Replacing a Patient’s Existing Denture
Using the Celara Denture Technique
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Denture patients frequently have trouble adjusting to new dentures, emphatically stating that they preferred their old dentures. This occurs because the techniques used to create new dentures do not adequately impart the attributes of the existing ones. Combine this with the fact that the demand for denture treatment is predicted to increase dramatically through the year 2020, and it is no wonder why so many doctors shy away from denture treatment.

The Celara denture technique enables doctors to predictably and profitably treat this ever-growing patient base. Celara uses the patient’s existing denture as a reference, eliminating preliminary impressions, custom trays, and wax rings. It enables doctors to predictably deliver quality dentures in three appointments, with increased patient satisfaction and minimal post-insertion adjustments. Celara utilizes the existing denture as a custom tray, as it has the border extensions and thickness that the patient is accustomed to and the occlusion helps accurately orient the tray in the mouth.

Stage I - Border Molding

1. Evaluate the border extensions. If the critical areas are short, extend them using the Celara Rapid Repair Tabs. Note: The tabs are used only on the borders that are critical to the fit, i.e., the posterior tuberosity areas and posterior border of the maxillary denture as well as the retromolar pad and buccal shelf of the mandibular denture. If the flange is broken, repair it using the repair tabs (Fig 1). Note: The repair tabs are not used in every case.

2. Apply the appropriate adhesive around the borders of the dentures and, if desired, on the crest of the palate of the maxillary denture. Note: It is not necessary to apply adhesive around the entire tissue surface of the dentures, as this will increase clean up time. The heavy body PVS will adhere to the borders with the appropriate adhesive, and the final light body wash will adhere to the heavy body.

3. Apply heavy-body PVS around the denture borders, insert the denture in the mouth and border mold.

4. If making both upper and lower dentures, make the impressions simultaneously with the teeth lightly in occlusion. Insetting the maxillary denture first, making sure it is completely seated, and perform an “open mouth” border molding technique for the posterior border, picking up the hamular notches and posterior tuberosity areas. Simply have the patient open very wide and move the jaw side to side to establish the thickness of the posterior tuberosity areas. For the mandibular denture, use a “closed mouth” border-molding technique: After inserting the denture, have the patient lift the tongue to enable recording of the sublingual frenulum and sublingual mylohyoid area, establishing all border molding peripheries with the teeth lightly in occlusion.

Stage II - The Final Wash

1. Have the patient rinse out with very cold water for 1-2 minutes. This will shrink the tissues and reduce inflammation.

2. Dry the ridges and make the final impression with the “extra light” or “light” body wash (Fig 3). Avoid over loading the anterior of the maxillary denture with impression material.

3. If making both upper and lower dentures, completely seat the maxillary denture and have the patient open wide, moving the jaw side to side. Then insert the mandibular denture, have the patient lift the tongue and border mold. Inset the patient the teeth lightly in occlusion while the impression material sets.

4. Carefully remove the dentures from the mouth. Clean all excess impression material from the facial surfaces of the teeth. Reinsert the impressions and observe/record mid-line, vertical dimensions, tooth positions, planes of occlusion, esthetics, etc. Note: The impression technique increases vertical 1-2 mm by default. This is typically desired for replacement cases. Decide which changes necessary and record them on the prescription, and take a bite registration with the impressions in the mouth.
Basing the Impressions and Pouring Casts

This portion of the procedure is typically performed by the dental assistant using the Celara Arch Refill Kit, which contains all necessary pre-measured and packaged materials.

1. Box the impression in the bottom disposable container using one pouch of Celara extended pour alginate. Immerse the denture with impression in the alginate, teeth side down, positioning the denture so that only 1-2mm of the border is above the alginate (Fig. 4).

2. After the alginate sets, use a dull knife to trim away all alginate from the impressed surfaces.

3. Place the upper container on top of the boxed impression in the lower container, and pour a cast using the Celara Quick Set stone (Fig. 5), which sets within five to seven minutes using tap water.

4. After the stone is set, open the container and carefully remove the denture from the cast, clean off impression material, and return it to the patient (Fig. 6). The patient leaves the office with their denture.

5. Send the Celara containers along with patient records and bite registration to your IMTEC Certified Laboratory. (Visit www.imtec.com for an update list.)

The Laboratory fabricates the Celara Wax Pattern by injecting the containers with Celara Wax. Typically, the doctor will request the laboratory to provide back a complete set up over a stabilized hard base for an accurate and predictable try-in at the second patient visit (Fig. 7). Alternatively, the laboratory can provide a Celara Wax Pattern over a stabilized base for use with a typical base plate and mm. A partial set-up with anterior teeth only is a third option.

Optional Fabricating the Celara Wax Pattern in the dental office

Many clinicians choose to incorporate the Celara Wax Injector in their office and fabricate the Celara wax pattern themselves on the first patient visit (Fig. 8).

Having the flexibility to do this is ideal when treatment planning more complex removable cases and/or implant re-taxed dentures. The wax pattern is injected with Celara Wax, a special hard, rigid wax that can come out of most undercuts without disturbing or breaking. The resulting pattern makes a perfect custom occlusal rim.

The Celara wax is injected directly over the cast, providing optimal fit and predictability. If desired, a post dam can be cut into the cast prior to injecting. The wax pattern is familiar and comfortable for the patient, and it provides a reference for the laboratory to predictably communicate changes. Baseplate wax can be added to it, or it can be marked and trimmed similar to a traditional rim (Fig. 10).

NOTE: The Celara denture technique is a perfect compliment to IMTEC’s Mini Dental Implant treatment plans when the fabrication of a new denture is required. Because of the accuracy, simplicity, and predictability of Celara, many doctors consider this to be standard of care for these cases, and would not consider replacing a patient’s denture any other way.

Additionally, Celara enables doctors to confidently begin treatment planning traditional implant retained dentures, as the Celara Wax Pattern is easily converted into an accurate clear surgical stent and open tray. Furthermore, Celara has tremendous application during guided surgical implant treatment plans.

“...The Celara system greatly enhances the speed and accuracy of implant denture construction. Whether I am simply replacing a denture or significantly changing an existing denture set up, the Celara system profoundly supports and enhances denture fabrication in our office.”

Leo Malin, DDS
Lacrosse, WI
LVI Instructor

For more information contact your IMTEC Certified Laboratory or IMTEC, a 3M Company, call 800-879-9799.