

## RESTORING FACIAL AESTHETICS WITH COMPLETE DENTURES - CASE REPORT

VIOREL ȘTEFAN PERIEANU<sup>1</sup>, MĂDĂLINA VIOLETA PERIEANU<sup>2</sup>, ANCA TEMELCEA<sup>3</sup>, DANA CRISTINA BODNAR<sup>4</sup>, TRAIAN BODNAR<sup>5</sup>, ION ALEXANDRU POPOVICI<sup>6</sup>, ION PĂTRAȘCU<sup>7</sup>

<sup>1,2,3,4,5,6,7</sup> "Carol Davila" University of Medicine and Pharmacy Bucharest

**Keywords:** aesthetics, facial proportions, complete denture

**Abstract:** Dento-facial aesthetics is significantly influenced by the shape of maxillary ridge, smile design, shape and size of the frontal teeth and of the marginal fitting of fixed restorations. There are certain clinical situations where using remaining teeth or more implants is not possible. Therefore, complete dentures are good treatment options to improve the initial clinical situation.

### INTRODUCTION

The main reasons for which patients are seeking dental treatment are: pain, aesthetics and masticatory dysfunction. In dental aesthetics shape, colour, position and marginal fitting of teeth are the most important.(1-4)

Morpho-functional restoration of the teeth is obtained by functional tooth units (dental or implant supported). The dentist's suggestions in order to obtain a perfect smile are subjected to patient's demands, but also to objective factors such as: number and quality of the remaining teeth, quality of bone support and financial aspects.(1-4)

### CASE REPORT

A female patient (H.A), in good general condition, 58 years old, presented in the dental office with a maxillary Kennedy Class II mod II edentation rehabilitated with a removable partial denture and mandibular Kennedy Class III mod I restored with fixed bridge works (figure no. 1).

**Figure no. 1. Panoramic radiograph of initial situation**



Existing problems with the maxillary removable denture included poor esthetics and masticatory and phonetics deficiencies. The patient complains with the existing prosthesis with regard to its esthetics.

The 1.3-2.3 fixed dental bridge is ill-fitted and the vestibularized maxillary incisors contribute to hypotonicity of

the upper lip and a modified aspect of the general face profile (figure no. 2 a, b).

**Figure no. 2 a, b. Profile images with vestibularized upper incisors**



The exaggerated vestibularized incisal edges of the maxillary incisors generated an anesthetic overcountoured upper lip. The patient complained with the ill-fitting of the two central incisors.(1.1,2.1)

The retentive clasps were placed on the canine and they were made of Wipla 0.7 mm diameter. This is why the gingiva at this level has been seriously injured during chewing or insertion and desinsertion of the denture (figure no. 3).

**Figure no. 3. Frontal view - altered smile design**



<sup>2</sup>Corresponding author: Mădălina Perieanu, B-dul. Constantin Brâncoveanu, Nr. 13, Bl. B16, Sc. 5, Et. 4, Ap. 132, Sect. 4, București, România, E-mail: trili\_poli@yahoo.com, Phone: +40723 472632

Article received on 15.10.2014 and accepted for publication on 16.11.2014  
ACTA MEDICA TRANSILVANICA March 2015;20(1):120-121

## CLINICAL ASPECTS

Precisely, after clinical and radiological examination of the remaining teeth, the decision has been made to extract them and to place an immediate denture in order to restore the dento-maxillary functionality and to guide the bone healing (figure no. 4 a, b).

**Figure no. 4. Immediate complete denture after soft relining**



The maxillary provisory complete denture was relining with a soft material (GC Tissue Conditioner).

Considering the remaining bone structure a complete implant-supported overdenture was the best treatment option. Four implants were symmetrically inserted in the maxillary lateral ridge (figure no.5).

**Figure no. 5. Four dental implants symmetrically inserted in the maxillary crestal ridge**



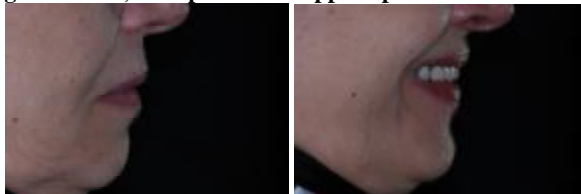
The aesthetic outcome of the final restoration was very good for the patient, as the frontal teeth of the present complete denture were not in vestibularised position, this was one of the patient's complains regarding the old denture (figure no. 6).

**Figure no. 6 a, b. Final complete denture supported by four implants**



The final aspect of the complete overdenture reveals a correct and natural arrangement of the frontal maxillary teeth and, consequently a natural aspect of the upper lip (figure no. 7 a, b).

**Figure no. 7 a, b. Aspect of the upper lip from lateral view**



The frontal view examination of the patient's face shows a complete modified smile design when compared to the initial rehabilitation (figure no.8).

**Figure no. 8. Final aspect of the full mouth rehabilitation with complete denture**



### CONCLUSIONS

When it comes to restore dento-facial esthetics, there are multiple and complex treatment options. The dentist must take into account many local and general factors and either conventional or implant supported complete dentures are a very good option.

### REFERENCES

1. Pjetursson BE, Lang NP. Prosthetic treatment planning on the basis of scientific evidence. J Oral Rehabil. 2008 Jan;5 Supl 1:72-9.
2. Soares GP, Valentino TA, Lima DA, Paulillo LA, Silva FA, Lovadiono JR., Esthetic analysis of the smile, Braz J Oral Sci. 2007;6(21):1313-1319.
3. Chiche GJ, Pinault A., Esthetics of anterior fixed prosthodontics. Chicago: Quintessence Publishing Co.; 1004. p.13,61-4,68,180.
4. Goldestein RE. Esthetics in dentistry, Vol I și II, BC Decker Inc; 2002.