

THE INTERIM REMOVABLE PARTIAL DENTURE



» INDICATIONS:

The Temporary or Interim Partial Denture is one of the most versatile and useful appliances that we use in dentistry and is often an integral part of a patient's long term treatment plan.

Although interim partials are most frequently used to replace a missing tooth for a young patient who has suffered the early loss of an anterior, their use in other instances is often indicated when age, health, poor finances, or lack of time precludes a more definitive treatment. Some of the most common indications for the use of an interim partial are:

1. to maintain space.
2. to re-establish occlusion.
3. to replace visible missing teeth while definitive restorative procedures are being accomplished.
4. to serve while the patient is undergoing periodontal or other prolonged treatment.
5. to condition the patient to wearing a removable prosthesis.
6. when healing is progressing after an extraction or a traumatic injury.
7. to maintain function while accomplishing minor tooth movement.

» TREATMENT PROCEDURES:

1. The first step in providing your patient with an excellent interim partial is to make sure that the arches are properly prepared to accept the partial. For example, it is often necessary to prepare occlusal rests to provide for sufficient resistance



to vertical displacement during function. (see photo below)

2. Take accurate alginate impressions of both arches. The impressions should be extended sufficiently to capture all the supporting tissues. In the mandibular impression, the anatomy of the ridge lingual to the natural and missing teeth must be captured. In the maxillary impression, the impression tray must be altered to eliminate any excessive space between the tray and the hard palate. If this is not done, the impression material will sag. The result will be a poor fitting appliance.
3. Pour up the impressions immediately in a dense dental stone.
4. Take an accurate occlusal record. Dental casts can often be hand articulated in more than one way. Therefore, it is essential to give the lab an accurate representation of the patient's centric occlusion.
5. Select a shade by matching the remaining teeth to any standard shade guide (Biotone type). The lab will pick the mold and size of the artificial teeth to be used by matching them to the remaining natural teeth on the master cast.
6. Determine the type of retention that



will be necessary. Although having a well adapted denture base that slightly engages interproximal undercuts is often enough to retain an interim partial, most patients prefer a partial that is palate-free. When this is the case, retentive clasps may be used. The most common clasps used with temporary partials are the Ball clasp, "C" clasp, and the Crozat clasp. All three are wrought wire clasps made out of orthodontic wire."

7. Determine whether or not you will need to do an anterior try-in to achieve the desired esthetics. For example, it is especially important to align the midline formed by the central incisors with the midline of the face, as any great deviation will result in an artificial appearance. If you make the decision to do a try-in, make sure to indicate on the Rx that this stage is necessary.
8. Make a detailed lab slip describing the partial design. It should include the following information:
 - a) tooth shade.
 - b) the type of retention desired.
 - c) a description of the set-up (how the teeth are to be set, abutted against the ridge, with or without a labial flange, overlapping of teeth, diastema, etc.)
 - d) the type of teeth - we recommend plastic teeth as they can be easily adjusted and reshaped.
 - e) an outline of the denture base and its extensions. This should be drawn and described.
 - f) indicate on Rx the need for anterior try-in.

9. At the delivery appointment, the tissue surface of the interim partial denture should be painted with pressure-indicating paste before attempting to place the denture in position. This will show any areas that may interfere with the denture being properly seated.

10. Carefully reshape these areas of interference. The goal is to get intimate contact between the denture base and the soft tissue without causing blanching or tissue ischemia.

11. The next step is to check the occlusion. The anterior teeth should be adjusted so only light contact is made in centric, lateral, and protrusive movements. The posterior occlusion desired is dependent upon the number of teeth involved and the desired use of the partial. For example, when multiple posterior teeth are being replaced, normal occlusal contacts are usually necessary to provide the patient with a functional occlusion. On the other hand, when only a few posterior teeth are being replaced light occlusal contact may be indicated.

12. When all the necessary adjustments have been made, the patient must be thoroughly counseled in the care of the temporary partial denture, the remaining teeth, and the soft tissues. Proper tooth brushing techniques and the use of dental floss should be a routine part, of the Patient's home care before the time of delivery of these appliances. No useful purpose is served when a removable partial denture is placed in an unclean mouth. This will only hasten the inevitable destruction of the remaining teeth and soft tissues.

» CONTRAINDICATIONS AND CONCERNS:

Generally, patients who wear interim partials are more susceptible to caries because the partial denture as well as the remaining natural teeth can become a target for plaque accumulation. Therefore, extra prophylactic measures such as more frequent hygiene visits and the regular use of a topical fluoride should be done. The use of disclosing tablets is an excellent way to show your patients the areas that are susceptible to accumulation of plaque and debris.

Ideally, temporary partials should not be worn during sleep as the soft tissue needs time to recover to its normal healthy architecture. Those patients that insist on wearing their prosthesis while

they sleep should leave their partial out for several hours during the day.

When using clasps for retention, care should be taken not to interfere with the patients normal occlusion. Occlusal interferences are one of the main reasons for poor patient compliance with these appliances.

Every attempt should be made to achieve the best anterior esthetics possible. For example, if excess space exists, creating a slight diastema is more natural than adding an extra tooth. Where there is a lack of space, slight overlapping is preferred.

» LAB REQUIREMENTS:

1. an excellent set of stone casts.
 2. an accurate inter-occlusal record.
 3. a completed lab instruction sheet.
- Every attempt should be made to establish excellent esthetics

» SUPPLY LIST:

- Alginate*
- Kromopan*
- Impression Trays*
- Acrylic Curing Hydro Static Pressure Unit*
- Universal Adjusting Pliers - Bird Beaks*
- Three Prong Adjusting Pliers*
- Wire Cutting Plier*
- Interproximal Enamel Stripping Tool Kit*
- Lighting Strips*
- Acrylic Repair Kit*
- Flame Shaped Carbide*
- Barrel Shaped Carbide*
- Fissure Carbide*
- Round Head Carbide*
- Brush Mounted Mandrills*
- Retainer Polishers-Course*
- Retainer Polishers-Medium*
- Retainer Polishers-Fine*
- Retainer Brite*
- Retainer Case*

» LAB FEES::

Lab fees for most temporary partials range from \$96 to \$150 depending upon the number of replacement teeth, clasps, and the need for any special procedures such as an esthetic try-in.



» CUSTOMARY FEE AND INCOME POTENTIAL:

Everyday we are faced with new challenges that affect how we deliver our care. By integrating temporary partials into your armamentarium, you can gain the versatility you need to meet these challenges. Most general practices use a temporary partial at least once a month. The average fee for this type of an appliance ranges between \$500 to \$750. At this conservative rate, you can expect to add a minimum of \$9,000 to your yearly gross income.

By Rob Veis, D.D.S. Director-Practice Development

» REFERENCES:

1. Henderson, D.: Mc Cracker's Removable Prosthodontics, 6th Edition, C.V. Mosby Co., St. Louis, 1981, pp. 418-422.
2. Stewart, K.: Clinical Removable Partial Prosthodontics, C.V. Mosby Co., St. Lotus, 1983, pp. 536-572
3. Miller, Grasso: Removable Partial Prosthodontics, 2nd Edition, Williams & Wilkins, Baltimore, 1979, pp. 326-333
4. Reitz, Weiner: The Fabrication of Interim Acrylic Resin Removable Partial Dentures with Clasps, J. Prosthetic Dent., Vol. 40, pp. 686-688. 1978
- i. Miller, Grasso: Removable Partial Prosthodontics, 2nd Edition, Williams & Wilkins, Baltimore, 1979, pp. 326-333.

The Practice Building Bulletin is a special service of Space Maintainers Laboratory produced solely for the private use of our clients. It is designed to help expand and enhance your ability to provide comprehensive patient care. Information included is the opinion of the author and may not be reproduced in any form without written consent.

Appliance Therapy Group Headquarters:
Space Maintainers Laboratory
9129 Lurline Ave. Chatsworth CA 91311
Copyright © 2006
www.appliancetherapy.com