

Case Study

Replacing a metal-ceramic bridge with an implant-supported prosthesis

Abstract A 64-year-old male patient complained about displacement of a metal-ceramic bridge in the area of teeth 13-23, 25. The teeth 11, 12, 13, 21, 22, 23, 25 were extracted, four implants were placed, and on them a temporary prosthesis was installed for a period of 4 months. After this period, a permanent cement-retained PFM (porcelain-fused-to-metal) bridge was installed.

Introduction

A 64-year-old patient, after long-term use, had a displacement of the bridge supported by the roots of his own teeth. As a result, a significant gap appeared between the tooth 25 and the bridge. This situation caused great discomfort to the patient. It was decided to remove the bridge and remaining teeth and make a complete restoration of the upper jaw dental arch, supported by both newly placed implants and those existing at the time of treatment.

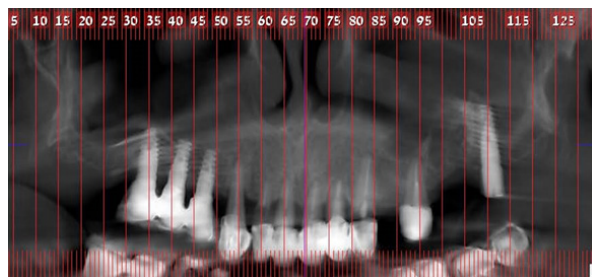
The clinical case is of interest to practicing dentists due to the large amount of work involved and the difficulty of combining new and previously placed implants in one design.

Diagnosis

Bridge displacement and destruction of treated teeth. The bridge and remaining teeth must be removed.

Treatment Implementation

First, the bridge was removed and the following teeth were extracted: teeth 11; 12; 13; 21; 22; 23; 25. Then, implants were placed in position of teeth 13, 11, 21 and 23. The following dental supplies were used:



X-ray of the initial situation of a patient with a displaced bridge

- UH8 Pure&Porous Implant Ø4.2 L10 Internal Hex RP - 1 pcs.
- UH8 Pure&Porous Implant Ø4.2 L11.5 Internal Hex RP - 3 pcs.

At the same time, the prostheses on the existing implants were removed.

To compensate for the implant angle of deviation from the plane of occlusion, 15° angled cement-retained abutments were placed.

Also, at the same time, a temporary prosthesis was made, which lasted for 4 months; after this period, the prosthesis was replaced with a permanent PFM one. Excellent aesthetics was achieved.

12 months after the surgery, a control X-ray was taken showing a good result in terms of maintaining the volume of bone tissue and osseointegration of the implants.



Angled cement-retained abutments



The final result – smile angle



The final result of full-arch restoration

Conclusions

Indicator	Value
Osseointegration	Successful
Healing phase	Fully completed
Bone status	No bone loss
Restoration	Cement-retained PFM restoration
Aesthetics	Good



15° Angled Abutment Internal Hex Regular Platform

