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#### **Case Study**

## Removal of old dental bridge and remaining teeth. Restoration of 3 implant-supported teeth, patient aged 50+

**Abstract:** A patient aged 50+ with an old bridge supported by ground teeth contacted us. Over time, supporting teeth were destroyed and problems arose with the attached keratinized gingiva in the bridge area.

In addition, while the bridge was used, two antagonist teeth in contact with the bridge were lost.

It was decided to remove the dental bridge and remaining teeth in the lower jaw, place three implants in position of teeth 45, 46, 47, perform a metal-ceramic restoration supported by implants, and form new gingival cuffs for all three implants.

The next step is the placement of two implants in the upper jaw with complete restoration of masticatory function on this side of the jaw.

The treatment was successful and no bone loss was detected in the control image made 6 months later.

#### Introduction

The patient, a woman aged 50+, contacted us regarding destruction of teeth that supported the bridge in the area of teeth 45, 46 and 47. The patient also lost most of her chewing teeth on both jaws.

The clinical case is interesting because such problems are typical and prevalent, and also shows that the treatment of edentulism with implants is superior to old treatment methods. The case is also interesting due to the significant amount of work that had to be performed in a limited volume.



Photo of the initial situation – the bridge must be removed

#### **Treatment Implementation**

The initial situation is shown in the photo below. It is clear that the soft tissues have recessed as a result of restoration: dental bridge is not held securely, supporting teeth are destroyed and must be extracted.

At the next stage, teeth roots and remains were extracted in the most atraumatic way possible in order to preserve the septum between the roots of the teeth and avoid damaging the bone wall on the vestibular side.

Next, the flap was detached and three implants were placed in position of teeth 45, 46 and 47.



Extraction of remaining teeth





Preparing for implant placement



All three implants were placed in position of teeth 45, 46, 47

At the next stage, healing caps were installed into the implants and soft tissues were sutured around them. They were left in this state until osseointegration was complete and new gingival cuffs were formed.

For this clinical case, the following dental supplies were used:

 UH8 Pure&Porous Implant Ø4.2 L11.5 Internal Hex RP - in position of tooth 45



Implant placement in the lower jaw



X-ray immediately after implant placement

- UH8 Pure&Porous Implant Ø4.2 L10 Internal Hex RP in position of tooth 46
- UH8 Pure&Porous Implant Ø4.2 L8 Internal Hex RP
  in position of tooth 47
- Healing caps (gingival height 3 mm) for internal hexagon 3 pcs.

The control X-ray taken 6 months after placing the implants in the lower jaw shows that integration was successful.



Healing caps are installed and soft tissues are sutured



Control X-ray 6 months after placing the implants in the lower jaw

### Conclusions

| Indicator                    | Value   |
|------------------------------|---|
| Osseointegration status      | Successful for all implants                                 |
| Bone tissue level and volume | No bone loss (measured 6 months after placing the implants) |
| Stability                    | Sufficient stability for prosthesis placement               |
| Restoration status           | PFM crowns  |
| Aesthetics                   | Good  |