

The esthetic exigency and the limits of the complex prosthetic reconstruction

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ABSTRACT: This article describes the evaluation and prosthetic treatment planning in which aesthetic requirement represented a major challenge and the rebalancing dento-facial somatosensory required optimal planning of each stage of treatment. Assuming that any dental unit deserves to be preserved for a period as long as possible on the arcade, we try to implement a concept that can provide predictable prosthetic rehabilitation to restore optimally the physiological function.

KEYWORDS: *corono-radicular, reconstruction, metal-ceramic crowns, aesthetic, intermaxillary relation.*

Introduction:

Interleaved partial edentation represents at first sight a situation where prosthetic treatment poses no problems. Major subject in many situations is determined by the type of prosthesis used. Prognosis of mobile prosthetic restorations using special anchoring system is not superior to fixed prosthetic restorations, quite the contrary. In situations where is chosen for the implementation of fixed prosthetic restorations with implant support, their survival is similar to the aggregation level of the tooth. In conclusion we can say that prosthetic treatment using dental units remaining, limit based on topographic distribution, remains a first choice.

Clinical and para clinical evaluation without assessing the potential and limits can lead to a failure aesthetic extensive prosthetic rehabilitation. Recovery of each dental unit may be in some cases the verge between fixed and mobile prosthesis. Corroborating data on dental and periodontal treatments associated with partial local morphology partial edentulous patients themselves requires planning and prosthetic plan while adjusting the phase requirements and expectations and, often, the imperative demands of patients.

Materials and methods

The study was conducted in the Department of Equilibration and Somato-Facial Esthetics, of the University of Medicine and Pharmacy Craiova. Clinical protocol was designed so as to enable sequential pretreatment steps taken to establish diagnosis. It also included radiographs and aesthetic evaluation. Protocol on the pre-treatment and went through different stages proprotetic which included rebuilding the indirect technique corono-root and crown

restoration for carious lesions. Preparation of abutments, re-size the exploratory vertical floor and wound protection dentin were performed according to conventional protocols. Note that for a rapid integration psychosocial provisional prosthesis were used. Choice of form, size, tooth orientation (respect the patient's required, but within the occlusal tooth gear appropriate clinical situation prior edentulous) and of chrome future prosthesis constituted a separate stage in which the collaboration with the dental laboratory is particularly important.

Results

It should be noted that the aim of this study was to present comprehensive data, any change in protocol steps leading to a favorable response or the other, proving that one can not talk about a balanced dental arches without facial aesthetic balance. Next we present two clinical cases demonstrating the above.



Fig.1. Dental-periodontal status at baseline.

The first situation brings into question the clinical case of a patient aged 55 years who appears at the dentistry department requesting a fixed prosthetic restoration in the maxillary region. We mention that at the first appointment five years ago, the patient refused any kind of

dental treatment, considering that our choice of prosthetic rehabilitation will not meet his requirements both functional and aesthetic. The created situation strengthened our conviction that the doctor-patient relationship must necessarily include a psychological component.

At the following presentation the aesthetic appearance is totally compromised by the edentulous areas at side and from the front area. A first clinical examination shows extensive coronary destructions in the canine (1.3.) also at the level of the central incisors. Note that the patient has previously received fixed prosthesis. Facial examination shows increased labio-mentoniere ditches, upper lip invagination disappearance of red lips. The persistence of prosthesis in the left side area emphasizes facial symmetry apparent loss of face time.



Fig.2.Edentation L, F-F,L, maxillary partially prosthesis. Overall Image.

Radiological examination shows us the proper endodontic treatment at the canine and at the maxillary central incisor. We proceed with preparation for the the three tooth roots. We opted for corono-root reconstruction performed using the indirect method. After completion and verification of corono-root devices we proceeded to cement them. We used them as abutments to provide natural curves corresponding to the reconstructed dental units.



Fig.3.View after cementing corono-root devies

Proceed to the removal of prosthetic work on arcade left, followed by conservative treatment of dental units.

The next stage consisted of overall fingerprinting of maxilla and mandible by the technique of double mixture and then to determine of intermaxillary relations by graphic intraoral registration technique. Use of provisional prosthesis permitted occlusal balancing by determining premature contacts and occlusal interference. This period is the most important from our point of view because it allows the patient to adapt to the new situation and detect clinical or aesthetic defects in restoring balance both the alveolar and dental arches in the smile.

The final step consisted in adaptation and the dental bridge cementing.



Fig.4.Overview after insertion of dental bridge

The final aspect of dental bridge deficiencies rendering shows of the shape and contours of . but they were all masked imposed by the patient and as much as possible modeling It stands out the gain related to dental-facial appearance together with restoration of size lower region



Fig.5.Lateral view



Fig.6. Front view

The following clinical case shows a patient aged 24 years which shows a latero-lateral edentulous jaw without any prosthetist attached.. At the region of the jaw shows a left latero-lateral edentulous without prosthetist attached.. By poor dental situation showing carious lesions in the frontal group and coronal destruction of the left maxillary premolar two construction order the carrying out of a fixed prosthetic dental aggregate of these structures.



Fig.7. Initial situation at the onset of treatment

Protocol aims in a first stage sanitation and restoration of processes caries central incisor (2.1.) and of the premolar (2.4.).



Fig.8. Situation after treatment and preparation of abutments

It is chosen for the reconstitution incisor root corono-cast while at the level of premolar for a reconstruction with prefabricated endodontic pins and glass ionomers.

Next steps are similar to those described in the first clinical case. There was an incorrect assessment of the color by the patient who disregarded the dental units present on mandible. For the corrections and establishment of commonly agreed of the color shade were made two temporary bridges, A2 and A3.5 respectively corresponding color VITA key.

The final option was for a total esthetic metal-ceramic construction, color A2. And In that case it was proceeded to reevaluation of the lower floor vertical dimension and functional dental restoration dental contacts.



Fig.9. Bridge inserted in the prosthetic field



Fig.10. Restoring of floor vertical dimension

Discussion

When treating patients who require special therapeutic conduct the regarding aesthetic status it is considered particularly important that all phases of work to be conducted under a unitary concept, allowing sequential visualization to highlight, by itself, the final result, otherwise predictable. The response of the practitioner cannot remain singular. He receives help also from the dental technician. The collaboration of the two would not be complete without patient intervention by his

wishes may, within the limits established by mutual agreement, to remodeling of the building aesthetically prosthetic.

Recovery of units affected by dental caries process simple or complicated as well as those who were, regained "by correct endodontic treatment is a very important step. Concept requires clinical situations in which the crown is completely destroyed or when it cannot direct support a crown restoration, that the preparation of the abode root to be well made and of a length to preserve as much tooth structure as possible. Abutment must be such shaped as to keep reconstituted tooth morphology [1,2]. Corono-radicular reconstruction crown is important for retention of the coating but the success of the restoration is ultimately determined by the remaining tooth structure [3,4]. Coronary reconstruction with prefabricated abutments was for us a treatment option, especially in the dental structures of in the lateral area. The management must be such oriented as to allow the removal of a minimum quantity of dental tissue, while satisfying the requirements for stability and retention elements at the abutments aggregation [3,5]. Edentulous prosthetic field management should aim height, width, its length and quality of mucosal coating. Required registration of intermaxillary relations and their transfer on the articulator are required as the only solution to achieve proper gnathoprotective equipment and restoring balance of dental-facial somatosensory.

The assessment protocol of the aesthetic status includes, besides determining the axis of vertical symmetry, horizontal planes, of the bipupilare line and plane of mouth corners, front occlusal plane and facial profile [6,7]. Our study paired each stage of the protocol in sequence aimed at achieving the a plan for evaluating premature contacts and occlusal interferences in the provisional dental bridge, data which are transmitted to dental laboratory and to be taken into account in making final dental bridge. Association of occlusal examination with markers given by aesthetic protocol data allow highlighting and planning of prosthetic treatment [8,9]. It was also considered locating and evaluating contact points, of the contact surfaces, of papillae and gingival level.

The impact on the quality of construction smile can highlight the value of dentures and how the relationship doctor- dental technician-patient worked. Recent research shows that restoring of the aesthetic balance in particular the type of smile, directly influence the exposure

of prosthetic constructions [10, 11, and 12]. Our choice concerning this hypothesis is verified partially because we noticed that most patients require certain types of prosthesis positioning elements often related to photographic images from previous years or because of their perception of the notion of beauty, as evidenced by us in the two cases clinical shown. The association of prosthesis visibility to the lateral areas represented a parallel study but of accurate information we can say that the perception of an attractive smile is linked to women with a vision of dental units up to two maxillary premolars, while men prefer to view level-one or two molars. Chromatic variations require a certain therapeutic conduct related both to the patient desires, but especially of the experience and perception of both the practitioner and the dental technician.

Conclusions

Recovery of the dental units affected by caries process simple or complicated as well as those that were, regained "by the correct endodontic treatment represents a very important step that helps maintain on the arch and their use in case of prosthesis

Obligation to register the intermaxillary relations and their transfer on the articulator represents the only solution required to achieve proper equipment and restore gnathoprotective dental-facial somatosensory balance.

Clinical and paraclinical evaluation without an evaluation of potential and can lead to failure aesthetic limits a extensive of prosthetic rehabilitation.

Disclaimer

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