Prosthetic Concept of Resilient Construction

Prosthetic Concept of Rigid Construction

The Implant retained overdenture

Function, esthetics, and stability. Those are the three key words when fabricating an implant retained overdenture.And when it comes to patient satisfaction, a stable and comfortable fit is undoubtedly the decisive factor. With multiple implants, the position of the bar with respect to the tooth arrangement is extremely important to avoid tilting movements. The case study presented here is based on a prosthetic concept which fully considers this principle. The concept has already been successfully applied for many years around the world. Its simplicity and flexibility allow its use in widely divergent situations.

The basic idea

When planning a bar construction, the position of the dental arch–and not of the implants–is the point of departure. In the anterior area as well as premolar and molar region, the bar is placed underneath the teeth. Moreover, it is extended in dorsal direction while reducing the dental arch. Under ideal conditions, the dorsal bar extension coincides with the terminal prosthetic element.

What goes for a normal overdenture also goes here. be covered. The palate usually remains free.

The dorsal bar extension

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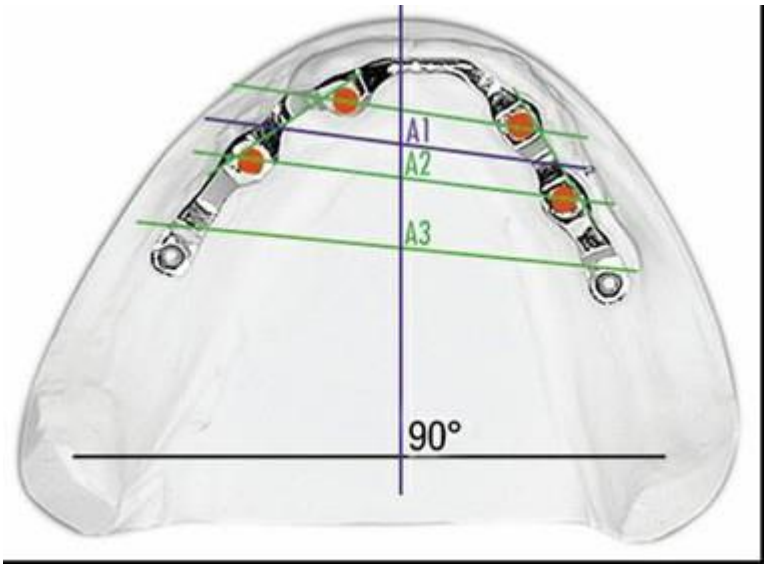
- The Green Tangent lines at the implants form a plane through which a blue dotted centre line runs.

- The blue dotted centre line intersects the vertical center line in Point **A1**. The vertical center line is at right angles to the hinge axis.
- The distance between **A2** and **A3** is approximately half as much as the distance between **A1** and **A2**.
- A line through Point **A3** runs parallel to the hinge axis.
- The ridge intersections indicate the maximum extensions.
  Up to these points, the prosthesis can be supported by the bar surface.

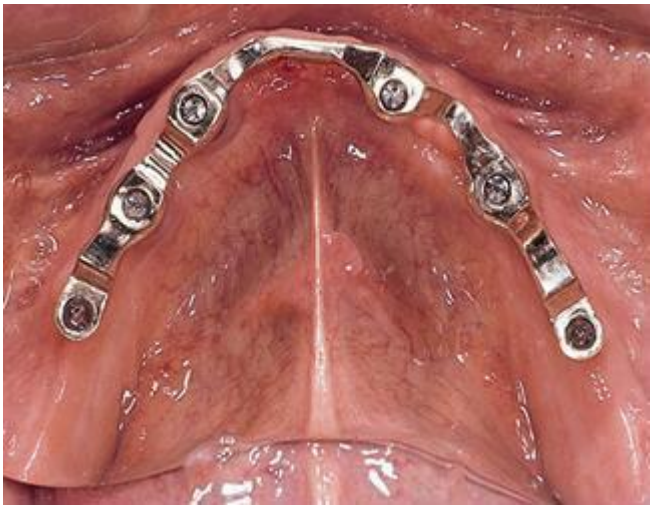


Stability

On this case, the stability of the prosthesis is guaranteed by (tripod) three parts: 1) the two distal attachments, 2) the anterior
Hader bar attachment, and 3) the dental arch which is almost completely supported by the bar.

For maxillary constructions, the palate remains free. The extensions of the acrylic resin into the vestibule considerably improves the facial physiognomy–which is often impossible with bridges.The fact that the prosthesis is removable offers advantages such as oral hygiene and servicing.

The implant retained overdenture is an excellent alternative for fixed or screwed bridges.



Ceka Implant Bar Constructions

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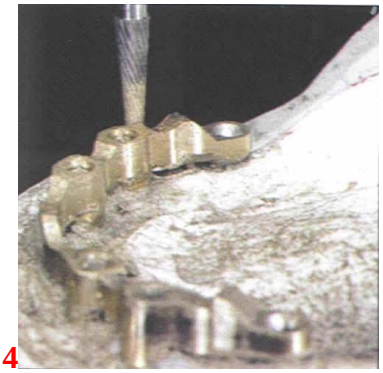
Position the Ceka angled female of choice as an extension of the wax bar (**FIG 1**). The attachments are not loaded when the space maintainers are used. The support zones are located over the implants for axial loading (**FIG 2**).

Use a two stage investment technique. Allow the initial investment to set for 30 minutes (**FIG 3**).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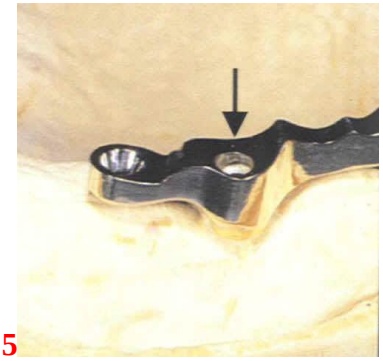
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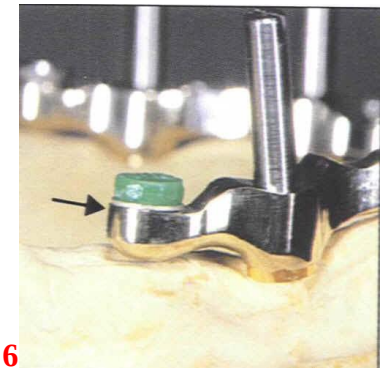
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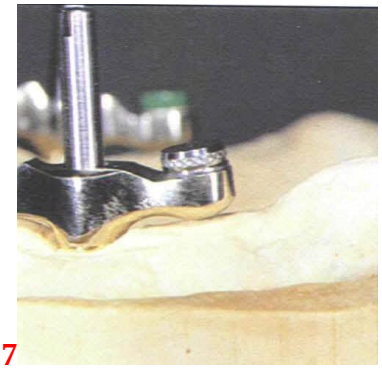
Bar and attachments are milled at an angle of 4 degrees, or the 8 degree tapered plasti-wax bar pattern may be used (**FIG 4**).
The support zone (arrow) is over the implant for axial loading (**FIG 5**). The attachment is not loaded. Preparations for the spacer technique are made as usual. The space maintainer (arrow) is used to avoid loading any attachments (**FIG 6**).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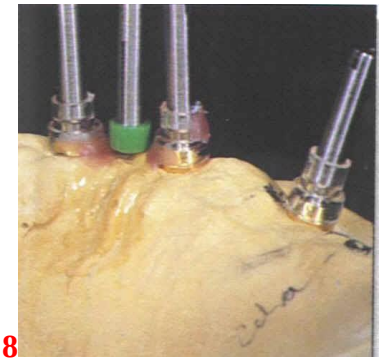
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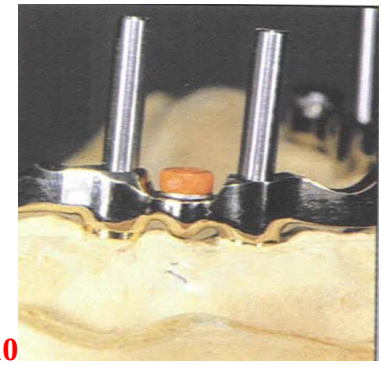
Not the rounded tissue side of the female for easy patient hygiene and maintenance (**FIG 7**). When space between implants is minimal, use the inverted REVAX axial attachment (**FIG 8**).
The titanium females are bonded into the cast bar (**FIG 9**).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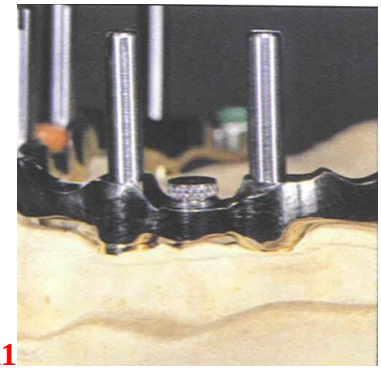
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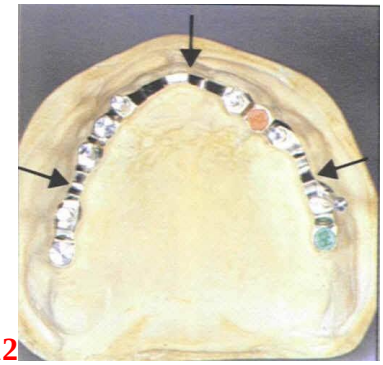
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The spacer retention technique is used on this case (**FIG 10 and 11**).
The attachments all have been processed using the small space maintainer.The loading is only at the elevations on the bar (**arrows, FIG 12**).

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