Revax Retained Rigid Hybrid Prosthesis

A bar supported removable prosthesis (bridge) that is resilient or totally abutment supported (rigid).

Benefits:
- A patient removable bridge
- Provides for proper lip support and contours
- Bar provides for abutment splinting
- Tripodization provides for controlled implant loading and prosthesis stability
- Provides for open palate

Indications

When an adequate number of well integrated implants are present in an arch, a traditional fixed bridge is the prosthetic modality of choice. Often this is not an option in the maxilla, due to combined vertical and horizontal resorption, quality of bone, and position and/or flare of the implants. In this instance, a traditional fixed bridge would not meet patient requirements for hygiene maintenance, esthetics, phonetics, and comfort. The viable alternative is the rigid supported Revax bar removable prosthesis.

Prosthetic Concept

The goal of the prosthetic design is to accomplish excellent esthetics, phonetics, and stabilization of the prosthesis as well as to ensure optimum conditions for oral hygiene and patient comfort.

The hybrid concept is to separate support, lateral stabilization, and retention. Each of these aspects may be altered according to the individual situation without influencing the other aspects.

Support

Support is derived from three elevated areas: on the midline and on the distal of a bar that primarily splintsthe
implants.

**Lateral Stabilization**
Lateral Stability is achieved by incorporating a cast frame into the removable prosthesis that closely fits the bar in a passive state.

**Retention**
Retention is derived from 2 or 4 CekaRevax attachments with adjustable, serviceable retention without affecting support or stability.

**The Rigid Hybrid Prosthesis**

25. A fixed bridge is the preferred option when an adequate number of integrated implants are available. The position of the implants and the horizontal resorption of the maxilla often eliminate this option due to esthetic, phonetic, or hygiene problems.

26. A rigid hybrid prosthesis is often the best option in the maxilla providing esthetics, hygiene, phonetics, serviceability, and comfort. This option is best suited to opposing dentition which approximates the spread or position of the implants.

27. With a labial index of the esthetic set-up and try-in, the 8° tapered bar is attached to the implant abutments as outlined in steps 3-7 of the resilient hybrid prosthesis instructions. The amount of distal extension of the bar is determined by the number of implants, implant length, width, and bone quality.

28. The midline and two distal support elevations are selected and elevated approximately 0.3mm. When possible, the distal elevated support zones should oppose the most distal opposing dentition.
29. The widening of the elevated median support area will create a more laterally stable prosthesis.

30. Preferably 4 Ceka Revax attachments are incorporated in the bar. The attachments should be placed as symmetrically as possible and by preference in the premolar region. The initial retentive force may be reduced with the Ceka retention adjustment tool.

31. With the rigid hybrid prosthesis, the space maintainer is used between the attachment male and female to position the attachment resilient. The prosthesis will be rigid, but the resilient
attachment positioning is important for future servicing and/or conversions.

32. Proceed with the finish of the prosthesis as outlined in Figs 16-20 of the resilient hybrid instructions. Even without opposing dentition in the molar region, it is recommended to provide acrylic resin coverage for the tuberosities and set up first molars for esthetics and phonetics.

33. Apply Ceka Bond to a mixing pad, and dip the threads of the male springpin into the adhesive and thread it into the retention part. CekaBond will prevent the male spring pin from loosening in the mouth.

## Conversion from Rigid to Resilient

34. If circumstances develop that make it undesirable to load a distal implant(s), or one or more implants are lost, this rigid prosthesis can be converted into a resilient prosthesis. This procedure can be done together with a reline (Fig 37-39).

35. Unscrew the bar. Apply a small amount of solder to the occlusal surface of the bar (see Figs 8-9-10-11) to create new distal support zones. Reduce the new support zones until 5 contact areas are present. Use the implant analogues to hold the bar while checking fit.
36. Now remove the distal support zones. Maintain only the male springpins distal to the new axis of rotation. Unused females may be filled with composite. Replace the titanium females if overheated during soldering. Ceka Site may be destroyed when overheated.

**Relining**

37. The relining technique for these types of hybrid prostheses is very simple and accurate. Block out all undercuts, take reline impression while pressing with the fingers within the triangle of the support zones.

38. Assemble the space maintainer and female dummy with the spring pin in the prosthesis. Block out the complete bar section in the framework. Pour the working model.

39. Proceed with relining procedure using the space maintainer at all times.

*Case Illustration of Revax Retained Hybrid Bar*

*Prosthetic Concept of Resilient Construction*

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