

AESTHETIC REFERENCES TO TOTAL IMMEDIATE PROSTHESIS: CASE REPORT

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ABSTRACT

The aim of this case report was to registert the prosthetic and surgical planning of rehabilitation of a patient who came to the clinic of the University Severino Sombra (USS) Vassouras, Rio de Janeiro State, Brazil, demand for a immediate full denture. The proposal was achieved because with the extraction of the remaining teeth and the installation of total immediate dentures returned to the patient esthetics, phonetics, improving the physiology of the stomatognathic system, providing a better quality of life.

KEYWORDS: immediate total prosthesis, caries, periodontal disease.

1. INTRODUCTION

According to the glossary of terms prosthetic, the immediate denture is defined as a complete or partial denture, made to be installed immediately after extraction of natural teeth¹.

This type of rehabilitation that seeks to fully restore the stomatognathic system, can provide anatomical, functional, aesthetic and psychological advantages. In the case of adaptation immediately after dental extractions, immediate dentures allow total control of hemorrhage, trauma protection, protection against exogenous infections, speed healing, phonetics, less noticeable transition from dental condition, suppression of the collapse of the neuromuscular system and less time wasted on social activities².

The ultimate goal of the prosthesis is offering comfort to the patient, allowing it to speak unhindered, chew food efficiently, have a rest position and, in addition, be adequately well built considering the aesthetic factors³.

The indication of the total immediate dentures is

when the remaining teeth are condemned to extraction. On the other hand the contraindications of this treatment is passed on cases of advanced periodontal disease, patients whose physical and/ or mental state is not compatible with an invasive surgical procedure, pathological changes that require large tissue removal, lack of cooperation and agreement of the patient, as well lack of technical and scientific capacity of professional⁴.

Tooth decay is the main reason that leads the individual to extract the tooth. Being influenced by the social and economic condition⁵.

The success or failure of therapy, for prostheses depends on several factors such as: professional-patient relationship, the patient's attitude towards the use of prostheses, personality, and also factors related to the quality of the prosthesis and the oral condition of the patient. We anatomical advantages as maintaining the vertical dimension, preventing the expansion of the language and the preservation of normal patient anatomy and aesthetic because it prevents facial structures to commit, facilitate aesthetic modifications and correction of wrinkles providing more natural appearance⁶.

It is important to assess the brakes and bridles, after installation of the prosthesis within the oral cavity and may be extended beyond normal, preventing proper seating of the denture base; evaluation of the occlusion, it influences the stability and retention of the prosthesis, which will cause other problems such as chewing, comfort and others; evaluation of the area of compression must be eliminated to give greater physical, psychological and functional efficiency comfort for the patient; assessment of aesthetics and phonetics, to be feeling well the patient⁷.

It is advocated a molding technique for TIP (total immediate prosthesis) maxilla in posterior edentulous patients bilaterally, in which the trays, rollers have wax in edentulous part, producing greater reliability of mus-

cle movements⁸.

Various materials can be used for functional moldings, so that the correct choice should be based on a material that is comfortable to the patient and the professional⁹.

The relining is indicated for immediate dentures; prosthetic patient unable to go to the dentist; prostheses low-income patients, being contraindicated when severe bone resorption, presence of temporomandibular disorders, orofacial pain, inflamed mucosa or hyperplastic support, large tooth wear, poor positioning of artificial teeth, premature contacts or interference, loss of vertical dimension is greater 3 mm and lack of interocclusal space. This procedure can be performed directly or indirectly¹⁰.

Upon installation, the dentures will be adjusted to support tissues, favoring the retention, stability and comfort. The latter is closely related to the true copy of the morphology of the settlement area of the prosthesis and acts positively on patient compliance¹¹.

Regarding care after installation, emphasizes the constant cleaning of the prosthesis and the optimal settings performed by a dentist responsible¹².

For most dentists, much of the interest ends when the patient completes the treatment, which compromises the prognosis of work performed and has a negative impact on oral health of the patient¹³.

The alveolar bone resorption process is continuous throughout the life of edentulous patients. An option to condition the mucosa and to improve the adaptation of the prosthesis is the direct or indirect relining, with acrylic resin for immediate soft foundation, in patients with immediate functional or aesthetic needs¹⁴.

The assembly phase of artificial teeth seems to be for professionals and their patients the greatest concern, because of the aesthetics, both receive the first full denture patients want is resembles as much as possible with natural teeth¹⁵.

The aim of this case report was to register the prosthetic and surgical planning of rehabilitation of a patient who came to the clinic of the University Severino Sombra (USS) demand for a immediate full denture.

2. CASE REPORT

Patient male gender, 63 years old, sought the Dental Clinic of the University Severino Sombra - Vassouras - RJ. Main complaint the patient reported poor hygiene and would like to extract all the teeth to wear prosthesis. In history it was found that the patient is a former smoker, mouth breathing, controlled hypertensive and takes drugs. When intra-oral clinical examination showed the teeth 15, 11, 21, 23, 26, 27, 35, 34, 33, 32, 31 and 45 (Figures 1 and 2), all committed to caries and periodontal disease and bone recession edentulous in parts. Ex-

cept teeth 15:45 (kept the vertical dimension of occlusion), all other suffered extrusion. The request of periapical and panoramic radiographs was done as a complementary examination in order to assist in planning (Figure 3).

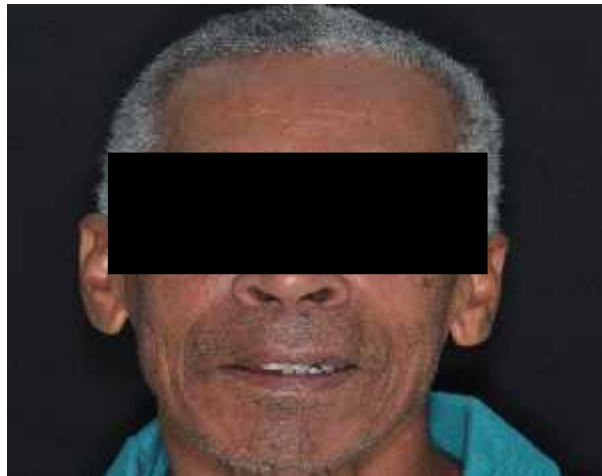


Figure 1. Initial photographic record of the patient.



Figure 2. Intra oral clinical aspect of the patient.

As a treatment option was offered to the patient multiple extractions of remaining teeth and making two total immediate dentures, since the extrusions, caries and periodontal disease precluded other treatment options. Early in the treatment was made with alginate molding, then was made the plaster model and the evidence base with acrylic resin and wax rollers with 7 semi-mount adjustable articulator for study and planning of the event (Figures 4 and 5).



Figure 4. Lower gypsum model based test and wax roller 7.



Figure 5. Upper plaster model based test and roller wax 7.

With the aid of the impression compound, three points were marked at the upper fork assembly model through the facial bow in the semi-adjustable articulator (Figures 6, 7, 8 and 9).



Figure 6. Fork with markup Godiva.



Figure 7. Mounting face bow.



Figure 8. View in 45 semi adjustable articulator.



Figure 9. View in semi adjustable articulator.

Digital caliper was used to obtain the measure of wear to be made on the plaster model. The marking on the upper central incisor was 2.12 mm after the lip line at rest, and the lateral incisor was of 5.00 mm above the lower lip at rest. Obtained after the measurements were made the wear on the plaster model and reconstructing the anatomy of the smile line providing a favorable aesthetic in order to guide the technician Prosthodontics (TPD) for proper assembly of artificial teeth (Figures 10, 11, 12, 13 and 14).



Figure 10. Measurement of wear of the maxillary central incisor marked the caliper.



Figure 11. Measure wear marked lower lateral incisor in caliper.



Figure 12. Confirmation of the measure in the upper plaster model.



Figure 13. Adjust the lower plaster model.



Figure 14. Model upper and lower set gypsum.

The job was sent to the TPD for making the total immediate dentures with the color selected with the STG scale (Vipi, Pirassununga, SP) (Figure 15) gums. As he had no switch for selecting color of teeth, was selected A3 color scale VITA Classical (Vita, Germany).



Figure 15. Color selection of gum.

JSCD

Multiple extractions of remaining teeth and the immediate installation of denture reline with using Resin Soft Confort Soft (Dencril, Pirassununga, SP) and then occlusal adjustments were made (Figures 16, 17, 18, 19 and 20) were performed.



Figure 16. Patients after surgery.



Figure 17. Total prosthesis.



Figure 18. Resin Soft Confort Soft to reline of dentures.



Figure 19. Lower prosthesis.

Openly accessible at <http://www.mastereditora.com.br/jscd>



Figure 20. Upper dentures.

The patient was instructed regarding the hygiene of the prosthesis with brushes, toothpastes, soaps neutral avoiding calculations and other types of damage caused by poor hygiene.

After a week the sutures were removed, and it was done again with the relined acrylic resin comfort.

Finished installation was outstanding patient satisfaction regarding the dentures reaching the desired goal at the beginning of treatment, clearly providing a better quality of life (Figure 21).

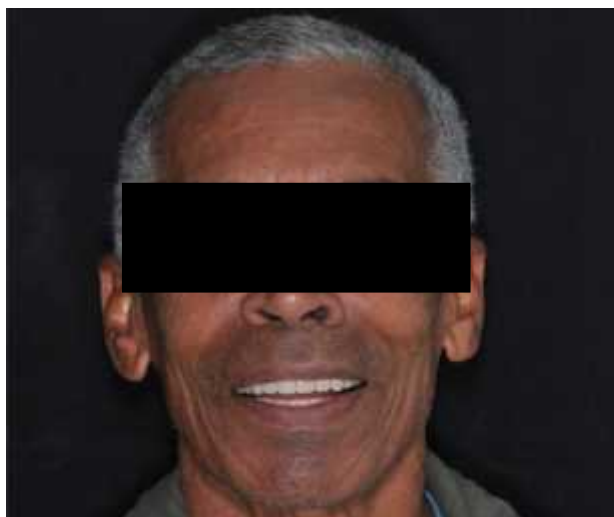


Figure 21. Final photographic record of the patient.

3. DISCUSSION

The treatment plan of the patient and the necessary procedures for immediate installation of complete dentures were performed after extraction of the remaining teeth¹. This study aimed to provide functional, aesthetic and health of the stomatognathic system reestablishment besides other advantages^{2,3}.

This planning surgical prosthetic was established after conducting a thorough clinical examination of the entire masticatory system, complete and panoramic, periapical radiographic laboratory, questionnaire semiological and psychological evaluation of the patient regarding their expectations of treatment to assess the risks

and contraindications⁴.

The remaining teeth had unfavorable and in full presence of caries periodontal situation, one of the main factors to multiple extraction⁵.

We can observe to the treatment that the patient returned its vertical dimension and aesthetics and have succeeded in therapy with the patient-professional relationship with the patient's attitude towards the use of prosthetics and oral condition of the patient⁶.

It is important to evaluate the occlusion⁷; the measure was measured using the digital caliper to delimit the extent adapted to be worn in the semi adjustable articulator plaster model and then sent to the TPD for anatomical rehabilitation of occlusion and alignment of the teeth in the arch line, thus improving the aesthetic sense of well-being, physical comfort and psychological.

The material was used for molding alginate, providing an efficient and rapid technique for the professional and the patient⁹.

The option of direct relining immediate dentures done in this case seeks to reestablish beyond aesthetics and masticatory function, condition the mucosa to receive a prosthesis in the future with the best fit, stability and retention^{10,11}.

The patient was instructed to perform a thorough cleaning after all the food and sleep was also instructed to attend Dental Clinic periodically to review and adjustments if necessary^{12,13}.

Although good planning capabilities, high quality, choice of TPD of great technical ability and all care at all stages of preparation of this work materials have been used, the patient was warned about the limitations of hearing aids, adjustment period for chewing and phonetics, periodic maintenance and home office, making more realistic expectations, avoiding a conflict of professional patient relationship and the end of work¹⁵.

4. CONCLUSION

We conclude that the objective was achieved because with the extraction of the remaining teeth and the installation of total immediate dentures returned to the patient esthetics, phonetics, improving the physiology of the stomatognathic system, providing a better quality of life.

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