Preliminary and Initial Attachment Procedures

Phase 1: Always refer to the Preliminary and Initial Attachments Procedures, page 8. Only this will guarantee a successful restoration.

Phase 2: TECHNICAL
1. Pour the impression, pin the dies, mount the casts, and articulate the models.
2. The TS or TSU may be used as a bite registration.
3. Wax the restoration to full contour. Use the TSU and silicone index as a guide to ensure that the crowns are not overcontoured.
4. Survey the model to determine the most favorable path of insertion (A). It is preferable to mount the model in an intermediate base. This may be done by using a transfer rod and nipple.
5. Place the SwissAnchor female onto the crown wax-up, using the mandrel (B). Place female as low as possible without impinging the tissue. Leave small space to allow hygiene access. The SwissAnchor females must be parallel in the vertical plane but not necessarily in the sagittal plane. (C)
6. Sprue wax pattern, add a short vent sprue to the female (D). Invest and cast in appropriate alloy. (The red females are indicated for precious or semi-precious alloys while the blue females are indicated for non-precious alloys) Finish the crowns and/or bridge(s). Do not sandblast the attachments as this may damage them. Instead use the Ai Glass Brush, #99-911020. Add ceramic material as necessary.
7. Return the crowns and/or bridge(s) and the TS or TSU to the dentist.

Phase 3: CLINICAL
1. Remove the temporary crowns.
2. Try in the crowns and/or bridge(s). Check the marginal fit and the occlusion. Check the shade of the porcelain, if it has already been fired to the framework.
3. If necessary, take a new master impression with crowns in place. If you pour the models, apply a thin film of petroleum jelly in the crowns before pouring the stone. This step will prevent damage to the margins.
4. Return the impression or model with written information for any changes to the technician. Include the TS or TSU.

Phase 4: TECHNICAL
1. Before pouring the impression place a thin film of petroleum jelly inside the crowns. Then place some self cure resin and a dowel pin into the crowns before the model is poured. This will allow the crowns to be removed easily and will prevent damage to margins and model. Pour the master model with crowns in place.
2. Rearticulate the models and check for any necessary adjustments. Make the changes, if any, outlined in the work order.
3. Keep esthetics and the comfort of the patient in mind while designing the removable framework. If you intend to solder the attachment to the framework, plan for this in your design. Add a small extension to prevent lift-off for distal extension partials (E).

Note: The above mentioned attachments have a tendency to lift-off distally. To prevent this, add a metal guide plane against the distal or mesial guide plane of the abutment crown(s).

4. On maxillary restorations, try not to cover the rugae, place a wide thin palatal strap whenever possible. Research has shown that this design is preferred, as it is much more comfortable. (F)
5. Cast and finish the partial framework.

procedures continued next page
SA SwissAnchor, Ceka, Octolink, ERA, Servo Anchor  continued

6. Cold cure, solder or spot weld the appropriate housing or wing cap to the partial framework. (G & H)
7. Remove the teeth from the TS or TSU and reset them onto the partial framework. You may need to hollow grind some teeth depending upon the attachment used. To improve esthetics, select a wider tooth to reduce the interproximal spaces.
8. Return the crowns, bridge(s), and partial to the dentist for the final try-in.

Phase 5: CLINICAL

1. Remove the temporary crowns.
2. Try-in the crowns, the bridge(s), and the partial, and check for proper attachment function. Check the occlusion and the esthetics. Make any necessary adjustments and request the patient’s approval.
3. Return all the models, crown, bridge(s), and partial(s) to the technician with written instructions for any additional changes.

Phase 6: TECHNICAL

1. Complete wax-up around attachment. Verify close adaptations to model.
2. Remove crowns and dies from model. Remove male element form housing or wing cap. Fill in housing or wing cap with thin plaster and seat on model smooth area with plaster. Invest the partial and boil out the wax.
3. Apply a thin layer of latex material such as Rubber-Sep™ around plaster under housing or wing cap. (J)
4. Pack acrylic is one step and process as usual. Deflask and finish the partial.
5. Screw in male elements and check for proper attachment function.
6. Return the completed restoration to the dentist. Include all of the information such as the shade, the mold number, and the attachment name and order number for inclusion in the patient’s file.

Phase 7: CLINICAL

1. Review and check the final restoration.
2. Remove the temporary crowns and bridge(s).
3. Try in the restoration and adjust the retention for the attachment. (We recommend using the least retention possible).
4. Check for sore spots and adjust the occlusion.
5. Seat the crowns one at a time with temporary cement. The removable partial denture must be seated before the cement sets.
6. Instruct the patient on the insertion and the removal of the partial as well as the care of the tissue below and around the attachment. It is also very important to emphasize oral hygiene, as the attachment extends beyond the tooth contour.
7. After approximately two weeks, recall the patient for a final cementation. At this time you may determine if a reline is required.
8. Record the attachment name and order number in the patient’s file.
9. Recall the patient (in 3 to 6 months) to determine if the removable partial requires a reline and to assure continued proper function of the attachment.

Making New Partial Denture to Existing Crowns

1. Block out undercut under SwissAnchor female(s) on existing splinted crowns. Place brass male transfer analog(s) into SA female(s) and take impression using semi-rigid material. (K)
2. Place assembled transfer components into impression. Pour stone model. Go back to Phase 4: Technical, step #6 above and proceed with procedures. (L)