Overdenture Procedures

Direct ORS O-Ring System and OSO, etc.

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: CLINICAL — Post Preparation

Z-Type Stud Attachments

1. Complete endodontic procedures.
2. Flatten the root surface. Drill a starter hole in the canal with a #700 or similar carbide to an approximate depth of 7mm. (A)
3. Use a # 6 round carbide to enlarge the hole to a depth of approximately 3mm. (B)
4. The diamond-sizing bur is used to cut a full recess for final sizing. Make sure that the diamond-sizing bur is rotating at all times including insertion and removal of the bur with irrigation. (C)

Straight Type Direct Stud Attachments

1. Complete endodontic procedures. Flatten the root surface. Prepare canal to desired depth with the 1.5mm diameter reamer. Shorten straight post to appropriate length. (D)

Phase 3: CLINICAL — Cementing Males

1. Cement the titanium ORS male post into prepared canals with glass ionomer or composite resin cement (E & F). Round off corners of root preparation. The ORS female (O-Ring in the gold plated retainer ring) elements may be added directly at chair side, however, we recommend that the laboratory technician process the female assembly into the denture with heat cure acrylic.

Phase 4: CLINICAL — Adding Female Elements Chairside

1. Create cavity in denture acrylic to accept the ORS female. Insert the rubber O-Ring into metal retainer ring. Seat assembled O-Ring female over male. Larger opening of the retainer ring is oriented toward the gingival. Block out under metal retainer ring with wax or putty. Also block out exposed head of ORS male. (G)
2. Try-in the overdenture to ensure complete seating over the seated attachments. Increase cavity in acrylic as necessary.
3. Prepare small vent holes in lingual behind attachments to allow expression of excess acrylic. (H)
4. Mix thin auto-cure resin in a small dish and paint around female elements. Use air first to blow away saliva around females.
5. Place excess auto-cure resin in denture recess and seat overdenture. Ask patient to close in occlusion while resin sets. Allow auto-cure resin to set completely. Add only one female element at a time.
6. Add remaining female elements. Remove overdenture and remove express acrylic on lingual aspect. Polish as necessary.

Phase 5: TECHNICAL

1. Insert brass ORS male analogs into impression. Seal in place with cyanoacrylate. Pour model.
2. Complete final set-up, do not insert the females assembly into the set up unless the females are processed already to a hard acrylic base
3. Return the final set up to the dentist.

procedures continued next page
Direct ORS O-Ring System and OSO

Phase 6: CLINICAL
1. Verify final set up and make any necessary adjustments.
2. Return the set up with typed changes if needed for final processing.

Phase 7: TECHNICAL
1. Insert red O-Ring into metal retainer ring. Seat assembled O-Ring over male. Larger opening is oriented over ORS male element facing gingival. Block out under metal retainer ring, block out material include stone or liquid latex. Also block out the exposed head of ORS male, usually with liquid latex. (J)
2. Paint model with separator as usual.
3. Close flask to ensure complete closure. Adjust denture teeth if necessary. When acrylic has reached doughy consistency, cover attachments on model with small amounts. Pack acrylic in one step-do not trial pack.
4. Process acrylic and finish the ORS restoration. Replace red O-Rings with white or black final O-Rings.

Phase 8: CLINICAL
1. Try-in finished overdenture. Adjust occlusion and fit as necessary.
2. Record attachment name and order number in patient’s file.

Inserting New O-Rings.
1. Take an O-Ring and squeeze it together. Punch one side into the housing and use a #2 burnisher or similar instrument to push in the remaining segment of the O-Ring.