganic bovine graft) and covered with a collagen patch, avoiding the displacement of the mucogingival line.



Fig. 6. Tooth extraction.



Fig. 7. Elian type I.

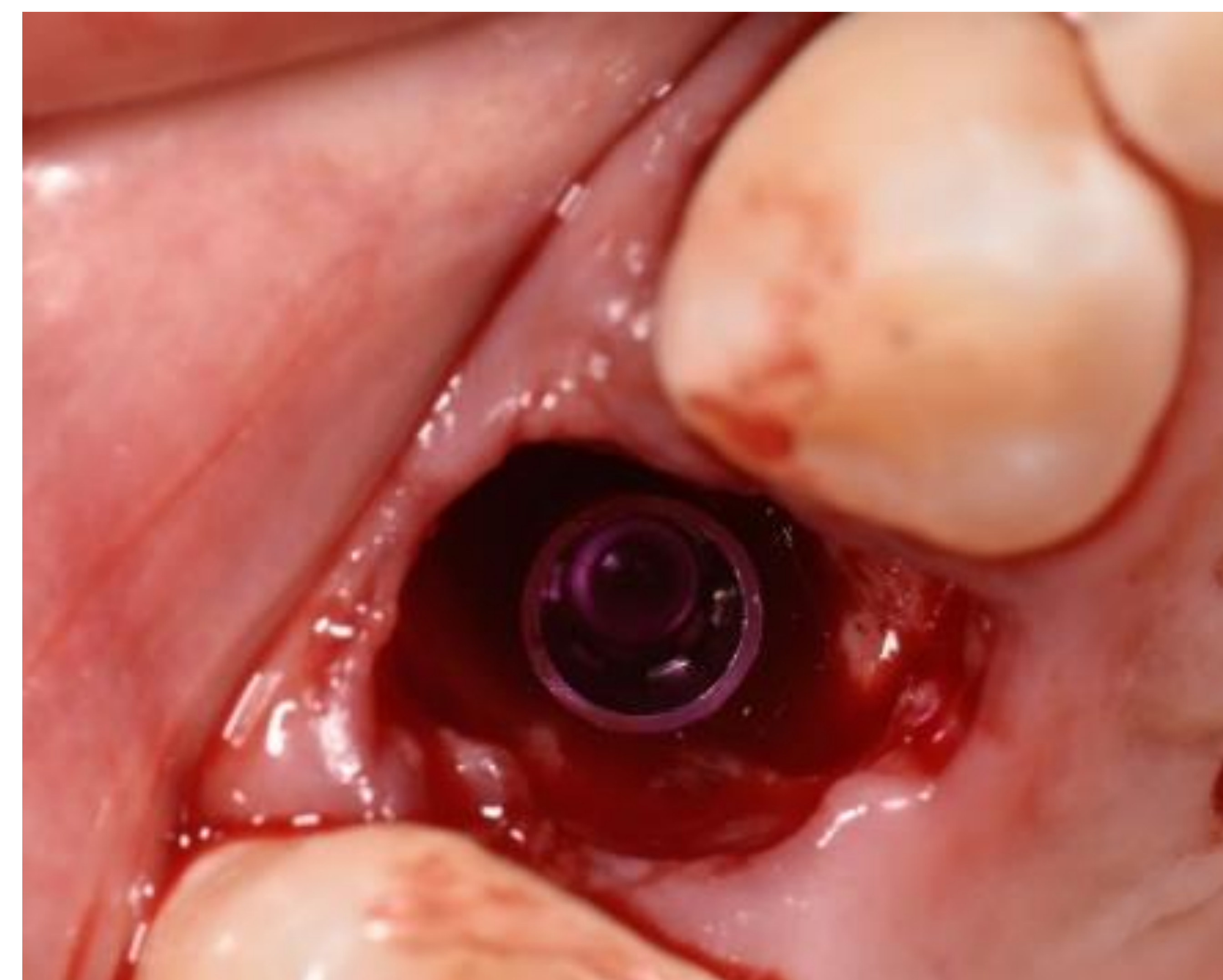


Fig. 8. Implant placement.



Fig. 9. Gap measure.



Fig. 10. Implant graft.

Result

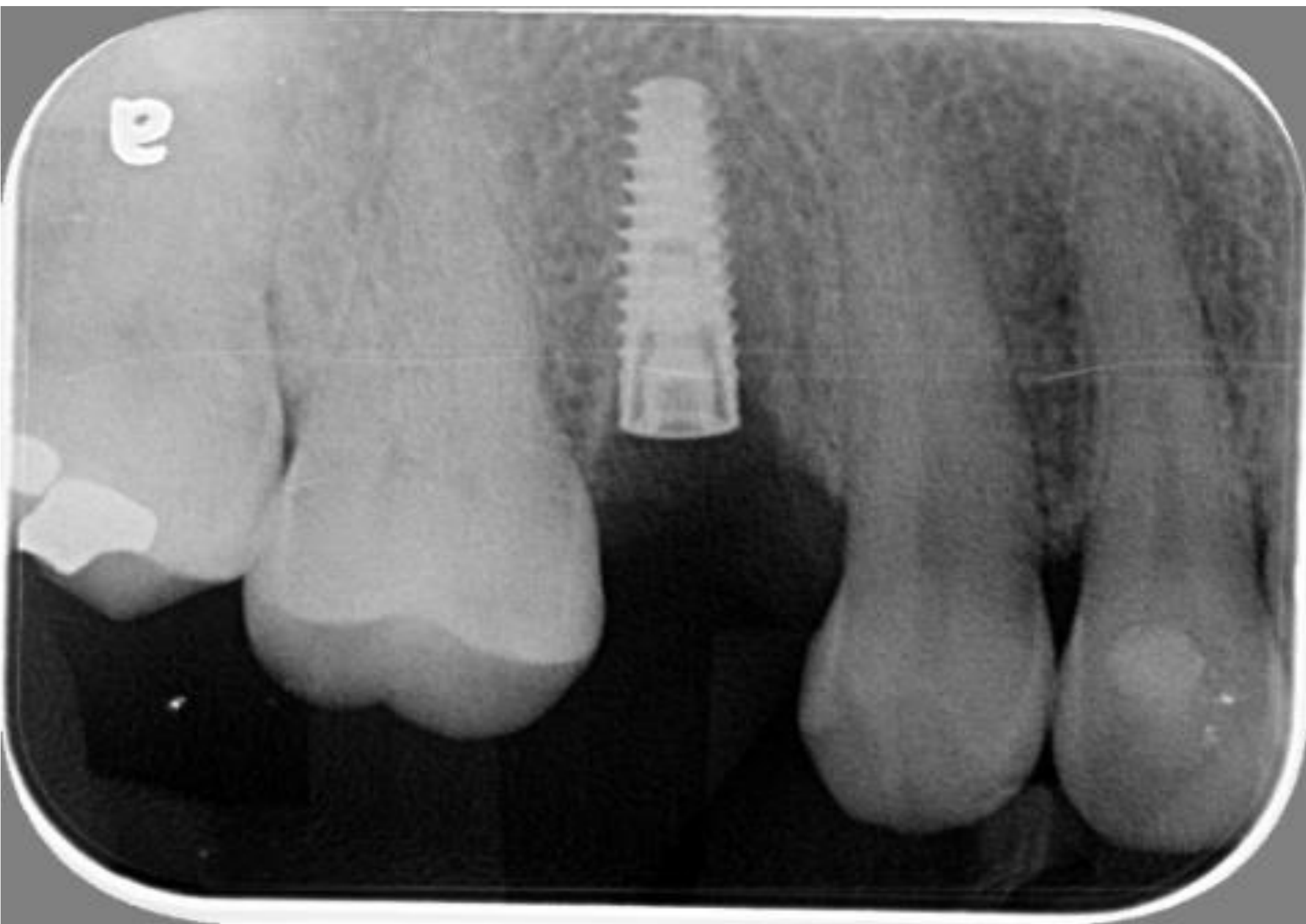


Fig. 11. Clinical and radiographic control..

At the 15 days of the surgical procedure, the clinical and radiographic observations were without any complications, the healing of the soft tissue was excellent. The provisionalization took place 4 months after the placement of the implant.



Fig. 12. Provisionalization.



Conclusion

The natural tooth as surgical guide for immediate implant placement offers tridimensional orientation. Nevertheless, this protocol does not exempt the planification using tomography as diagnosis tool in the placement of immediate, early and late implants.

References

