

# Combined periodontal, orthodontic, and implant treatment in a partially edentulous patient

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## BACKGROUND

A 52-year-old male patient, a long-term smoker, sought aesthetic improvement and restoration of normal masticatory function due to fan-shaped displacement of anterior teeth, caused by severe tooth mobility and malposition. This case presented a complex clinical scenario due to severe periodontitis and malocclusion and improvement of aesthetics.

## AIM

To illustrate the comprehensive management of a patient with periodontitis, focusing on restoring the aesthetics of the anterior teeth and achieving stabilized occlusion in the posterior area.

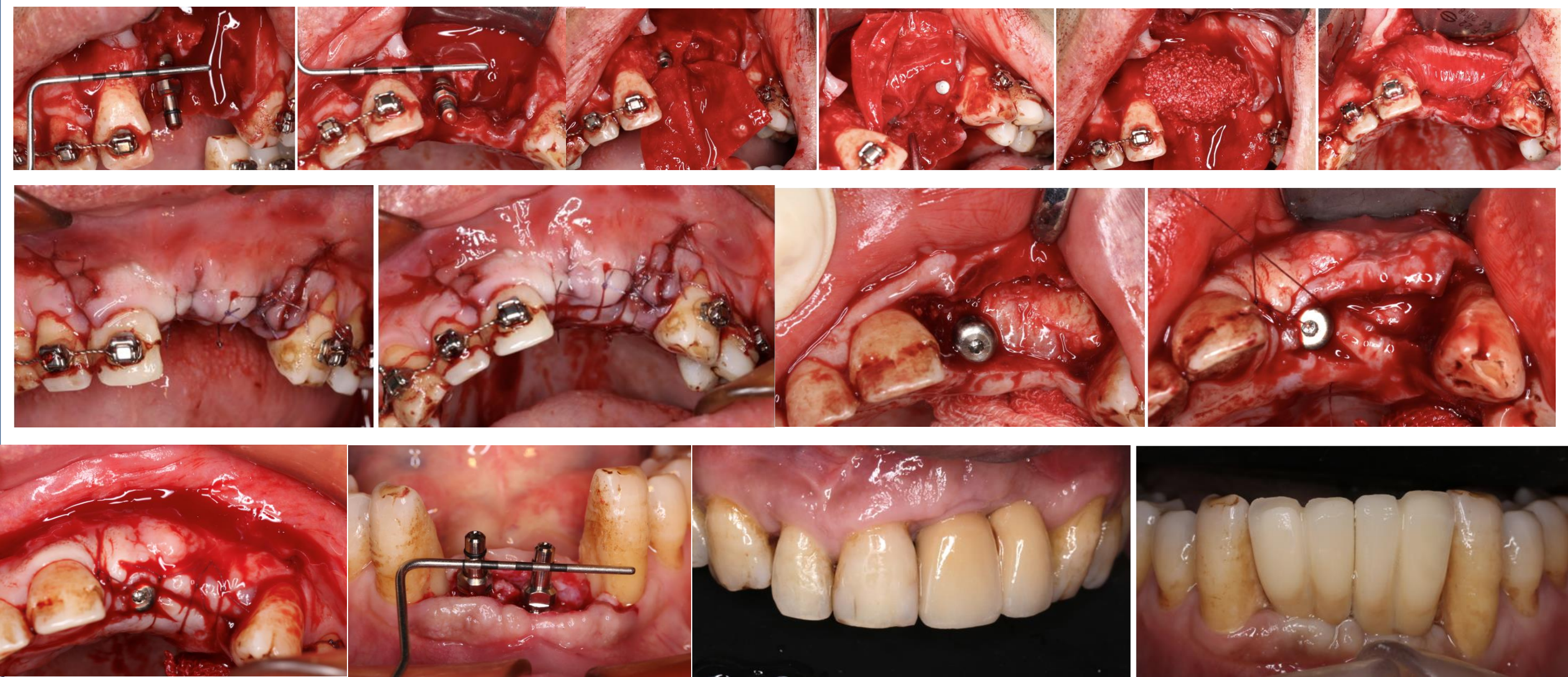
## MATERIALS&METHODS

Implantation of Site 21:

Tooth 22 was extracted under local anesthesia, followed by a full-thickness mucoperiosteal flap at the alveolar crest of 21/22. The implant bed was prepared, and a Camlog 3.3 x 11mm implant was placed in site 21. The bone defect at site 22 was filled with Bio-Oss bone graft and covered with a Bio-Gide membrane. After 6 months, a second-stage procedure was performed with keratinized tissue transplantation, followed by prosthetic restoration.

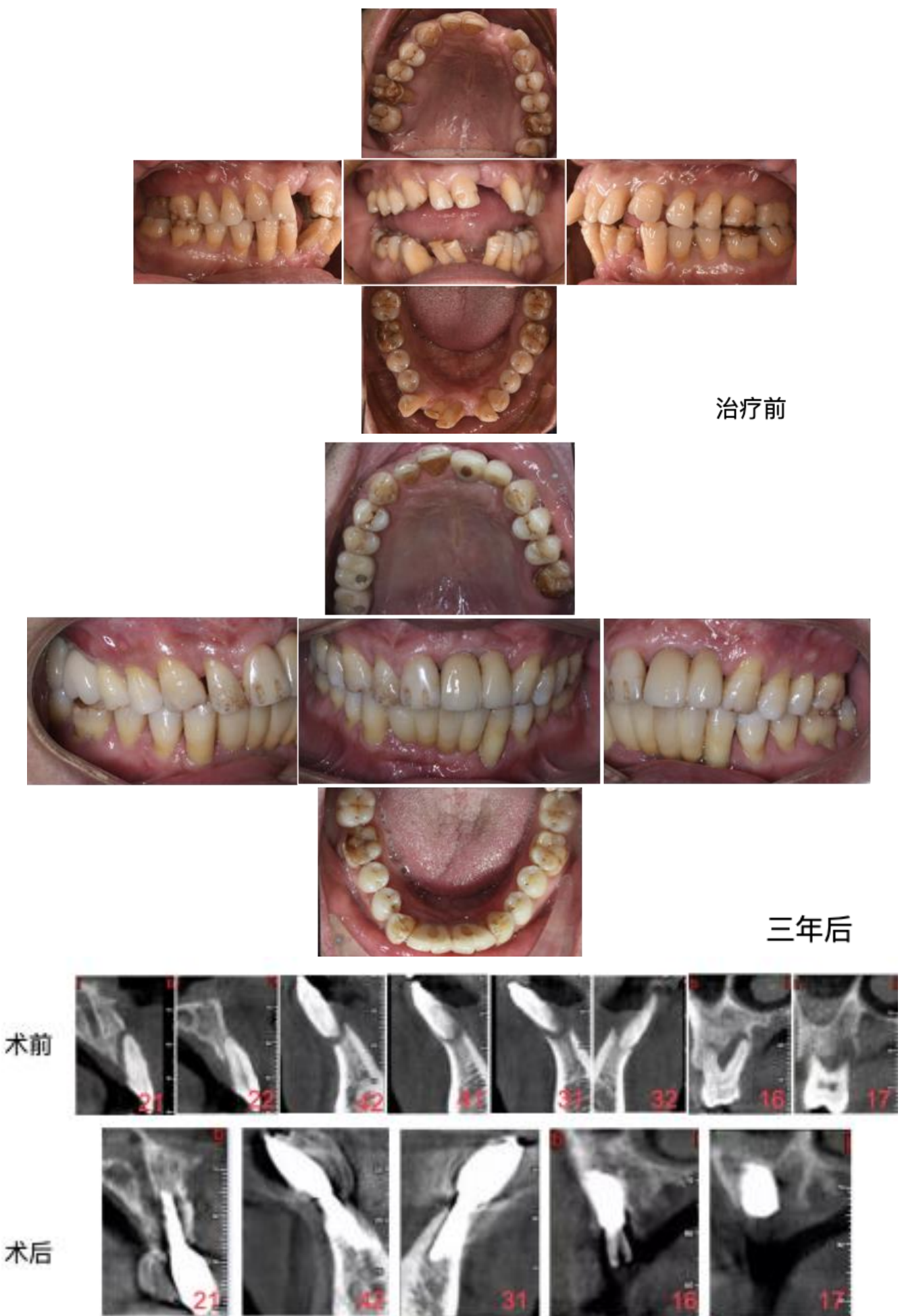
Implantation at Sites 42 and 31:

Horizontal incisions were made at the alveolar crest of 41/42/32/31, and a full-thickness mucoperiosteal flap was elevated. Camlog implants were placed at 42 and 31 with healing abutments. After three months, final impressions were taken, and definitive prostheses were fabricated and placed.



## RESULTS

Post-treatment, the patient demonstrated significant improvements in oral hygiene, with firm and healthy gingiva. The aesthetic and functional outcomes of the implant-supported prostheses were satisfactory. Radiographic follow-up confirmed stable bone levels around the implants, and no peri-implant inflammation was observed.



## CONCLUSIONS

This case demonstrates that comprehensive periodontal treatment can effectively control inflammation, allowing for successful orthodontic correction and implant rehabilitation in patients with severe periodontitis and malocclusion. Systematic management of the periodontal condition is critical in creating favorable conditions for subsequent dental interventions.