

Case Report

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1. Abstract

We present this case of esthetic restoration completed in collaboration between the esthetic dentist and the periodontist specialist, using a fully digital protocol, for a 36-year-old female patient who came to our clinic after undergoing orthodontic treatment at another clinic. Case documentation includes photographs taken before orthodontic treatment and throughout the restorative prosthetic treatment. A detailed description will be provided of the treatment steps, which included gingival grafts and dental veneers for the upper jaw.

2. Introduction

The patient presented to our clinic seeking prosthetic rehabilitation of the maxillary arch, exhibiting multiple wedge-shaped cervical lesions, gingival recession, presence of black triangles, and asymmetric abrasion of the incisal edges of the upper anterior teeth. These problems were present before the orthodontic treatment, but some worsened during the dental alignment treatment, caused both by trauma due to incorrectly distributed occlusal forces and mechanical factors, such as brushing with a hard toothbrush using horizontal movements. The treatment consisted of cervical fillings, coverage of gingival recessions, and subsequently dental veneers made using digital technology, milled from Empress Multi A2 for the maxillary arch.

3. Case Presentation

Patient Information:

- **Name:** Irina
- **Age:** 36
- **Gender:** Female
- **Date of first consultation:** October 23, 2023
- **Reason for presentation:** Unesthetic appearance of the maxillary arch and dental sensitivity due to wedge-shaped lesions and gingival recessions.

- **Dental history:**
 - Dento-alveolar anomaly with crowding treated by extraction of upper second premolars and fixed orthodontic appliance.
 - Missing tooth 36 replaced with an implant, missing tooth 47 closed orthodontically by mesialization of tooth 48.
 - Numerous cervical lesions treated with fillings.
- **Clinical examination:**
 - Presence of cervical lesions and marginally infiltrated coronal fillings, bimaxillary gingival recessions.
 - Occlusal function is optimal, muscles show no contractions/pain on palpation, temporomandibular joints show no pain, clicking, or crepitus.

4. Evaluation and Diagnosis

- **Dental photographs:** Intraoral and portrait photographs taken.
- **Imaging:** Panoramic radiograph.
- **Digital scanning:** Models created by digital scanning.
- **Diagnosis:** Esthetic dysfunction, dental sensitivity, gingival recessions.

5. Treatment

Initial management:

- Professional cleaning
- Digital smile design
- Mock-up simulating the new gingival level

Therapeutic interventions:

- **Restorative therapy:** Composite cervical fillings up to the enamel-cement junction in the area from first molar to first molar in the maxilla, leaving exposed roots free for coverage with gingival grafts; coronal and cervical fillings for other teeth with caries or wedge-shaped lesions.
- **Periodontal surgery:** Coverage of gingival recessions using the tunneling technique with connective tissue grafts harvested from the palate.
- **Prosthetic restorations:** Dental veneers according to digital planning, made from Empress Multi A2 for the maxilla from first molar to first molar, after the healing period recommended by the periodontist, cemented on April 30, 2024 using adhesive technique.

Follow-Up and Monitoring:

- **6-month check-up:** Consultation, dental photographs, and professional cleaning.
- **1.5-year check-up:** Consultation, photographs, panoramic radiograph, cleaning.

6. Final Result and Monitoring

The final result, both esthetic and functional, was truly successful, with the patient being extremely satisfied with the natural appearance of the new teeth. Subsequent check-ups demonstrated that the result is stable over time, naturally requiring periodic monitoring.

7. Discussion

This case was complex, and its resolution through multidisciplinary collaboration and the use of cutting-edge digital technologies was key to success. Certainly, the patient's compliance, the rigor with which therapeutic indications were followed, and the trust placed in the medical team in making the right decisions for the long-term well-being of the teeth played a special role.

8. Conclusion

Dental treatments addressing the esthetic area must be carried out with a well-established therapeutic plan, previewed and accepted by the patient. The use of digital technologies is very helpful for predictability and precision, with the final result matching the planning.

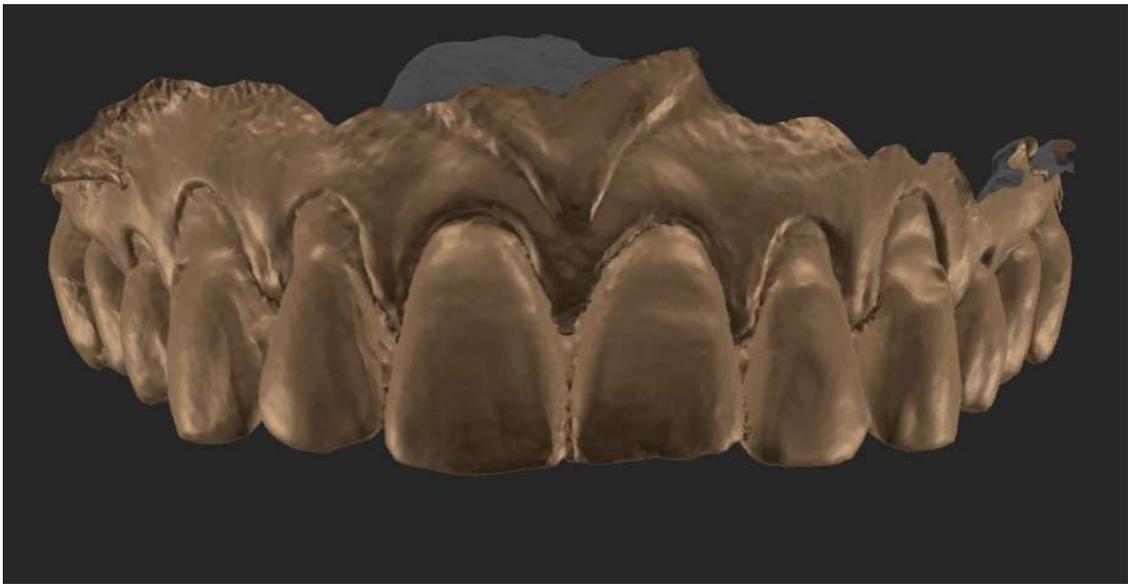
9. Photographs

Photos before orthodontic treatment (March 2018):

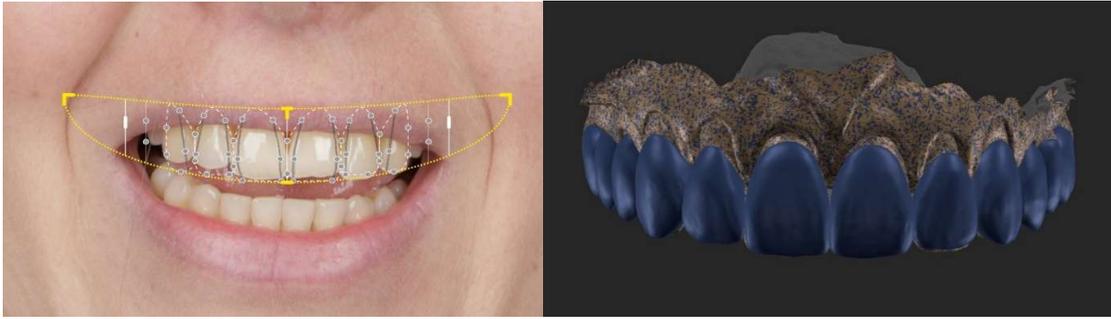


Photos, radiograph, scan from initial consultation (October 2023):





Smile design, Mock-up before/after



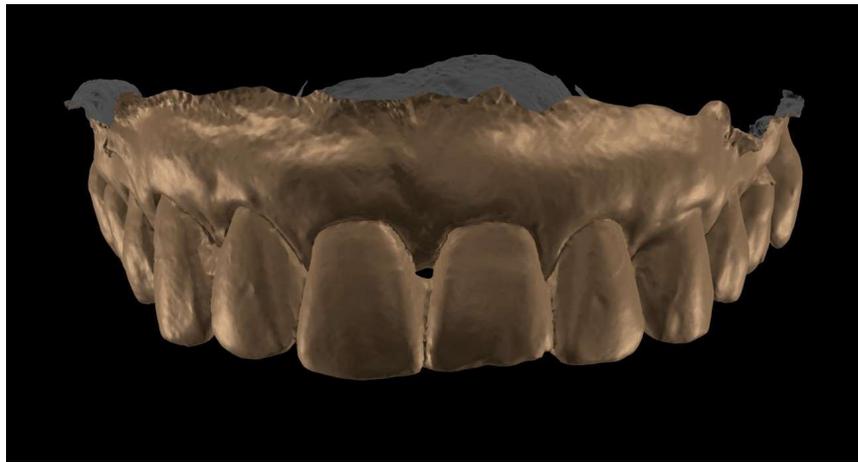
Cervical fillings up to enamel-cement junction according to digital planning



Coverage of recessions using tunneling technique



Healing of grafts at 4 months, preparations, provisionals according to final mock-up



Final restorations





6-month follow-up



1.5-year follow-up



