Prosthodontics : An Inside Affair..!

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Introduction

Today, a large proportion of the aging population is motivated to "stay young". Besides alluding to physical fitness and attractiveness, this attitude also includes the maintenance of a functional and cosmetically appealing dentition. In this context, losing one or several teeth is a traumatic event and many people experience difficulties in coming to terms with their loss. The immediate consequences of tooth loss are functional (the person is unable to chew or speak properly) as well as cosmetic (facial appearance is adversely affected). In the long term, tooth loss often impairs the person's self-image, emotional balance, and overall quality of life.[1,2]

Tooth loss is not a disease per se. Still, it often leads to disabilities of varying degrees of severity. Therefore affected individuals should be considered as persons with a disability who seek a prosthodontist's help to re-establish the original morphology and functional capabilities of their dentition.

Prosthodontics may be primarily regarded as the discipline of dentistry concerned with the replacement of missing teeth. It is commonly subdivided into fixed and removable prosthodontics. As the name implies, removable prosthodontics refers to treatment modalities using prosthetic devices that can be removed from the mouth for cleansing and maintenance procedures. Fixed prosthodontics encompasses those modes of treatment in which the replacement teeth are permanently placed in the oral cavity.

Terminologies

A **crown** is a cemented extracoronal restoration that covers, or veneers, the outer surface of the clinical crown. It should reproduce the morphology and contours of the damaged coronal portions of a tooth while performing its function. It should also protect the remaining tooth structure from further damage.[2]

If it covers all of the clinical crown, the restoration is a **full or complete veneer crown** It may be fabricated entirely of a gold alloy or some other untarnishable metal, a ceramic veneer fused to metal, an all-ceramic material, resin and metal, or resin only. If only portions of the clinical crown are veneered, the restoration is called a **partial veneer crown**.

Intracoronal cast restorations are those that fit within the anatomic contours of the clinical crown of a tooth. **Inlays** may be used as single-tooth restorations for proximocclusal or gingival lesions with minimal to moderate extensions. They may be made of gold alloy or a ceramic material. When modified with an occlusal veneer, the intracoronal restoration is called an **onlay** and is useful for restoring more extensively damaged posterior teeth needing restorations.

Another type of cemented restoration has gained considerable popularity in the past 10 years. The all-ceramic **laminate veneer**, or facial veneer, is used in situations requiring an improved cosmetic appearance on an anterior tooth that is otherwise sound. It consists of a thin layer of dental porcelain or cast ceramic that is bonded to the facial surface of the tooth with an appropriate resin.[5] The **fixed partial denture** is a prosthetic appliance, permanently attached to remaining teeth, which replaces one or more missing teeth. Although the term is preferred by prosthodontists, this type of restoration has long been called a bridge. "**Bridge"** is still in common enough usage that in the most recent listing of ADA insurance codes and nomenclature (1991), components of this restoration are catalogued under "bridge", and the term "fixed partial denture" does not appear in the list. A tooth serving as an attachment for a fixed partial denture is called an **abutment**. The artificial tooth suspended from the abutment teeth is a **pontic**. The pontic is connected to the fixed partial denture retainers, which are extracoronal restorations that are cemented to the prepared abutment teeth. Intracoronal restorations lack the necessary retention and resistance to be utilized as fixed partial denture retainers. The connectors between the pontic and the retainer may be rigid (ie, solder joints or cast connectors) or non rigid (ie, precision attachments or stress breakers).[5]

At large Prosthodontic restorative implants became essential part of routine dental practice in conjunction to replace natural teeth. It based on Branemarks osseointegration theory, where thread of implant attached to bone by means of osseointegration; refers to the fusion of the implant surface with the surrounding bone. it is highly useful in congenitally missing teeth, early loss of permanent teeth, implant supported dentures, overtures and so on.[3,4]

In an interdisciplinary approach; prosthodontic restoration mean would be fulfil by orthodontic intervention, periodontal adjunctive procedures, surgical ridge augumentation, sinus lift or so parallel procedures; are explained subsequently.

Prostho-Ortho interrelationship

Adult Orthodontic Cases : for molar uprighting; where it is replaced by prosthesis, pathologically migrated teeth, increased interdental space for implants.

Prostho-Perio interrelationship

Indication : Alveolar Ridge Augmentation, alveolar ridge lift, severe bone loss cases where bone graft is required, crown lengthening procedure, frenum correction and so on procedures.[2]

Prostho-Endo interrelationship

Indication : Root Canal Therapies prior to crown and bridge work, Post and Core Restorations, Endodontic surgaries, retrograde restorations.[4,5]

Summary

Prosthodontic as a whole, plays major role in improving quality of life by various means such as crown and bridge work, removable partial dentures, complete dentures, implants. It helps in maintaining form and function of or various oral functions such as mastication, speech, swallowing, esthetics, smile dynamics.

Though artificial teeth replacement never be natural but striving to make it near to.

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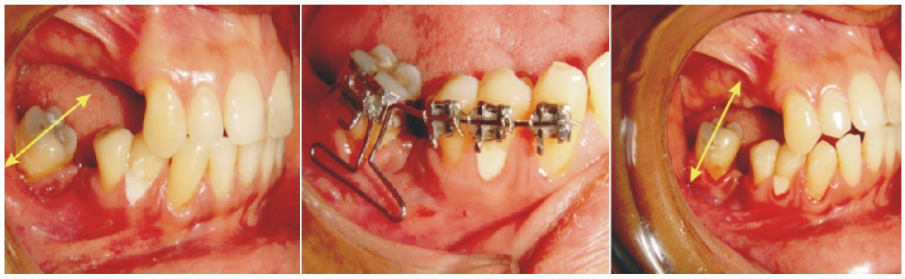

Fig : Case showing uprighting of molar prior to restoration.

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