

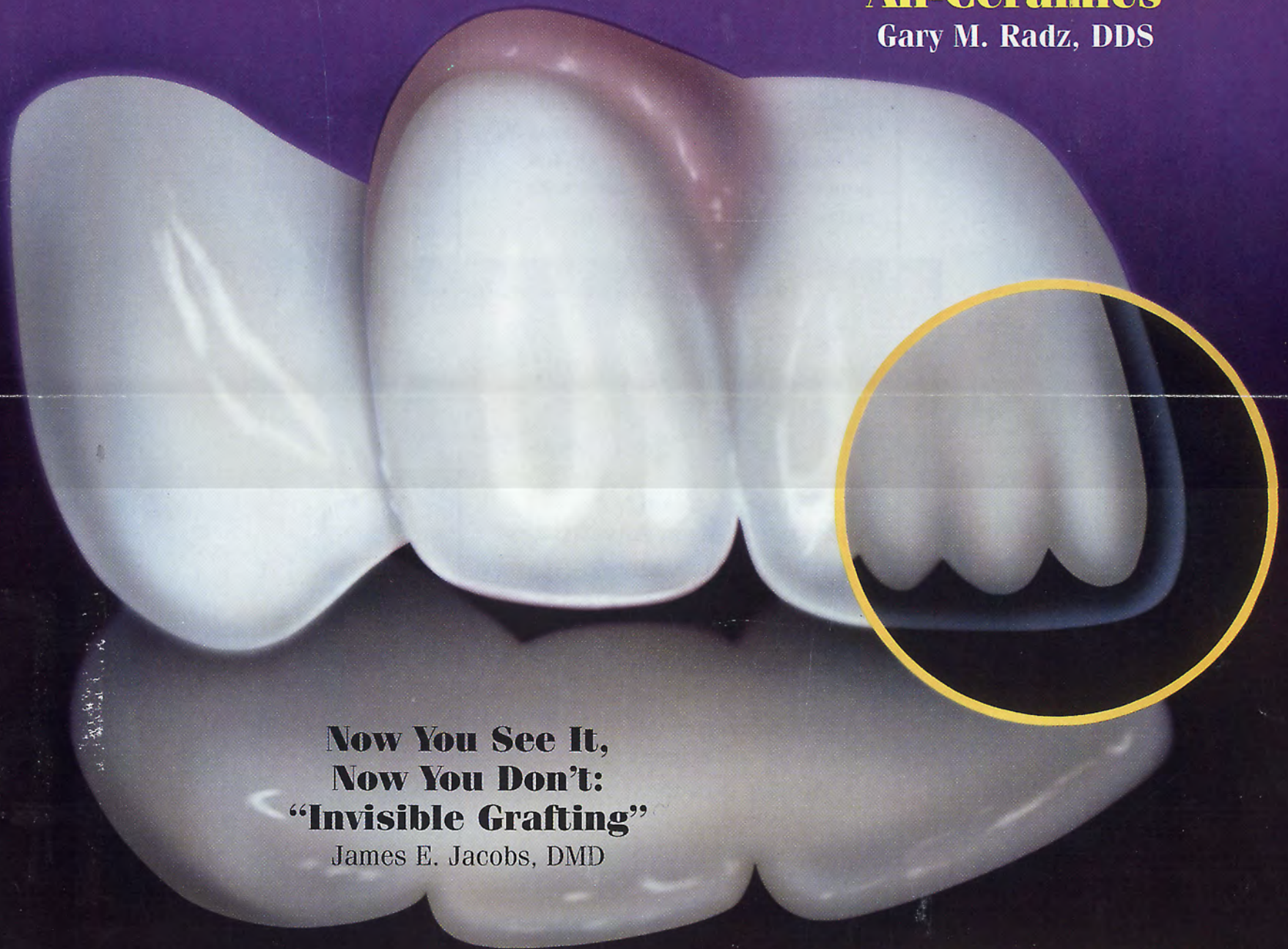
# Contemporary Esthetics

March 2001  
Vol. 5, No. 3

AND  
RESTORATIVE  
PRACTICE®

## **Strong To the Core: Improved Pressable All-Ceramics**

Gary M. Radz, DDS



## **Now You See It, Now You Don't: "Invisible Grafting"**

James E. Jacobs, DMD

## **Keep Smiling: Implant- Supported Restorations For Full Dentures**

Keith D. Rossein, DDS

Frank L. Boris III, DDS



**D**r. Rossein and Dr. Boris' article offers a realistic challenge that many dentists may encounter. I especially appreciate their willingness to share about a case that did not turn out perfectly.

The patient presented with "phantom pain" (unrelated to any sore spots or inflamed tissue). When you, Dear Reader, encounter this situation, please recognize that *now* is the time to be sure you set appropriate expectations about treatment results for the patient. If you set appropriate expectations, you can create a situation where you win every time. Conversely, when you set inappropriate (overly optimistic) expectations, you create a situation where you are vulnerable to

failure in the eyes of the patient—unless everything goes perfectly.

The secret to routinely enjoying success is preframing patients to have appropriate expectations. There is a saying that goes, "An ounce of preframing is better than a pound of reframing," or, correcting inappropriate expectations.

From the patient's point of view, transitional implants make the process of replacing missing teeth less emotionally traumatic. Every patient wants to avoid being without their teeth so they can continue with a reasonably normal lifestyle. Therefore, using transitional implants will be a key factor in generating case acceptance for a significant percentage of patients. My clients who use transitional implants report that

patients are thrilled when they understand that after surgery they will leave the office with solid teeth they can use right away. Patients like getting a preview of what it will be like having solid teeth with which to chew.

The key case acceptance points are that the patient suffers no cosmetic embarrassment, and can function normally and return to daily activities immediately.

The bottom line is that transitional implants make it easier for patients to say "yes." I encourage clients to continually search for ways to make it easy for patients to do business with them.

In the last paragraph of their article, Drs. Rossein and Boris suggest a truly creative strategy for "jump starting" the implant aspect of a practice. The idea of offering patients a trial run of what it would be like to have a stable denture is intriguingly innovative.

Put yourself in the position of a patient wearing a full denture who is not complaining. If your dentist offered you a \$1,500 minimally invasive treatment that would slow down the resorption of your ridge and temporarily stabilize your denture, would you be interested? It's an interesting question. My feeling is that a significant percentage of patients would agree to the opportunity to "try out" having a stable denture—considering that they could always go back to their present situation.

It's easy for me to imagine a patient enjoying denture stability for a year and subsequently electing the long-term solution of a bar overdenture—especially because the \$1,500 initial fee is less intimidating than the investment required for 5 or 6 implants and a bar overdenture. I suspect that, once patients have experienced and enjoyed denture stability, many would not be willing to go back to their previous instability. Once you've enjoyed a new experience that is better, it is unlikely you'll voluntarily return to a former and less desirable situation.

Transitional implants are a win-win solution. The patient def-



**G.L. Johnson**  
Consultant and  
Speaker  
Tacoma,  
Washington  
Phone:  
800.371.3147  
Fax:  
253.858.5407

E-mail: GLJseminars@msn.com

*"G.L." is an in-office consultant and speaker with clients in 36 states. His focus is on fee-for-service dentistry through leadership, effective communication, and team motivation. He has coached over 55 comprehensive/cosmetic care treatment planning study clubs.*

initely wins, and the dentist has a useful tool that makes the implant process less emotionally traumatic for patients, allows definitive implants to heal undisturbed, and enables the dentist to jump start the implant aspect of the practice by providing patients a relatively inexpensive way to test drive denture stability.

All things considered, this creative strategy facilitates the worthy purpose I encourage all my clients to pursue. Purpose the question: How can I do important things (deliver valuable treatment to my patients) and also have fun in the process? ■



**Great White™**  
bites through the toughest materials  
faster and smoother!

Call 1-877-779-2877 for your free sample.

SS White Great White burs are the perfect choice for crown removal. They don't grab, catch, stall or break when cutting through amalgams, composites or semi-precious and non-precious castings.

Now SS White offers 20 operative shapes. So you get the power, speed and smoothness of Great White burs for removing old restorations in secondary decay.

But don't take our word for it. Try a Great White, FREE. Call 1-877-779-2877 for your FREE SAMPLE, today!

The bur is free. The call is free. Make the call.

**1-877-779-2877**

GREAT WHITE  
Gold Series

**SS WHITE®**

Moving dentistry forward for more than 150 years.  
www.sswwhiteburs.com  
SS White® is a registered trademark of SS White Burs, Inc.  
Great White™ is a trademark of SS White Burs, Inc.

1999  
REALITY  
Four Star Award  
★★★★

satisfaction  
GUARANTEED

Circle 53 on Reader Service Card

To receive a **FREE** subscription to:



**PLEASE CALL:**  
**800/603-3512**



this in the temporary restoration. This would allow the patient to immediately be taught proper home care and become accomplished with his oral hygiene by the time the final prosthesis was inserted. He would also become accustomed to the "feel" of his teeth, making the transition down the line to his new overdenture rather easy. Most important, however, was the fact that he would leave after the surgery wearing his teeth.<sup>5</sup>

**A**t a 1-month post-operative visit, the tissue around the surgical site looked healthy and devoid of any inflammation.

The Dentatus modular transitional system with its corresponding prosthetic components was used to fabricate a chairside splint that would be cemented to the MTI implants and act to stabilize and retain the denture.

A rubber dam was used to protect the surgical site and prevent the sutures from being dislodged by the acrylic used to form the splint. Additionally, plastic "gingival spacers" were placed over the MTI heads to protect against acrylic locking into this undercut area (Figure 4).

Each MTI implant was covered with a "singular coping," which has an internal metal cross-bar that fits into the slot of the implant head and seats directly against the titanium (Figures 5 and 6). With this metal-to-metal contact, occlusal stress would be channeled through the long-axis of the implant.

Neocryl™ (Harry J. Bosworth), a methylmethacrylate orthodontic acrylic, was used to form the splint by incorporating the copings. Neocryl™ has two great advantages. It is extremely strong, providing excellent cross arch stabilization and support for the denture. Also, because it becomes clear after polymerization, the clinician has better visibility and control

when taking the splint off and on, so as not to bend the MTI implants out of alignment. Neocryl™ should be mixed to a honey-like consistency and poured into a clear, preformed matrix. The filled matrix is then placed over the copings and held in position until hard enough to be removed without displacing the copings (Figure 7).

Next, slight undercuts, using a

pear-shaped acrylic bur, were created buccally and palatally on the splint, and were smoothed off at the gingival margin. The splint was then cemented with TempBond® (Kerr® Corp.) to the transitional implants (Figure 8).

After hollowing out the ridge portion of the patient's denture corresponding to the splint, it was retrofitted to the splint using a soft

reline material, Trusoft™ (Harry J. Bosworth). Trusoft™ is especially effective for this technique, as it remains soft for up to 1 year (Figure 9).<sup>2</sup>

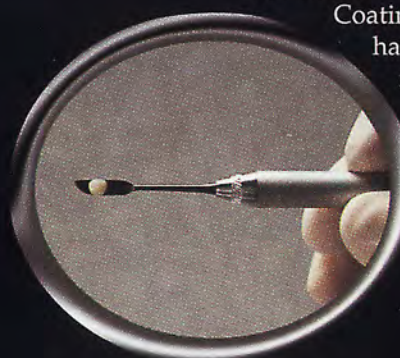
The patient returned after 1 week to have the sutures removed and the splint recemented with IRM cement (DENTSPLY®/Caulk) (Figures 10 and 11). The patient was given oral hygiene in-

## We're taking Composite Instruments further...



*Satin Steel™ XTS™ from Hu-Friedy. The new standard for performance and feel in composite instruments.*

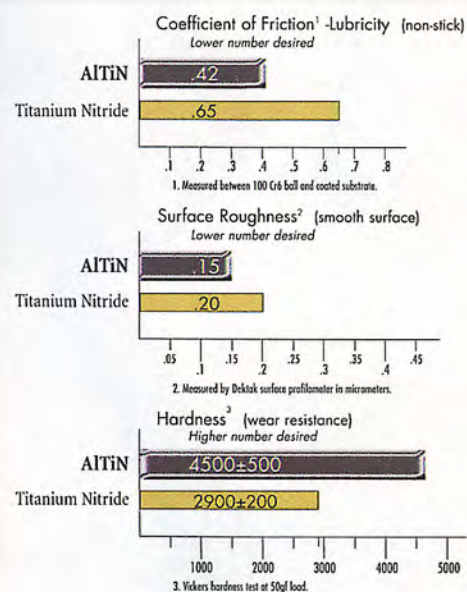
Through advanced technology and innovative design, Hu-Friedy has created Satin Steel XTS™, a complete line of composite instruments that allows for perfect placement of composite materials without sticking to or discoloring restorations.



Our Aluminum Titanium Nitride Coating creates an extremely hard, smooth surface that resists scratches and sticking. The unique, black finish offers enhanced contrast between instrument, tooth structure and composite material.

### It's all in the numbers!

As research indicates, Hu-Friedy's Aluminum Titanium Nitride (AlTiN) coating is consistently harder, smoother and sticks less as compared to conventional titanium-only coatings.



If you like these numbers, call this number: 1-800-HU-FRIEDY, and ask about Satin Steel™ XTS™

©2000, Hu-Friedy Mfg. Co., Inc. All rights reserved.

HU-FRIEDY DENTAL



Circle 49 on Reader Service Card





Figure 7—Neocryl™ splint with embedded singular copings.



Figure 8—Neocryl™ splint is reinserted with temporary cement.



Figure 9—Trusoft™, a soft reline material, is added to the hollowed out denture base for retrofitting.



Figures 10 and 11—1-week postoperative view.



Figure 12—1-month postoperative view.

# JS DENTAL MANUFACTURING, INC.

## Proud To Serve Endodontic Needs

### Company Profile:

- 4th Generation Family Run
- Started in the 1910's
- U.S. Based
- Global Customer Orientation

### Company Reputation:

- Quality Conscious
- Driven by Research/Development
- Knowledgeable Support Team
- Personalized Care
- Full Spectrum of Products
- Fast, Prompt Delivery
- Superb Prices, High Quality

### Products Available:

#### Stainless Steel

- K-Files
- Hedstrom Files
- Reamers
- S-Files
- S-Finders
- Turbo Files
- Engine H-Files
- Engine Reamers
- Engine S-Files
- Engine T-Files
- Pluggers
- Spreaders
- Paste Fillers
- Barbed Broaches
- Gates Glidden Drills
- Peeso Reamers

#### Nickel-Titanium

- Mity K-Files
- Mity Hedstrom Files
- Mity Turbo Files
- Mity Pluggers
- Mity Spreaders
- Mity Engine H-Files
- Mity Engine T-Files
- Mity Roto 360
- Mity Gates Glidden

MITY TURBO FILE

<http://www.jsdental.com>



**We Care About How You Practice Dentistry**



P.O. Box 904 • Ridgefield, CT 06877 • 203-438-8832 • 1-800-284-3368 • FAX 203-431-8485

Circle 47 on Reader Service Card

denture placed, the “phantom pain” (unrelated to any sore spots or inflamed tissue) had first developed.

The philosophy of the initial treatment plan was to achieve a balanced occlusion, with the hope that this would alleviate the pain. An occlusal plane was established with the fabrication of bilateral posterior mandibular fixed bridges. The maxillary denture was soft relined. Unfortunately, the “phantom pain” remained.

A second treatment plan was developed for a maxillary denture with attachments to an implant-supported bar. It included six implants that would support a gold bar. The overdenture would attach to the bar with three gold Hader clips. Upon completion, 90% of the denture ridgelap would be nontissue bearing, to prevent any pressure on the maxillary ridge. During the healing period, transitional implants would be used to support a provisional restoration.

After a midcrestal incision, the tissue was flapped and, using a surgical stent, osteotomies were drilled and six HA-coated Microvent implants (Paragon™ Implant Co.), 4.7 mm in diameter and 10 mm in length, were placed

(Figure 1) and covered with healing caps.

Next, a profile drill (1.3 mm in diameter) was used to create the osteotomies for the five MTI transitional implants (Dentatus USA). Because of the less dense maxillary bone, the osteotomies were drilled 3 mm to 4 mm short of the desired length, and a turn-key was used to manually screw the transitional implants [1.8 mm in diameter and 17 mm in length] 10 mm into the bone. MTI implants are also available in 14-mm and 21-mm lengths, so the appropriate size was chosen based on the availability of cortical bone. The tissue was then sutured around the protruding MTI implants (Figure 3).

**M**ost important, however, was the fact that the patient would leave wearing his teeth.

Because the final prosthesis was to be an overdenture attached to an implant-supported bar, it was decided that we would simulate



# Stabilizing a Full Denture with a Transitional Implant-Supported Splint



**Keith D. Rossein, DDS**  
Consultant and Editor  
Implant News & Views  
Phone: 516.593.3806  
Email:  
krossein@optonline.net  
Website: www.implant  
newsandviews.com



**Frank L. Boris III, DDS**  
Private Practice  
Kingston, Pennsylvania  
Phone: 570.288.3697  
Fax: 570.288.7723

**T**emporization after implant surgery offers special problems for both the dentist and patient, particularly in fully edentulous situations. From the surgeon's perspective, a nondisturbed healing period for permanent implants is essential, with the first month especially critical. Any transmucosal loading of the surgical site could lead to implant failure. From the patient's point of view, most don't want to leave their homes or be

seen publicly without teeth. These two concepts come into conflict as soon as patients are told they must refrain from wearing their dentures for 2 to 3 weeks after surgery. One can only guess at how many implant cases are not accepted for this reason.

Transitional implant-supported restorations for single tooth, unilateral, and partially and fully edentulous situations are gaining credibility and momentum as more research and clinical articles appear.<sup>1-4</sup> We would like to offer our contribution by introducing an easy and beneficial technique to the implant-supported overdenture protocol.

**F**rom the patient's point of view, most don't want to leave their homes or be seen publicly without teeth.

## CASE STUDY

An 82-year-old man presented, wearing a full maxillary denture, a mandibular partial, and complaining of the inability to chew without discomfort. The patient explained that within the past year, two new maxillary dentures had been fabricated by another dentist, in an effort to alleviate the pain he experienced in the maxillary ridge when he chewed. Before that, he had worn a maxillary unilateral partial attached to teeth Nos. 9 through 11. This partial had been added to in stages, as teeth were lost. After the three remaining teeth were extracted and an immediate



**Figure 1**—Six Microvent implants placed in maxilla.



**Figure 2**—Five MTI transitional implants inserted.



**Figure 3**—Flap is sutured over the definitive implants and around the protruding MTI implants to be loaded.



**Figure 4**—Rubber dam protects the sutures and surgical site from the temporary acrylic. Gingival spacers (red) prevent acrylic from licking under the implant head.



**Figure 5**—Singular copings are placed over the MTI heads for prosthetic construction.



**Figure 6**—Radiograph shows definitive and transitional implants.