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February 2009

Dear Colleagues:

This edition of the perio-implant newsletter demonstrates a new and cutting edge technology that can be used to plan and place implants with absolute precision.

Cone beam dental radiography has been available now for several years. Most of the improvements in utilizing this technology have come from software that allows us to look at bone three dimensionally. The SimPlant software we use also allows us to determine the hardness of the bone. The following is a case report of a maxillary full arch extraction and implant case.

The patient is a 41 yr. old male whose chief complaint was loose teeth and pain. The panorex showed a hopeless situation in the maxillary arch and in the mandibular posterior sextants (figure 1).



Fig. 1

The patient was interested in a horseshoe implant retained maxillary prosthesis. Extractions were performed along with socket debridement and bone grafts. The plan was to place six implants to support the denture with locator attachments. An I-Cat cone beam film was taken (figure 2).

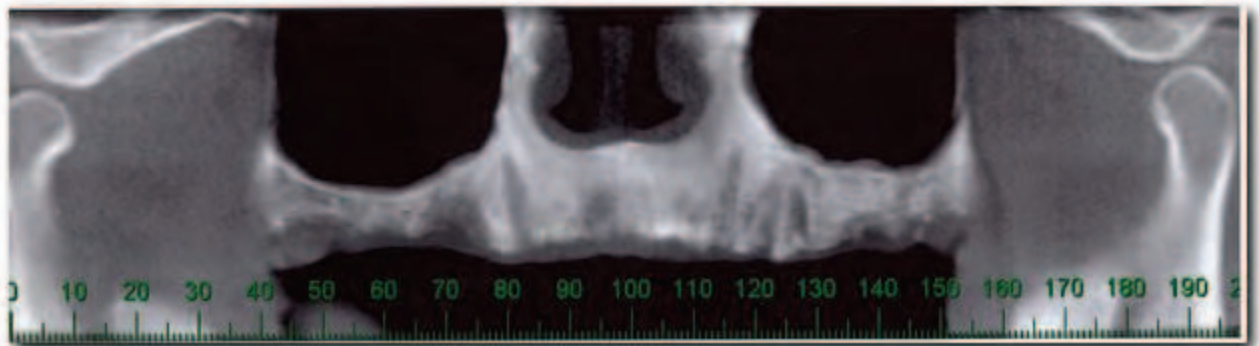


Fig. 2

With SimPlant software the implant position can be planned with precision. The implant size for length and diameter can be chosen with the software. The scan with the implant plan is downloaded to Materialize and a bone template is fabricated. (figure 3 and figure 4).



Fig. 3 Side View—Bone Template



Fig. 4 Front View—Bone Template

A stent to rest on the bone after flap reflection is then made. (figure 5). Implant receptor sites are then drilled into the maxilla with precision not obtainable with a standard stent. (figure 6).



Fig. 5 Surgical Stent

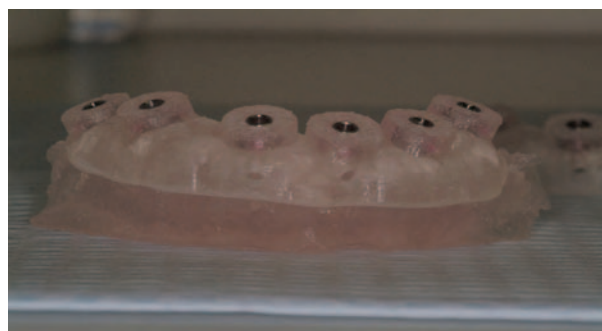
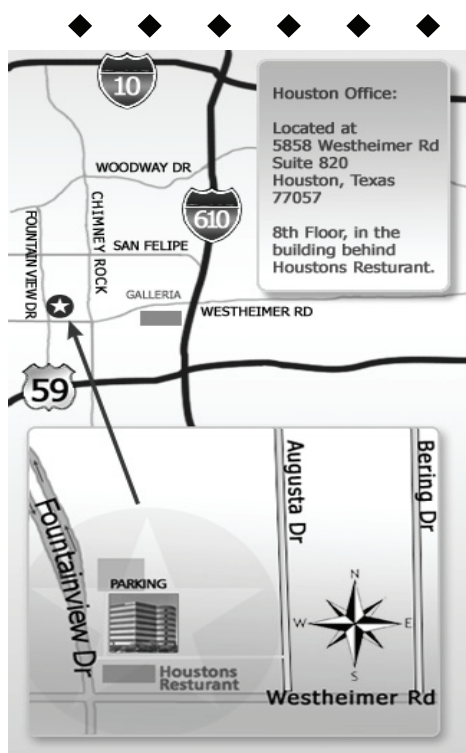


Fig. 6 Surgical Stent on Bone Template



Our practice provides the very latest in periodontal and implant care for your patients. The services we provide include:

1. Regenerative procedures for treatment of advanced periodontal disease
2. Periodontal plastic surgical procedures including connective tissue grafts, gingival grafts, and ridge regeneration for pontic sites
3. Advanced implant placement
4. Site development for implants—(bone regeneration for deficient areas)
5. Treatment of bone loss around failing implants

Our philosophy is a team approach incorporating your treatment plan with ours.

After office hours I am available by contacting the answering service at 713.954.1334 or my cell at 713.444.8500.

Here is a map to our office which is conveniently located in Houston (Westheimer and Fountainview) with easy-access and free parking.