

Multidisciplinary management of a missing maxillary central incisor: a case report

A. Boëdec¹, Z. Badran¹, A. Safarzadeh^{1,2}, A. Gaudin³, A. Soueidan², A. Hoornaert¹

¹Department of Oral implantology; ²Department of Periodontology; ³Department of Operative dentistry
Faculty of dental surgery, Nantes/France



Introduction

Prosthetic implant rehabilitation of single missing maxillary incisors constitutes a clinical challenge in esthetic dentistry. Thus, multiple clinical parameters should be considered such as bone volume, periodontal tissues quality, esthetic outcome of definitive crown, and most importantly patient satisfaction. This poster describes the case of a multidisciplinary management of a missing 11, in a context of insufficient bone/gingival volumes.

Case Report

A 42 years old healthy Caucasian female consulted for implant supported rehabilitation of missing central right maxillary incisor (11). Clinical and radiographic examination (Figure 1 A,B,C) revealed the need of bone augmentation/soft tissue management prior to implant placement. A laser Er:YAG frenectomy was performed (Figure 1 D), and 15 days after healing, a ramus bone graft was harvested and placed in the buccal region of 11 (Figure 1 E). Four months later, the implant was successfully placed (Figure 2 A). After 3 months of healing period, provisional abutment and resin crown were placed and a connective tissue graft was carried at the same time in order to enhance the peri-implant mucosal contour (Figure 2 B, C: healing at 4 weeks). Afterwards, the contact surfaces were modified as well as the mesial surface of the 21 using an esthetic resin composite (Figure 2 D). Six months later, satisfactory gingival contour maturation could be noticed. The final ceramic crown was delivered and the occlusion was checked (Figure 3 A,B, C: 1 month recall after final crown). Final esthetic outcome (Figure 4B) was assessed by the patient using a visual analogical scale. It received a 85 value (100 maximum score) in comparison to the 0 value at first visit (Figure 4A).

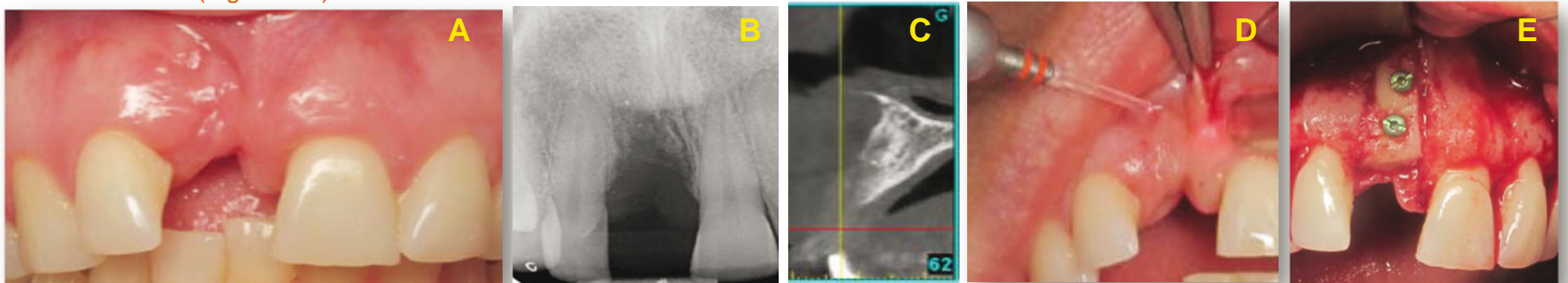


Figure 1:



Figure 2:

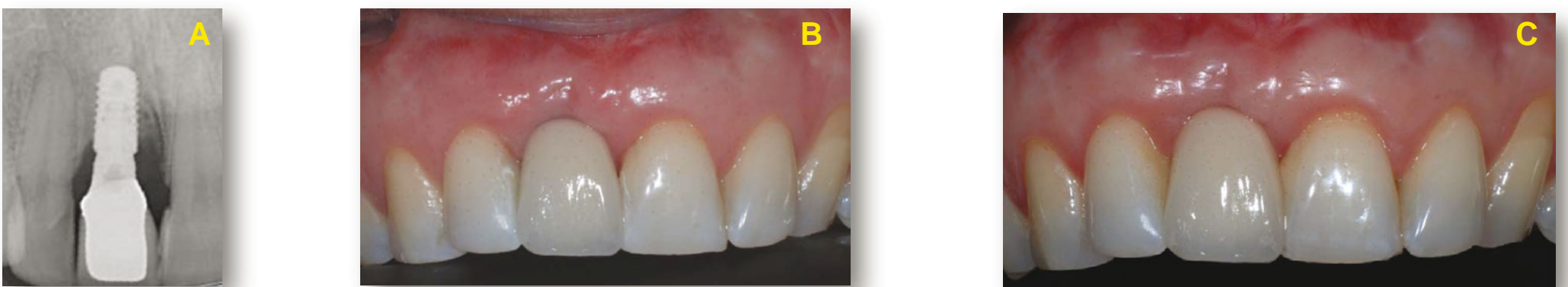


Figure 3:

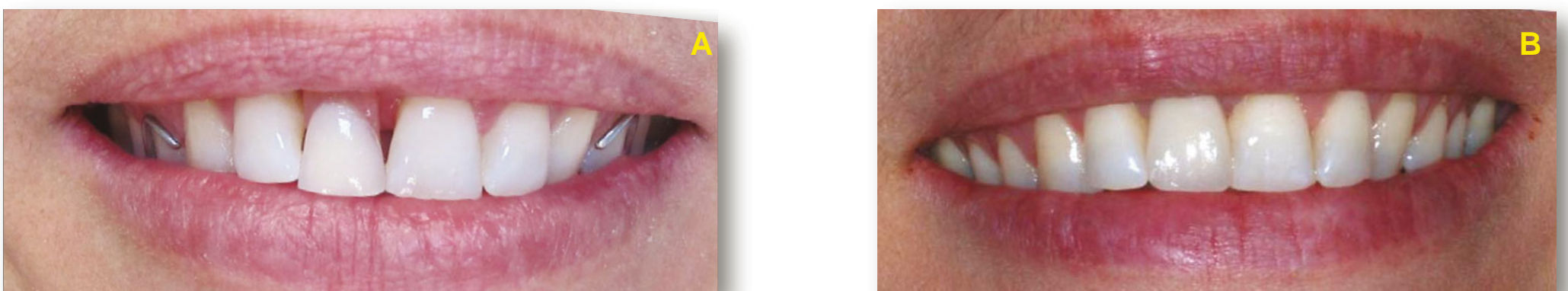


Figure 4:

Conclusion

In this case report, a multidisciplinary approach combined techniques from oral surgery, periodontology, implantology and prosthodontics in order to esthetically and functionally rehabilitate a single maxillary incisor. Mastering these competences or team work is necessary in order to achieve clinical success in such complex clinical situations.

Acknowledgments: We would like to thank Dr. E. Bray for her valuable help in the prosthetic treatment.

