

Replacement of All Teeth with Implants

All of the teeth in an arch can be replaced using implants. There are several options available to achieve this.

Implant Supported Denture

With as few as 2 implants, an existing or new complete denture can have substantial improvement in stability. The denture is still removable for cleaning and patients are encouraged to clean the "overdenture implant abutments" at the same time. This is the simplest form of implant treatment for helping existing denture wearers and is also the most cost effective. The patient continues to wear their existing denture during the treatment phase, so that they are not without teeth at any time.

This type of treatment can also be used to help stabilize existing or new partial dentures and eliminates the need for clasps on the remaining natural teeth.



Overdenture anchors attached to 2 implants in the lower jaw



Lower denture showing implant attachments that will "lock" onto the overdenture anchors



Overdenture anchors on 4 implants in the upper jaw



Upper denture with 4 implant attachments – Note that the palate is open and not fully covered by the denture

Implanted Supported Bar and Overdenture

With 3 to 4 implants in the lower arch, and 4 to 6 implants in the upper arch, an implant supported titanium retention bar can be screwed to the implants. Special attachments are used on the bar and in the denture to anchor the denture to the bar. This option provides excellent stability for chewing and socializing. The denture is easily removed by the patient for cleaning. The bar is not removable by the patient, and the bar and underlying implants must be brushed regularly as well.

The advantages of this option are that cleaning is easy and, because one still has a denture, lip support and cosmetics are easier to manage, particularly in the upper arch. Another advantage of this option in the upper arch is that the patient can be without the palatal portion of the denture and therefore better appreciate the taste, temperature and texture of food and beverages.



Lower retention bar anchored to 4 implants



Lower overdenture showing the attachments that will engage the bar and lock onto it



Lower retention bar anchored to 3 implants



Lower overdenture showing the attachments that will engage the bar



Upper overdenture – Note the open palate



Retention bar anchored to 4 upper implants



Upper overdenture showing retention clips

Fixed Implant Supported "Hybrid" Denture

With 4 to 6 implants in the lower arch, and 6 to 8 implants in the upper arch, a non-removable option is possible using denture teeth instead of porcelain/metal restorations. This type of prosthesis has been referred to as a "hybrid" because it is halfway between a denture and a fixed bridge. Dr. Shupe feels that this option is usually the treatment of choice for the lower arch. It is possible to have an immediate "hybrid" type prosthesis installed in conjunction with implant placement (next day). There is a titanium frame that supports an acrylic base and resin denture teeth. Patients do not remove this type of fixed prosthesis; they must clean around the implants in a similar fashion as they would natural teeth.

One of the advantages of this option is that it more closely returns the patient to the sensation and psychological feeling of having their own natural teeth, since the patient cannot remove the prosthesis. This option is more commonly used in the lower arch than in the upper.



Implants in the lower jaw



Hybrid prosthesis showing the screw holes; these are sealed over after insertion in the mouth



Hybrid prosthesis in the mouth screwed to the implants

Ceramic/Metal Fixed Bridge Reconstruction

The most appealing implant option for fully edentulous patients is the fixed, non-removable ceramic or metal-ceramic bridge. Usually 6 to 8 implants are required. The bridge is similar to that which would be placed over natural teeth, except that it is cemented or screwed onto implants. With this option the patient most closely experiences a return to their natural teeth. With this system there must be adequate bone volume and sufficient lip support from the remaining ridge so that the teeth on the bridge appear to be coming out of the gum just like a natural tooth.



Upper jaw with 6 implants ready for cementation of the fixed porcelain/metal restorations



Porcelain/metal restorations in the mouth, cemented to the implant post