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# COMPLICATIONS OF PARTIALLY EDENTULOUS DENTITION ASSOCIATED WITH INCOMPLETE ORALE REHABILITATION

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## ABSTRACT

The prosthodontic restoration are intended to restore the original morphology of the arch and to be resistant to conditions in the oral cavity, dimensionally stable of the tissues, and tissue compatible. The aim of prosthetic treatment is to replace lost tissue and avoid, or at least reduce, all the functional disorders that occure because of tooth loss. Matherial and method Different types of dentures was used for different topographic situations in a partially edentulous dentition. Results and discussion Under the pressure of tooth migration, the bony alveolar wall opposing the edentulous space is broken down. Conclusion Management of tooth wear is an integral part of treatment planning.

Keywords: partial edentation, oral rehabilitation, complications

## INTRODUCTION

Diagnosis means 'through knowledge' and entails acquisition of data about the patient through an elaborate clinical examination, which comprises a history and physical examination, supplemented in some cases by investigations.(3,8) An correct and complete examination must be the first step of the medical treatment that the physician must execute every time. By far the most important of these is the history. The aim of prosthetic treatment is to replace lost tissue and avoid, or at least reduce, all the functional disorders that occure because of tooth loss.(2,9) The specific functions of a tooth replacement can thus be identified as prophylactic function and therapeutic function. The incomplete oral rehabilitation could be more harmful that the lack of prosthetic treatment. In the case when two arches are mutilated by a partial edentation, the restoration of centric relation represents a fundamental problem of prosthetics. The disturbance of centric relation start with the loss of periodontal-muscular reflexes and finish with non-coordination of muscular activity.(6,11). Patients with advanced oral diseases and partial tooth loss jeopardizing individually optimal function have to be treated primarily as patients affected by opportunistic infections and hence the elimination and control of such infections must receive first priority irrespective of the patients.(5,7,10).

## MATHERIAL AND METHODS

Clinical and radiographic evaluation of the patient and the dentition includes periodontal assessment, crown-to-root ratio, and caries assessement. All restaurations must be completed prior to making the impression for the removable partial dentures. These include teeth requiring restorations, fractures or

endodontic therapy, recontouring or enameloplasty, gingival inflammation, periodontal pockets and tooth mobility.

For some patients, a conventional removable partial denture may be a comfortable, affordable, and desirable treatment option. In some clinical situations, however, the retention and function of a conventional removable partial denture may be compromised due to lack of an adequate number of abutment teeth.

**RESULTS**

Adopt a methodical routine, which will allow it to gain the patient's trust and establish good communication and rapport. This makes the interview more pleasant and effective for both and is by far the most important determinant of the outcome of any treatment approach.

Attrition, erosion and abrasion and resultant tooth structure loss are very prevalent at people with incomplete oral rehabilitation. Approximately 83 % of the examined people with incomplete oral rehabilitation had at least one tooth that had all the incisal or occlusal enamel lost to attrition, and 9% had at least one tooth worn down to the gingiva. Tooth fractures, significant areas of abrasion and attrition, as well as chemically-induced tooth loss should be noted during the examination. In order to control and minimize tooth structure loss, occlusal problems and dysfunction of the temporomandibular joint, the precipitating factors should be determined and efforts made to control their etiology.(fig.1)

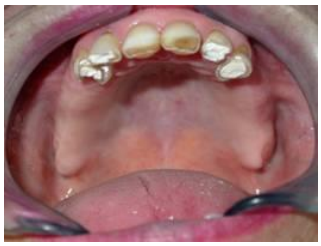

Fig.1 The incisal enamel lost

Another symptom for edentulous state complication at the incomplete rehabilitation patients could be the occluso-periodontal disharmony by missing the periodontal equilibrium.(fig.2)

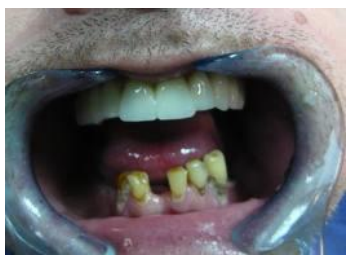

Fig.2 Occluso-periodontal disharmony

In the case of edentulous space, the supporting function of the closed dental arch is the lost of the approximal contact points and of the tooth migration into the

edentulous space. Under the pressure of tooth migration, the bony alveolar wall opposing the edentulous space is broken down. At the same time, the alveolar bone beneath the space is resorbed. The consequence is the formation of the periodontal pocket in the area bordering the edentulous space. In addition, the approximal contacts with adjacent teeth become loose.(fig.3)

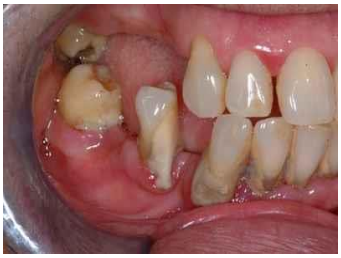

Fig.3 Periodontal complication

One of complication is the elongation of teeth. This pathology may be due to the reactive behavior of the periodontal tissues. If the tooth is not pressed into the socket by masticatory force, the pressure in the blood vessels lifts the tooth out of socket. The gentle but continuous pull on the ligamentous apparatus acts as a stimulus on the alveolar bone, which grows in the direction of the pull until the tooth is held by antagonist contact or the opposing jaw.(fig.4)

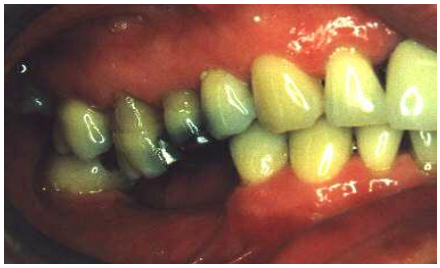

Fig.4 The elongation of teeth

The residual ridge is subjected to unpredictable resorption patterns and remodeling of the alveolar bone when teeth are lost. Ridge high and width must be evaluated to establish adequate stability, retention, and occlusal plane when fabricating partial dentures at the patients who wear fixed dentures.

Malocclusions in a partially edentulous dentition arise because the continuous masticatory field is interrupted and sagittal or occlusal support contacts are lost. The malocclusions is characterized by various degrees, affects the temporo-mandibular joint, the masticator muscles, the mandibular dynamics and the appearance of the parafunctions. (fig.5)

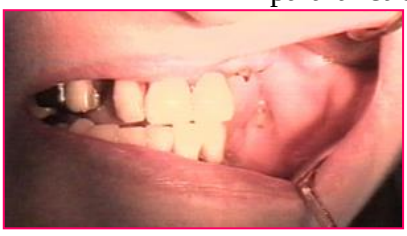

Fig.5 Malocclusions

## DISCUSSION

Residual ridge remodeling is a chronic condition that affects different people at different rates. The reforming of the bone tissue is in according to the action of the mechanical forces of pressure and traction. The bone as a plastic tissue models itself continuously all over lifetime. The amount of remaining residual ridge as well as the ridge morphology and height should be taken into consideration when planning the surgical and restorative treatment with fixed or removable dentures.

The overeruption of the antagonist has two repercussions. First, in the dental arch from which the tooth is overerupting, all of the teeth become more mobile, bringing consequences such as loss of sagittal support, opening of the interdental spaces, approximal caries, and damage to the marginal periodontium.

Removable partial dentures provide a sound and desirable treatment option for many prosthodontic patients. This can be several reasons, such as the lack of suitable abutments for conventional fixed partial dentures, lack of suitable bone for implant therapy with fixed prosthese and financial constraints.

## CONCLUSIONS

The oral rehabilitation treatment structure is intended to have a therapeutic action. Different types of oral rehabilitation are required for different topographic situations in a partially edentulous dentition. Management of tooth wear is an integral part of treatment planning.

The pattern, etiology and severity must be considered prior to completion of a treatment plan. The success of a consultation depends on the use of some well-tested principles and the implementation of several steps after clinical and paraclinical evaluation. It is especially important to be conscious of the way the patient wishes to be addressed as some are conscious of status, and cultures also have an effect.

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