

# PROSTHODONTICS

Lec: 7

المرحلة الرابعة

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## **INSTRUCTIONS TO THE PATIENT:**

After initial placement and adjustment of the RPD and before the patient is dismissed. The difficulties that may be encountered and the care that must be given the prosthesis and the abutment teeth must be reviewed with the patient.

The patient should be instructed in the proper placement and removal of the removable partial denture. They should demonstrate that they can place and remove the prosthesis themselves. Clasp breakage can be avoided by instructing the patient to remove the removable partial denture by the bases and not by repeated lifting of the clasp arms away from the teeth with the fingernails.

The patient should be advised that some discomfort or minor annoyance might be experienced initially. To some extent, this may be caused by the bulk of the prosthesis to which the tongue must become accustomed.

The patient must be advised of the possibility of the development of soreness despite every attempt on the part of the dentist to prevent its occurrence. Because patients vary widely in their ability to tolerate discomfort, it is best to advise every patients that needed adjustments will be made. On the other hand, the dentist should be aware that some

patients are unable to accommodate the presence of a removable prosthesis. However, the dentist must avoid any statements that may be interpreted or construed by the patients to be positive assurance tantamount to a guarantee that the patient will be able to use the prosthesis with comfort and acceptance. Too much depends on the patient's ability to accept a foreign object and to tolerate reasonable pressures to make such assurance possible.

Discussing phonetics with the patient in regard to the new dentures may indicate that this is a unique problem to be overcome because of the influence of the prosthesis on speech. With few exceptions, which usually result from excessive and preventable bulk in the denture design, contour of denture bases, or improper placement of teeth, the average patient will experience little difficulty in wearing the removable partial denture. Most of the hindrance to normal speech will disappear in a few days.

Similarly, perhaps little or nothing should be said to the patient about the possibility of gagging or the tongue's reaction to a foreign object. Most patients will experience little or no difficulty in this regard and the tongue will normally accept smooth, nonbulky contours without objection. Contours that are too thick, too bulky, or improperly placed should be avoided in the construction of the denture, but if present, these should be detected and eliminated at the time of placement of the denture; the dentist should palpate the prosthesis in the mouth and reduce excessive bulk accordingly before the patient has an opportunity to object to it. The area that most often needs thinning is the distolingual flange of the

mandibular denture. Here the denture flange should always be thinned during the finishing and polishing of the denture base. Sublingually the denture flange should be reproduced as recorded in the impression, but distal to the second molar the flange should be trimmed somewhat thinner, Then, when the denture is placed, the dentist should palpate this area to ascertain that a minimum of bulk exists that might be encountered by the side and base of the tongue if this needs further reduction . it should be done and the denture repolished before the patient is dismissed .

The patient should be advised of the need to keep the dentures and the abutment teeth meticulously clean. If cariogenic processes are to be prevented, the accumulation of debris should be avoided as much as possible, particularly around abutment teeth and beneath minor connectors, Furthermore, inflammation of gingival tissue is prevented by removing accumulated debris and substituting toothbrush massage for the normal stimulation of tongue and food contact with areas that will be covered by the denture framework.

The mouth and removable partial denture should be cleaned after eating and before retiring. Brushing before breakfast also may be effective in the reduction of the bacterial count, which may help to lessen acid formation after eating in the caries – susceptible individual. A removable partial denture may be effectively cleaned by use of a small, soft – bristle brush. Debris may be effectively removed through the use of nonabrasive dentifrices, because they contain the essential elements for cleaning. Household cleaners and toothpastes should not be used , because they are

too abrasive for use on acrylic resin surfaces , The patient , and the elderly or the handicapped patient in particular , should be advised to clean the denture over a basin partially filled with water so that the denture impact will be less if the denture is dropped accidentally during cleaning .

In addition to brushing with a dentifrice, additional cleaning may be accomplished by use of a proprietary denture cleaning solution .The patient should be advised to soak the dentures in the solution for 15 minutes once daily , followed by a thorough brushing with a dentifrice .Although hypochlorite solutions are effective denture cleaners , they have a tendency to tarnish chromium – cobalt frameworks and should be avoided .

In some mouths the precipitation of salivary calculus on the removable partial denture necessitates taking extra measures for its removal. Thorough daily brushing of the denture will prevent deposits of calculus for many patients. However any buildup of calculus noted by the patient between scheduled recall appointments should be removed in the dental office, this can be quickly and readily accomplished with an ultrasonic cleaner.

Because many patients may dine away from home, the informed patient should provide some means of carrying out midday oral hygiene, Simply rinsing the removable partial denture and the mouth with water after eating is beneficial if brushing is not possible.

Opinion is divided on the question of whether or not a removable partial denture should be worn during sleep. Conditions should determine the

advice given the patient, although generally the tissue should be allowed to rest by removing the denture at night.

The denture should be placed in a container and covered with water to prevent its dehydration and subsequent dimensional change. About the only situation that possibly justifies wearing removable partial dentures at night is when stresses generated by bruxism would be more destructive because they would be concentrated on fewer teeth. Broader distribution of the stress load, plus the splinting effect of the removable partial denture, may make wearing the denture at night advisable. However, an individual mouth protector should be worn at night until the cause of the bruxism is eliminated.

Often the question arises whether an opposing complete denture should be worn when a removable partial denture in the other arch is out of the mouth.

The answer is that if the removable partial denture is to be removed at night, the opposing complete denture should not be left in the mouth. There is no more certain way of destroying the alveolar ridge, which supports a maxillary complete denture, than to have it occlude with a few remaining anterior mandibular teeth.

The removable partial denture patient should not be dismissed as completed without at least one subsequent appointment for evaluation of the response of oral structures to the restorations and minor adjustment if needed. This should be made at an interval of 24 hours after initial placement of the denture. It need not be a lengthy appointment but should

be made as a definite rather than a drop – in appointment. This not only gives the patient assurance that any necessary adjustments will be made and provides the dentist with an opportunity to check on the patient's acceptance of the prosthesis but also avoids giving the patient any idea that the dentist's schedule may be interrupted at will and serves to give notice that an appointment is necessary for future adjustments.

### **FOLLOW – UP SERVICES:**

The patient must understand the sixth and final phase of removable partial denture service (periodic recall) and its rationale; patients need to understand that the support for prosthesis (Kennedy Class I and II) may change with time. Patients may experience only limited success with the treatment and and prostheses, so meticulously accomplished by the dentist, unless they return for periodic oral evaluations.

After all necessary adjustments to the removable partial denture have been made and the patient has been instructed on the proper care of the denture, they must also be advised as to the future care of the mouth to ensure health and longevity of the remaining structures. How often the dentist should examine the mouth and denture depends on the oral and physical condition of the patient. Patients who are caries susceptible or who have tendencies towards periodontal disease or alveolar atrophy

should be examined more often. Every 6 months should be the rule if conditions are normal.

The need to increase retention on clasp arms to make the denture more secure will depend on the type of clasp that has been used .Increasing retention should be accomplished by contouring the clasp arm to engage a deeper part of the retentive undercut rather than by forcing the clasp in toward the tooth. The latter creates only frictional retention which violates the principle of clasp retention. An active force, such retention contributes to tooth or restoration movement, or both, in a horizontal direction, disappearing only when either the tooth has been moved or the clasp arm returns to a passive relationship with the abutment tooth. Unfortunately, this is almost the only adjustment that can be made to a half- round cast clasp arm. On the other hand, the round wrought – wire clasp arm may be cervically adjusted and brought into a deeper part of the retentive undercut. Thus the passivity of the clasp arm in its terminal position is maintained, but retention is increased because it is forced to flex more to withdraw from the deeper undercut. The patient should be advised that the abutment tooth and the clasp will serve longer if the retention is held minimally , which is only that amount necessary to resist reasonable dislodging forces .

Development of denture rocking or looseness in the future may be the result of a change in the form of the supporting ridges rather than lack of retention.

This should be detected as early as possible after it occurs and corrected by relining or rebasing. The loss of tissue support is usually so gradual that the patient may be unable to detect the need for relining. This usually must be determined by the dentist at subsequent examinations as evidenced by rotation of the distal extension denture about the fulcrum line. If the removable partial denture is opposed by natural dentition, the loss of base support causes a loss of occlusal contact, which may be detected by having the patient close on wax or Mylar strips placed bilaterally . If however , a complete denture or distal extension removable partial denture opposes the removable partial denture , the interocclusal wax test is not dependable because posterior closure , changes in the temporomandibular joint , or migration of the opposing denture may have maintained occlusal contact. In such cases evidence of loss of ridge support is determined solely by the indirect retainer leaving its seat as the distal extension denture rotates about the fulcrum.



No assurance can be given to the patient that crowned or uncrowned abutment teeth will not decay at some future time. The patient can be assured, however, that prophylactic measures in the form of meticulous oral hygiene, coupled with routine care by the dentist, will be rewarded by greater health and longevity of the remaining teeth.

The patient should be advised that maximal service may be expected from the removable partial denture if the following rules are observed:

- 1- Avoid careless handling of the denture, which may lead to distortion or breakage. Damage to the removable partial denture occurs while it is out of the mouth, as a result of dropping it during cleaning, or an accident occurring when the denture is not worn. Fractured teeth, denture bases, and broken clasp arms can be repaired, but a distorted framework can rarely if ever be satisfactorily readapted or repaired.
- 2- Protect teeth from caries with proper oral hygiene, proper diet, and frequent dental care. The teeth will be no less susceptible to caries when a removable partial denture is being worn but may be more so because of the retention of

debris. At the same time, the remaining teeth have become all the more important because of oral rehabilitation, and abutment teeth have become even more valuable because of their importance to the success of the removable partial denture. Therefore the need for a rigid regimen of oral hygiene, diet control, and periodic clinical observation and treatment is essential to the future health of the entire mouth. Also the patient must be more conscientious about returning periodically for examination and necessary treatment at intervals stated by the dentist.

- 3- Prevent periodontal damage to the abutment teeth by maintaining tissue support of any distal extension bases, As a result of periodic evaluation, this can be detected and corrected by relining or whatever procedure is indicated.
- 4- Accept removable partial denture treatment as something that can not be considered permanent but must receive regular and continuous care by both the patient and the dentist. The obligations for maintaining caries control and for returning at stated intervals for treatment must be clearly understood along with the fact that regular charges will be made by the dentist for whatever treatment is rendered.