P lacing a permanent, fixed bridge immediately after extraction has always been a tricky and difficult esthetic procedure due to the uncertainty and amount of ridge resorption. We know that after extraction, 40 to 60% of bone loss occurs in 2-3 years, thereby severely jeopardizing esthetic and functional restorative results. Fortunately, due to the availability of modern grafting materials, the bridge procedure has become much more predictable and simple. Placing an immediate, post-extraction, synthetic bone graft into an existing extraction site is within the capabilities of most general dentists. The capability of providing an immediate, permanent fixed prosthesis in a manner of weeks, not months, with dependable predictable gingival stability is of enormous value. The following is a case report that demonstrates a present day approach to handling extractions and the resulting esthetic restorative bridge technique.

The patient presented with many multiple sites of decay around old fillings and old crowns. This decay was most evident around the roots of teeth having old porcelain to metal crowns and was confirmed with x-rays, explorer, and high Diagnodent readings. The decay was due to lack of plaque control, poor filling and crown margins and the high intake of refined carbohydrates (especially colas).

Noted also was that all existing posterior teeth had recurrent marginal decay, poor margins or failing root canals. We elected to restore all the upper, posterior teeth first, thereby filling out the buccal corridors. During her first visit, we performed a root canal on #14 and prepped #3 through #5 and #12 through #15 for porcelain to metal crowns. At the next visit we seated the above and surgically removed the ankylosed root of #8, and took full arch impressions. Unfortunately, a considerable amount of the labial plate was removed with the root. In order to restore the buccal esthetic gingival contours and to prevent further loss of alveolar bone, we decided to immediately graft the extraction site area. We placed Bioplant® HTR® into the socket, covered the site with gelfoam and cross-sutured the area. As a viable alternative, for one or two extraction sites, Bioplant Inc. also provides a sterile adhesive, waterproof, oral bandage called Biofoil® that can be used to protect the post-extraction socket graft site from germs, oral debris, food or tooth brushing without the need for suturing. It comes in handy when relining an acrylic plate or bridge after surgery, protecting the gingiva by preventing the acrylic and acid from entering the extraction site. It makes immediate impression-taking a “snap”.

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We then immediately prepped and impressioned the remaining anteriors—6,7,9,10,11 (#11 required a root canal, post and buildup). The entire case was accomplished in less than four weeks with a total of three operative visits.

We have performed many cases similar to this. Bioplant HTR grafting is very quick (4-5 minutes tops), easy, user friendly (little or no material migration), and very predictable. In situations where shrinkage and compromised esthetics have already taken place, a ridge augmentation graft with Bioplant HTR should be considered. It is the preferred option versus having to send the bridge back to the lab for additional porcelain in the pontic area. This is usually the poorest option due to compromised cosmetics resulting from abnormal gingivoincisal lengths.

In summary, the combination socket graftrestorative procedure is a win-win situation. The dentist appreciates little if any gingival shrinkage at the extraction site resulting in a predictable, profitable, “headache free” enhanced cosmetic restorative procedure. Patients are grateful for not having to wait for their “permanent” bridgework, not having to wear a thumbplate or having to be referred out for grafting.

Bioplant HTR is a slowly resorbable synthetic bone alloplast that by regenerating new bone, prevents unesthetic gingival shrinkage post extraction. You can find out all about Bioplant HTR on the Internet at www.bioplanthtr.com.

This is a very nice procedure to offer your patients, eliminating the need for complex long-term grafting procedures, aggravating “thumbplates”, and multiple visits. Enhanced cosmetics is always the predictable by-product of grafting.

Additional benefits to the dentist are increased efficiency of the doctor’s time and satisfaction of giving patients fixed, permanent bridgework that lasts esthetically, in just a few visits.

Numerous researchers have commented on the positive reasons for ridge preservation achieved by socket grafting (see articles at Bioplant’s website—here are some URLs):

http://www.kavousa.com/prophylaxe/diagnodent.html

Dr. Ronald E. Groba is a practicing, general dentist in Friendswood, Texas. If you have questions about this article or this technique, feel free to call him at 281-482-1275. Dr. Groba and Marie are associated with the University of Texas Dental Branch in Houston and give continuing education courses for doctors and staff on practice management and efficient delivery of over-the-shoulder general and cosmetic dentistry. For more information, call the above number and ask for Marie. Note: Dr. Groba receives absolutely no compensation from the manufacturers of Bioplant HTR.