

COMPLETE MOUTH REHABILITATION WITH SEGMENTED IMPLANT SUPPORTED CEMENT RETAINED FIXED DENTAL PROSTHESIS : CASE REPORT

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INTRODUCTION

Restoring edentulous patients with an implant-supported fixed dental prosthesis is a challenging procedure. It requires proper diagnosis of clinical situation and patients' needs for treatment planning. The purpose of this case report is to present a step-by-step illustration of complete mouth rehabilitation with segmented implant supported cement retained fixed dental prosthesis.

CASE REPORT

A 75-year-old male, medically fit, presented with an edentulous maxilla and an un-restorable remaining dentition in the mandible. After diagnosis of the clinical situation, different treatment options were presented including implant supported overdentures and implant supported fixed prosthesis from which the patient selected the fixed option.

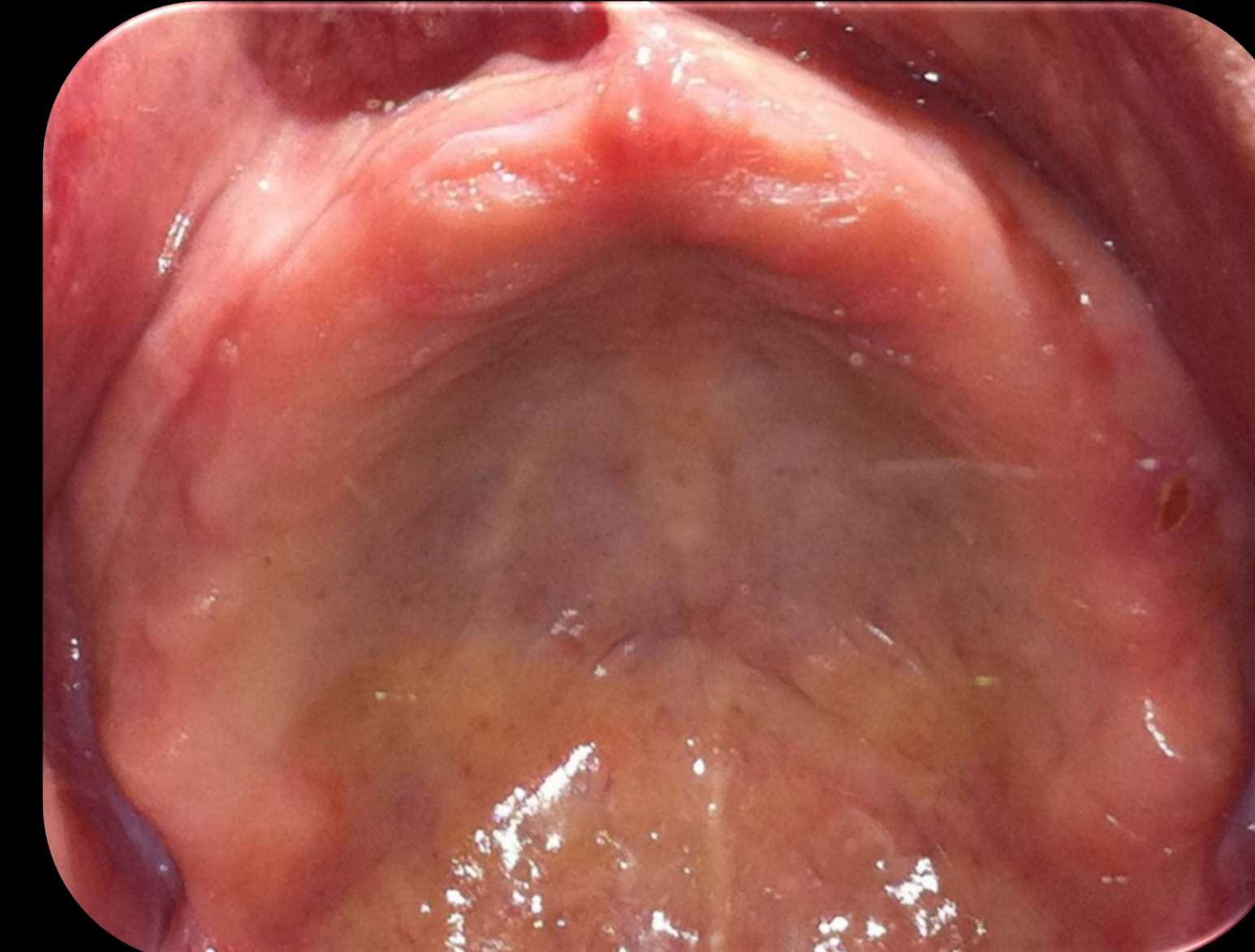
DIAGNOSIS AND TREATMENT PLANNING

New complete dentures were fabricated and two pairs of clear autopolymerized acrylic templates were made by duplicating these dentures. The labial flange of one pair of the templates were removed, then it was used intraorally to evaluate the labial and soft tissue support which with the other factors described by Zitzmann and Marinello helped to determine that the patient was a candidate for FP2 fixed prosthesis.

PRE-TREATMENT



Panoramic x-ray



Upper arch

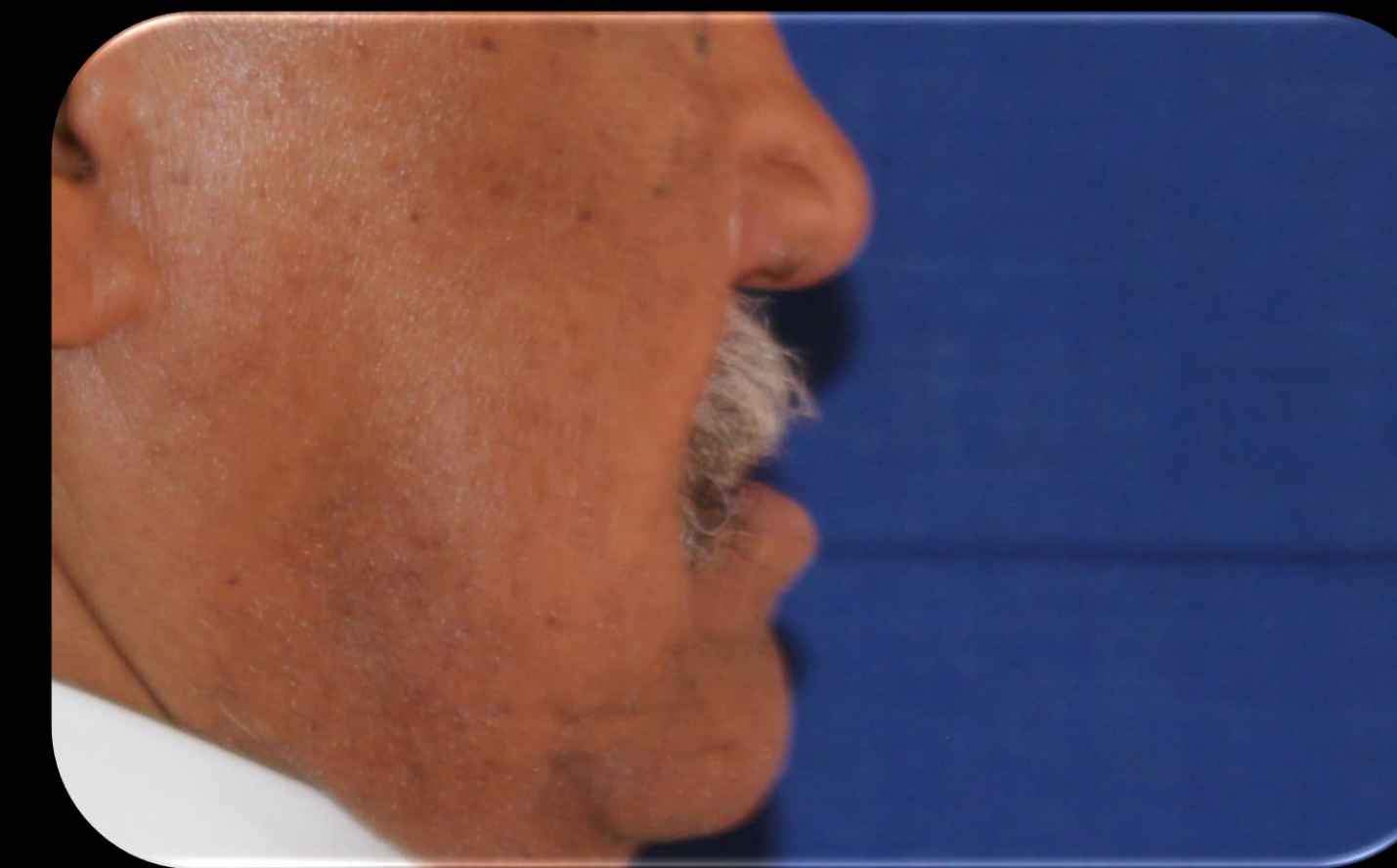


Lower arch

DIAGNOSIS & TREATMENT PLANNING



Denture duplicated template



Lateral profile without the template



Lateral profile with flangeless template

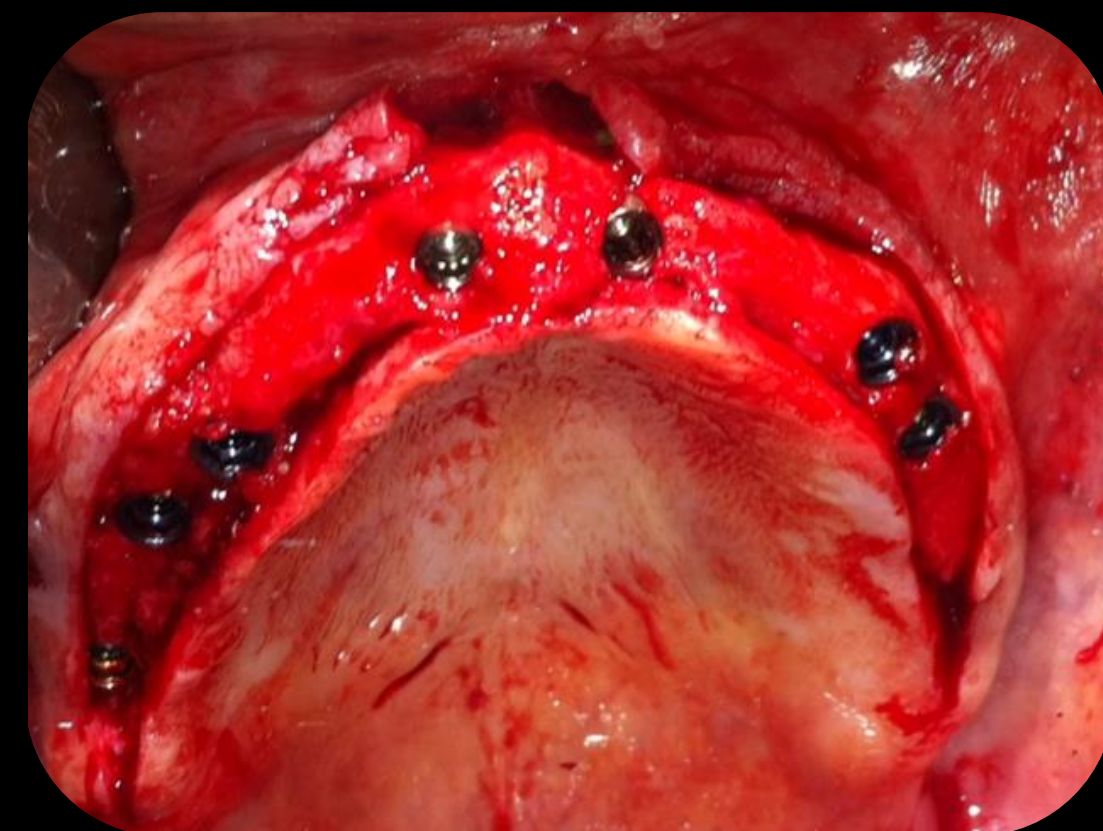


Patient's smile

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SURGICAL PROCEDURES

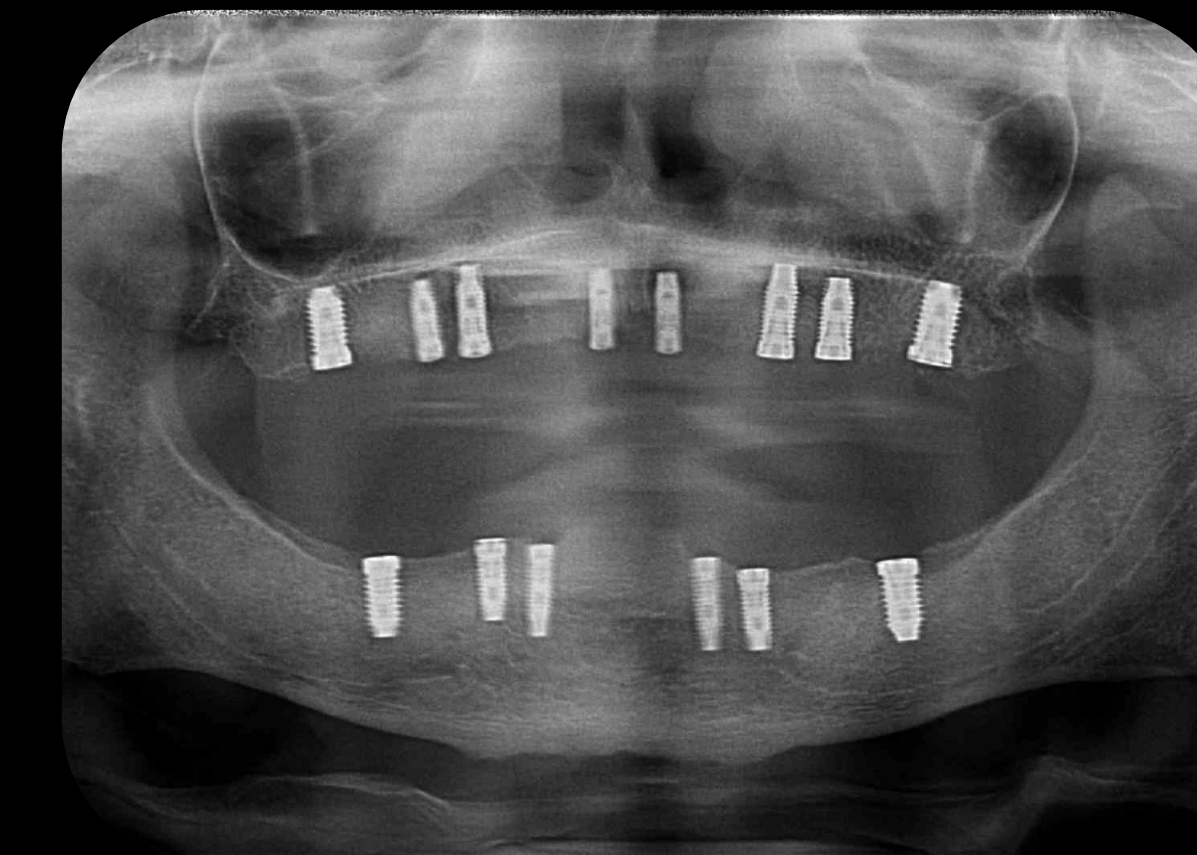
The second pair of the templates was used as radiographic and surgical stent. Fourteen implants were placed (eight in the maxilla; following the conventional placement protocol , and six in the mandible; two at canine areas following the immediate placement protocol and four implants at the areas of the first pre-molars and first molars following the conventional placement protocol) and all implants were submerged.



8 implants placed in the upper arch



6 implants placed in the lower arch



Post-surgical Panoramic x-ray



Soft tissue healing after 2nd stage

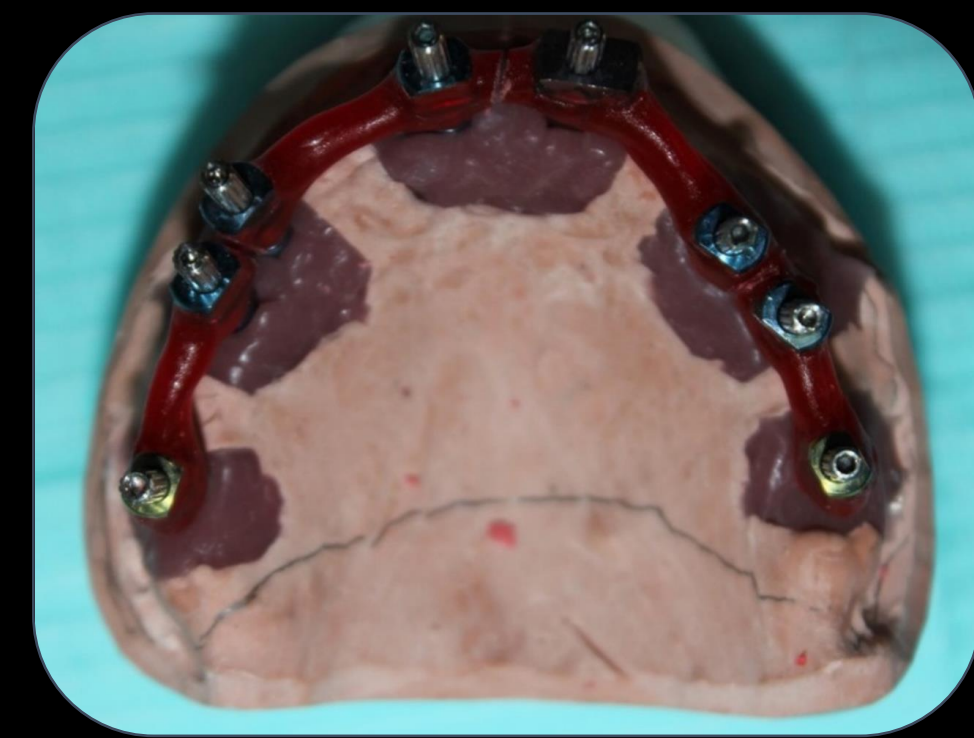


Soft tissue healing after 2nd stage

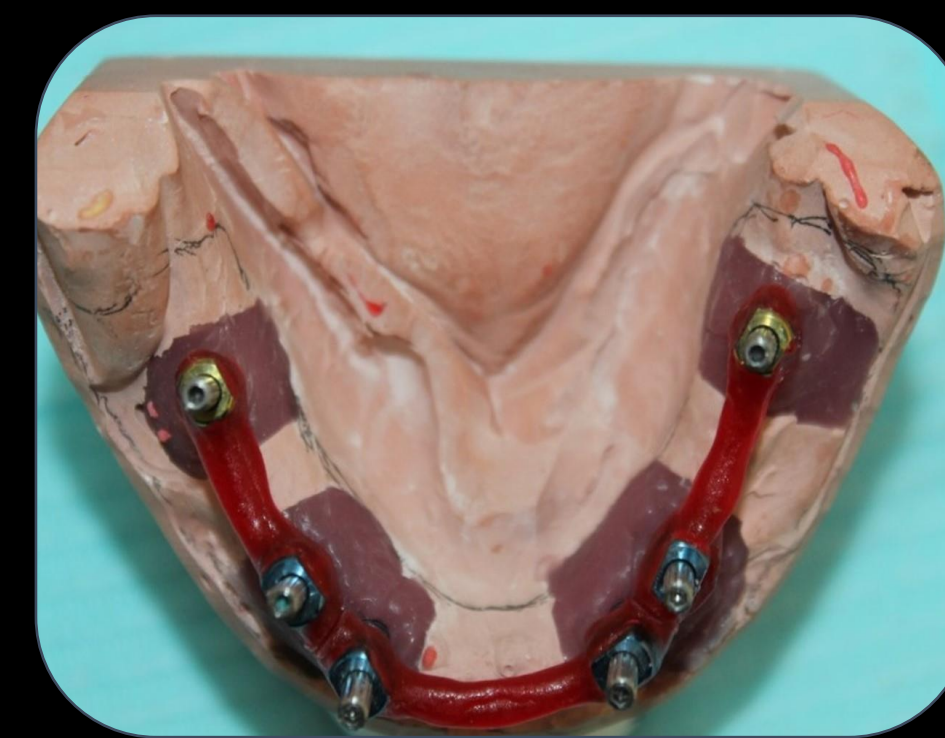
PROSTHETIC PROCEDURES

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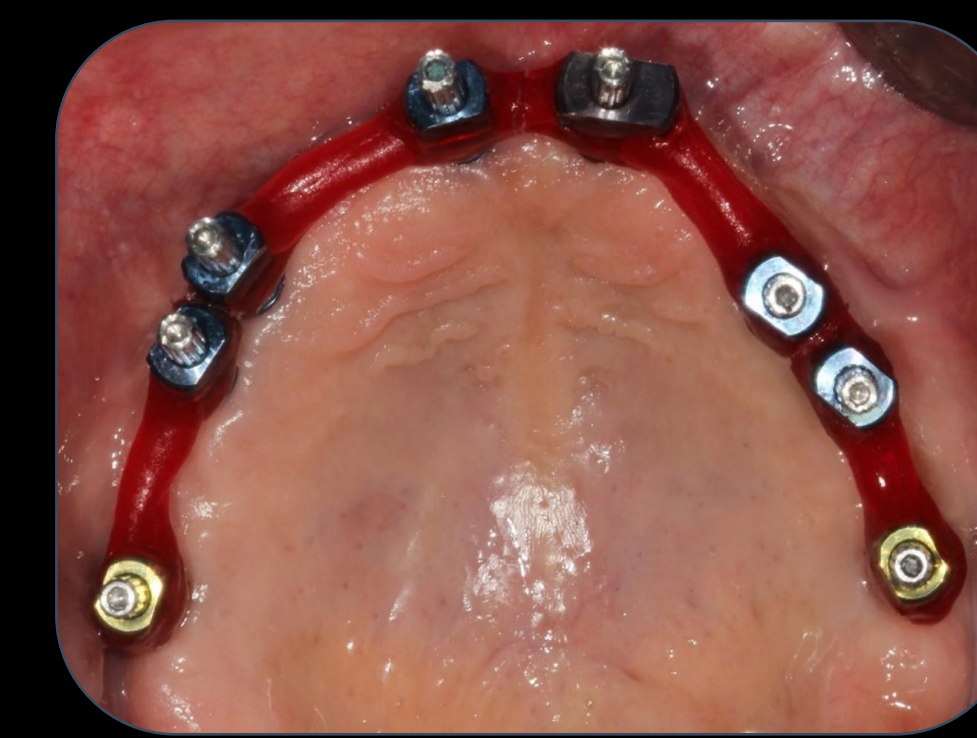
Segmented Implant Supported Cement Retained Fixed Dental Prosthesis were fabricated (four for the maxilla and three for the mandible) and cemented following the cementation protocol recommended in the literature.



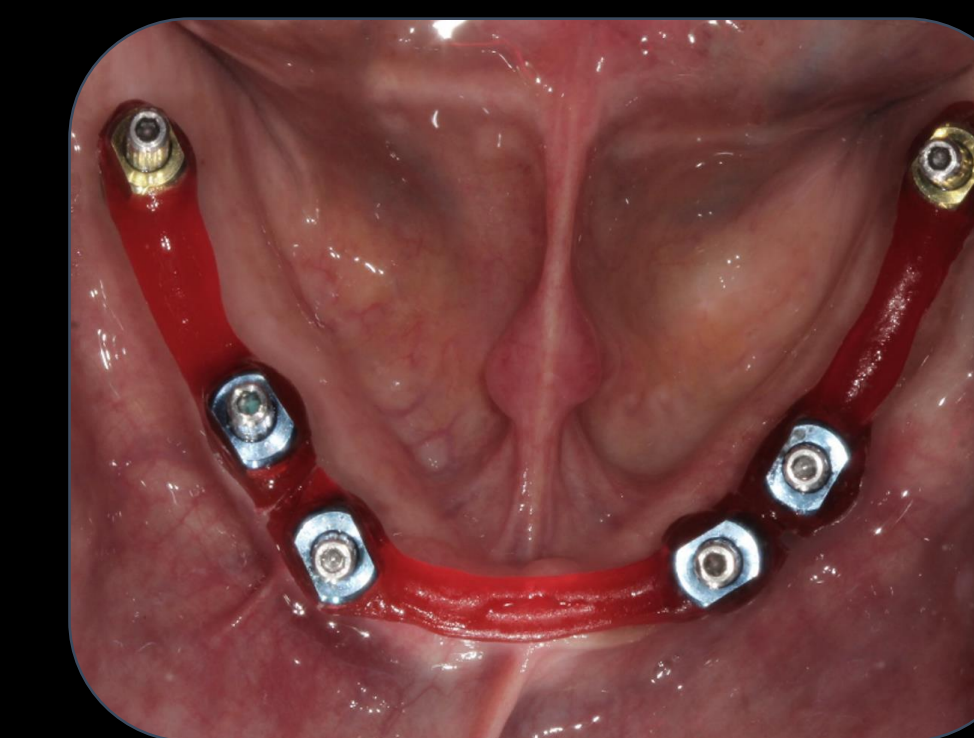
Splinted impression copings on the cast



Splinted impression copings on the cast



Splinted impression copings intraorally



Splinted impression copings intraorally



Upper open tray impression



Lower open tray impression



Jaw relation record with record blocks



Provisional restorations



Jaw relation record (metal framework)



Final prosthesis (frontal view)



Final prosthesis (left lateral view)



Final prosthesis (right lateral view)

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DISCUSSION

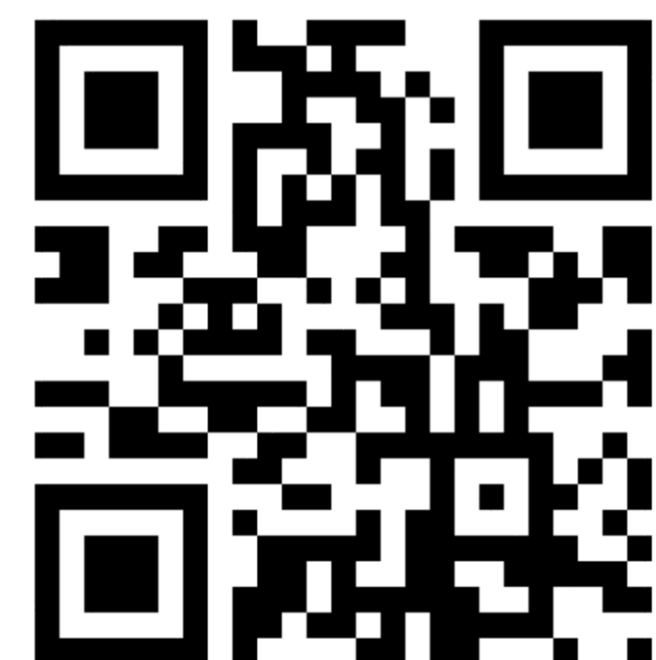
The prosthesis restored patient's function and esthetic and the segmentation facilitated a passive fit, ceramic veneering and re-intervention if needed. However, it required precise distribution and placement of implants.

The treatment was approved by the patient and had a favourable outcome in terms of patient acceptability and success based on follow up period of 2 years.

CONCLUSION

The use of segmented implant supported prosthesis for management of edentulous patients may provide a considerable improvement in esthetic and function if diagnostic planning and proper patient selection are considered.

REFERENCES



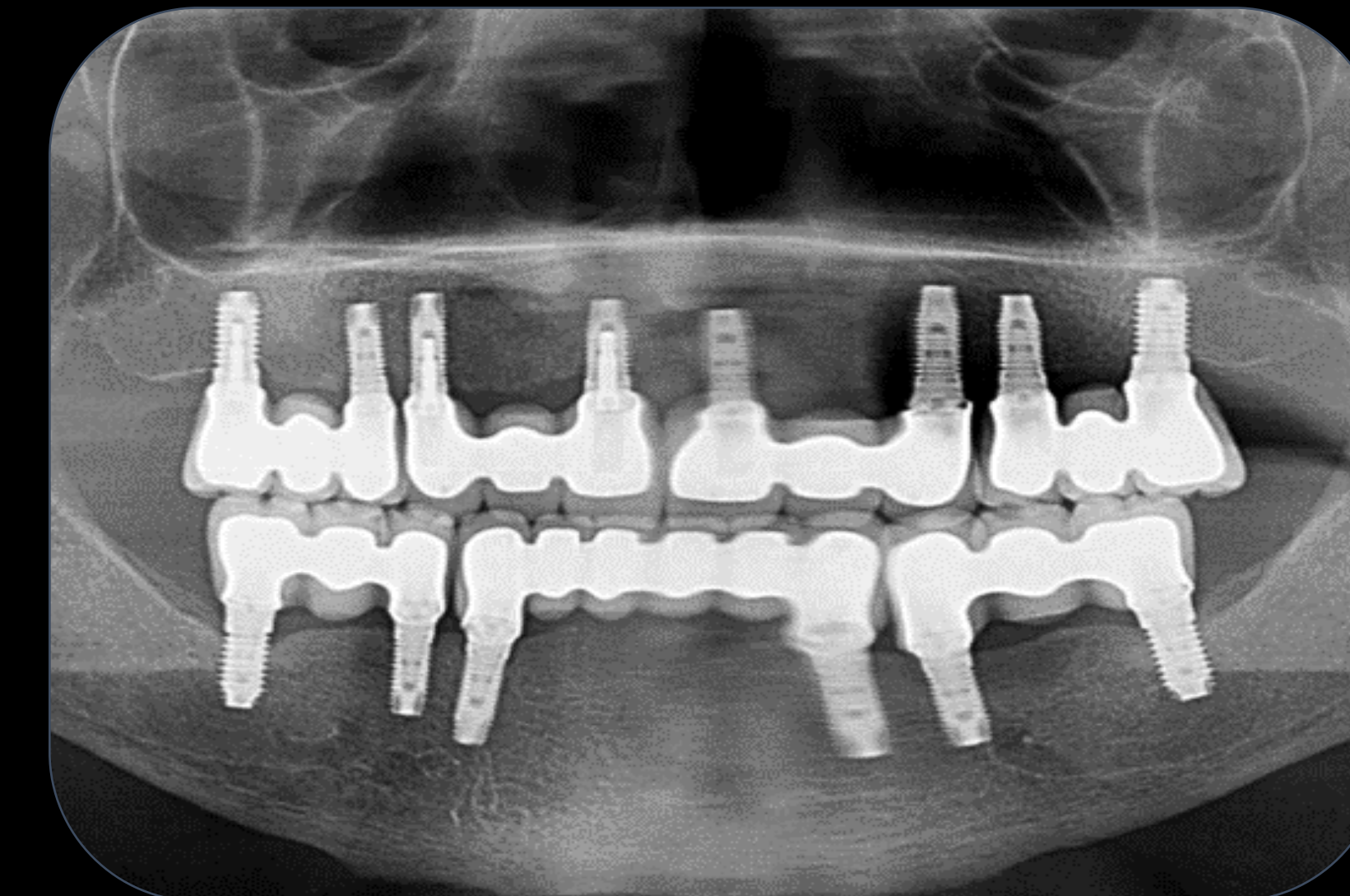
POST-TREATMENT



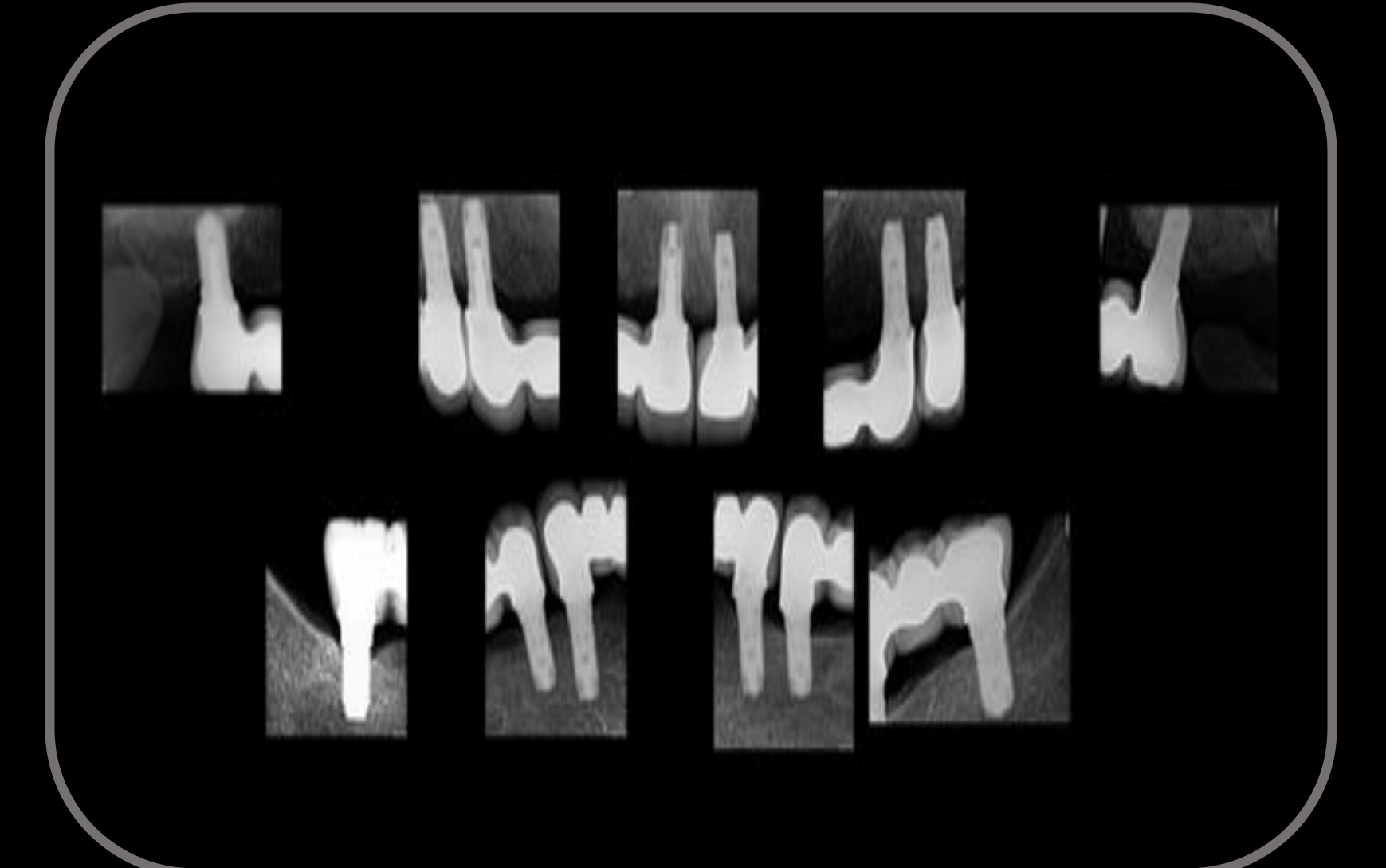
Post-treatment patient's lateral view



Post-treatment patient's smile



Post-treatment panoramic x-ray



Two-year follow-up periapical x-rays