THE TOTAL CROWN BRIDGE RESTORATION OF A DENTAL ARCH

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Abstract: This paper illustrates a clinical case of edentulous lateral-lateral status that was restored with a total metal-ceramic bridges, which successfully restore the lost functions of the dentomaxillary system and help increasing the patient's oral health concerns.

Cuvinte cheie: punte totală, metalo-ceramică

Rezumat: Prezenta lucrare ilustrează un caz clinic de edentație latero-latero-laterală restaurată cu ajutorul unei punți totale metalo-ceramice care restabilește cu succes funcțiile pierdute ale aparatului dento-maxilar și ajută la creșterea preocupărilor pentru sănătatea orală a pacientei.

INTRODUCTION

Possibilities of restoration of the edentulous interlaced arcade status are multiple when dental units are missing and the occlusion causes large function imbalances. Total bridges are part of special crown bridges including: bridge extension, movable and removable bridges, implant bridges, implant bridges, Maryland bridges.(1)

To restore an entire dental arch with a total bridge is necessary to meet certain local conditions related to the specifics of each case namely the existence of sufficient arch dental units in terms of periodontal stable with good implantation, abutment teeth that can support at least three crown bridges, Edentulous type must be mixed and include the entire edentulous arch such as fronto-lateral-lateral frontal.(2,3)

Minimum units needed to support a dental bridge is four total, these dental units must be free mobility of the coronal integrated and located in different parts of the arch, to be treated fairly endodontic, for example, is sufficient the presence arcade of two canines and two molars to achieve a total axle.(1,2) As regards the general conditions necessary for a total bridge, they must consider the following factors: general health of the body, the patient's tolerance of treatment type and hours of work and the material from which are made full bridges, financial possibilities the patient's oral hygiene status and the patient's disposition to the dispensary and dental status monitorising.(2)

CASE PRESENTATION

Patient, aged 27 years old, has presented in our specialty dental esthetic clinic in order to reestablish the aesthetic oral functions.

On the intraoral clinical examination, we found the presence of an edentulous maxillary arch lateral-lateral-side that is highlighted in figure no 1. Tooth 1.7. This old crown restored with a root caries process marginally. The teeth in the front or upper canine-canine group showed higher caries, enamel brittle, large fillings inappropriate that could not perform marginal functions of dental apparatus. In terms of masticatory units

outstanding dental arch could not therefore dearth of other major failure was chewing.

In terms of physiognomy, the presence of edentulous spaces, the migrated position of tooth discoloration and decayprone structures, gives an unpleasant appearance. Tooth 2.5 has coronal mass destruction and was restored, 2.7 has a carious process incomplete restored. Wisdom teeth showed surface caries. Oral health status of the patient is affected by the lack of proper oral hygiene, plaque deposits and muco-bacterial dental plaque is visible during clinical examination.

Figure no. 1. Intraoral clinical aspect of the maxillary arch to be restored



In the mandibular arch, the patient had edentulous status on left side by the lack of 3.6, 3.7. Because 4.6. was extracted during childhood, in its corresponding space dental arch is closed by mesial migration to the 4.7 and 4.8.

We noticed the presence of bacterial plaque deposits and tartar, of dental caries on multiple surfaces.

Occlusal plane, as shown in figure no. 2 is uneven, with a large inclination to the right due to occlusal imbalances that were installed during the period after the loss of dental units. The patient stated that this edentulous condition has existed for about 10 years.

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Figure no. 2. The appearance of shading occlusal plane due to lack of dental units



In order to establish complete and comprehensive diagnosis and especially of a treatment plan to meet patient needs and restore dental apparatus functions, we asked further discussions on panoramic radiographs.(4) This radiograph was performed by classical technique developed film exposure in relation to incidence of 1:3 and is presented in figure no. 3.

Radiological imaging examination revealed tooth endodontic treatments performed correctly 2.3. and 2.5., secondary caries processes in the upper front teeth and the upper molars and other teeth caries in the mandibular arch lesions that were identified and clinical examination. Report of the lateral maxillary tooth roots with maxillary sinus is intimate and old edentulous bone structure due status is lowered by inserting the maxillary sinus limiting toothless gap between the roots of teeth.

Figure no. 3. The appearance of radiological image



Following this review and analysis of complex desires and availability of patients, we determined that the treatment plan and complete restoration of the maxillary arch will de made by metal ceramic crown bridges following that in another step to restore arcade left side jaw with a metal ceramic bridge. In order to achieve total maxillary bridge teeth have prepared by grinding as follows: 1.7., 1.3., 1.2., 1.1., 2.1., 2.2., 2.3., 2.7. and performed their endodontic treatment, as shown in figure no. 4.

Due to massive coronal tooth damage at 2.5., we made a crown-root device chrome-nickel that was cemented in the root

Figure no. 4. The appearance of the prosthetic field maxillary teeth prepared for fingerprinting



After imprinting prosthetic field, the dental technician wax model and has shaped metal frame of which was made in oral evidence. The total bridge model is presented in figure no. 5, while the mucosal side is shown in figure no. 6.

Figure no. 5. Appearance of the total bridge on working model: a) oral view, b) vestibular view





Figure no. 6. The total bridge facial appearance



After insertion of the denture in the oral cavity, it adapts well mucosal and occlusal as shown in the following figures no.7 and 8.

Figure no. 7. The clinical maxillary total bridge intraoral view



Figure no. 8. Appearance of occlusion



Once the period of stomatognathic system adaptability to the new clinic status is finalized and after final cementation of metal-ceramic total crown bridge in the oral cavity, the patient

states satisfied. Patient dispensary was done over a period of 3 to 6 months for brushing. Following these clinical examination, we noticed an improvement in oral and dental health of patient's status and thus increase quality of life by restoring dental apparatus functions because of this type of restoration: total metal-ceramic bridge.

CONCLUSIONS

- Dental apparatus functions are abolished due to the presence of edentulous spaces, due to discomia of the dental restorations, due to poor oral hygiene, all dependent on patient's oral health care.
- Oral rehabilitation in total crown bridges help to restore balance of stomatognathic system in patients.
- Total bridges are an alternative to dental implant therapy, an alternative that is more accessible in socio-economic terms.
- Restoring an complete arch with biocompatible materials such as ceramics and helps increase awareness of oral health status in patients.

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