Enhancing quality of life with implant-retained dentures

By Terry Myers, DDS

Fortunately, some people can take the small events that increase quality of life for granted — having a conversation, tasting delicious foods and smiling without self-consciousness are daily occurrences that are rote for some, but luxuries for others.

While certain patients can maintain a happy, productive life with standard dentures, for others with special needs, dentists must find alternatives that fit with the patient’s lifestyle and budget. Everyone deserves the confidence and self-esteem that a beautiful smile can provide. With the proper equipment and new procedures, doctors can provide patients with function and fashion.

A variety of implant options offer functionality and esthetics. For one of my patients, an implant-retained denture fit her financial and physical requirements. The 64-year-old German woman has basically well-maintained diabetes, occasionally struggling with insulin levels as well as other health issues, such as skeletal back problems.

She had reached a point in her dental history where she would need her few remaining upper teeth extracted and replaced by a denture. She had been researching the possibility of denture implants. She did not want traditional dentures because she gagged quite easily, and the thick base of the denture, plus her German accent, made her speech difficult to understand. In addition, due to her diabetes, she occasionally got painful and slow-to-heal sores on her palate under her dentures.

Technology helped me to achieve the clinical care and physical appearance that this woman needed. Imaging played a big part in my treatment plan. For the diagnostic part, I used a GXCB-500™ medium field-of-view cone-beam unit from Gendex that gave me a three-dimensional view of her dentition (Fig. 1).

This imaging method allowed me to determine whether implants were even possible for the patient because I couldn’t identify all of the details without determining the width and height of the bone to see if a bone graft was necessary.

She had already stipulated that she did not want a bone graft. With...
out the 3-D scan, I would need to refer the case to an oral surgeon. By just looking, feeling or with a 2-D X-ray of the ridge, there didn’t seem to be enough bone in the area for a successful implant. Besides the bone, on a 2-D pan, her sinuses appeared so big that I didn’t want to chance complications.

I was able to ascertain from the 3-D scan’s cross-sections (Fig. 2) that she had enough bone to place an implant denture. During the surgical procedure, with my intra-oral digital X-ray (DEXIS®), I could check if the implants were properly situated above the sinus level. My mix of imaging options gave me the vital information I needed to complete my treatment plan with confidence.

After imaging, I decided on full-arch implants on teeth Nos. 4, 6, 8, 10, 11 and 14. Because of her diabetes, the implant denture needed to be removable so that she could clean very well around it.

It was very important to the patient that she did not have a prosthesis that looked like a denture. She had all of her natural lower dentition, and we were able to use a combination of shades (A2-A3.5) to maintain a natural appearance.

Trubyte Portrait IPN teeth were used because of their natural shading from gingival to incisal edge. The locator attachments, like little gaskets, make it easy for the patient to remove her denture for proper hygiene and re-seat it in the right place every time.

After finding out the condition and measurement of her ridge and gums, we decided on six 3.5 Nobel Replace implants of 15 mm in length. I chose the Nobel Guided Surgery protocol (Figs. 3, 4) because I had to be very precise regarding the length of the implant in relationship to her sinus as well as her small amount of bone. During the surgery, I used my digital X-ray to check the drill lengths and placements very quickly right at chairside (Fig. 5). That’s the beauty of guided surgery and digital radiography — much of the information is determined beforehand, taking away the stressful element of surprise during the procedure (Fig. 6).

Taking into account possible healing issues because of her diabetes and small amount of bone, I didn’t immediately load the denture onto the implants, but instead put on healing caps and let the area heal for 4-6 months. The healing caps were placed above the gum line so that the patient could still chew properly.

Virginia dentist gives two patients new smiles

By Fred Michmershuizen, Online Editor

When Dr. Lisa Marie Samaha of Port Warwick Dental Arts in Newport News, Va., decided to hold a Smile Makeover Contest, she intended to award one patient with free care.

But after reviewing the applications she decided to present two awards, not one. The practice received many compelling stories, and two exceptional individuals stood out.

As a result, Michael Boyd of Hampton, Va., and Terry Cane of Williamsburg, Va., were selected to receive life-enhancing and life-saving dental treatment that began in October.

“It was such a heartwarming presentation, for all of us,” said Abby Sharpe, who works in Samaha’s practice. “You could really tell the impact it had on our winners. They are both so deserving.

“They will both be undergoing tens of thousands of dollars in treatment over the next month or so and are just so excited and appreciative.”

Samaha and her team had specific criteria for the contest winners. When reviewing the candidates, they considered whether the individuals had life-threatening levels of dental disease, or if they had damage severe enough to keep them from sharing a smile with others.

They considered the candidates’ personal economic circumstances. They also took into consideration whether the candidates had devoted their lives to helping others.

Samaha, founder of Port Warwick Dental Arts, prides herself on offering compassionate care resulting in beautiful smiles.

She provides a wide range of esthetic, reconstructive, surgical and comprehensive dental care. Her practice offers a non-surgical program for periodontal disease treatment that highlights nutrition, specialized testing and state-of-the-art laser therapy.

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For denture cases, it is important to keep current on new methods and technologies and for patients to understand their options and improve outcome through proper care. With digital imaging and 3-D technology, I can better educate my patients by pointing out their particular areas of concern on the large computer monitor. For extra insight, a Web site called www.denturewearers.com offers helpful information and tips for dentists and patients about the various denture-related options, denture care and how different medical conditions such as diabetes, heart disease and oral cancer affect denture choices. Being apprised of the facts and researching the choices, such as the patient and I did, facilitates treatment acceptance and success. For this patient, the implant eliminated the palate of the denture, which had caused much of her gagging, speech and soreness problems. Besides functioning very well, her beautiful teeth give her the encouragement to speak with confidence and smile with teeth showing instead of pursed lips (Fig. 7). Moreover, she has a renewed pleasure in eating because she can utilize the taste buds on her palate again. Giving patients their smiles back always leaves a really good taste in my mouth too.