Dental Implants: Where Do We Go from Here?

Gordon’s Clinical Bottom Line: Most dental practitioners agree that root form implants are one of the most important innovations in the history of dentistry. Yet the use of implants in North America is minimal when compared to the proven need. Potential reasons for the relatively minimal use are: litigious environment, resistance to change techniques, fear, need for significant CE, cost to implement, clinical complications, and lack of patient acceptance because of high fees. Should GPs be encouraging more implant placement by surgical specialists? Should GPs become more educated and place and restore more implants themselves? If so, in which situations? Additionally, which implant systems are simplest, and the most cost effective and clinically proven? This article answers these questions and makes suggestions about increasing and improving implant surgery and prosthodontics in your practice.

Dental implants could be used more frequently!

- About 35–40 million of the 220+ million American adults are edentulous. Only a few have implants supporting their dentures.
- About 80% of adults have at least one missing tooth (exclusive of third molars). Few have received implants. Why?
- Implant placement has been perceived to be difficult. This is incorrect for many situations!
- Most schools don’t teach implants. This is changing.
- Cost of implants to dentists has been high. Costs are going down.

In this article, CR Evaluators, including GPs (general practitioners), surgical dentists, and prosthodontists, and a survey provide realistic guidance on implant dentistry.

Are Surgical Handpieces Really Fit for Surgery?

Gordon’s Clinical Bottom Line: In spite of the presence of many oral and maxillofacial dental specialists, it is well known that general dentists accomplish the majority of routine oral surgery. Do GPs have handpieces that allow optimum oral surgical procedures? Do the handpieces exhaust air into the surgical sites? Should they be electric or air driven? Are the handpieces and the associated tubing and accessories sterilized adequately? These and other questions are answered in this article by the CR surgical team and Evaluators from all areas of dentistry, along with suggestions on how to improve this important part of practice.

Many dentists use handpieces that have been marketed as “surgical” handpieces. But, biologically, cannot be considered a true surgical instrument. With the recent nationally publicized case of improper sterilization and cross-contamination in an oral surgeon’s practice, and the prevalence of HIV, Hepatitis C, MRSA, drug resistant TB, and waterline biofilm contamination, it is time to evaluate the current status of dental surgical services.

This article reviews principles of cross-contamination, determines how some current surgical handpieces may compromise “sterile technique,” lists some popular surgical handpiece companies, and suggests a protocol to minimize cross-contamination and bio-load.

Handheld X-Ray Units Are Growing in Popularity

Gordon’s Clinical Bottom Line: In recent years, handheld x-ray heads have entered the market and are rapidly growing in popularity. Many dentists are using the devices not only for field trips, military, and public health service, but also to replace or augment conventional wall-mounted units in their dental offices. In spite of research showing their adequate safety and effective use characteristics, these devices have had some controversy and criticism. In this report, CR scientists, clinicians, and Evaluators have studied and compared the concept and the representative devices.

Since 2005, the Nomad (Aribex) product line has established the safe and effective use of handheld x-ray heads, and the concept is now a leader in overall x-ray unit sales. New brands on the market offer clinicians additional choices, but have caused legal and safety concerns. Not all units have FDA clearance, and most lack extensive test data and approval by state and local regulatory agencies. Clinicians should exercise good judgment when selecting a handheld x-ray device, and verify legal use in their locale and demand adequate data to assure that leakage radiation is within safe limits. The following report shows the features and performance of three current handheld units x-ray units.

Noteworthy Products

RelyX Ultimate: Resin cement is easy to use, is dual-cure, and has high bond to both tooth and restoration (Page 6)

Digitest II: Pulp vitality tester that is not objectionable to patients (Page 6)

Quick Up: Gingival-colored pick-up material is easy and fast to use for securing attachments to dentures (Page 6)

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Dental Implants: Where Do We Go from Here? (Continued from page 1)

Results of CR Survey on State of Dental Implants: 2013

The following survey demonstrates the state-of-the-art on implant dentistry. It provides a current perspective for selection of brands and diameters of implants and notes the relative difficulty and success of the procedures. The survey defined standard diameter root form implants as 3 mm or more and small diameter (mini) as 1.8 to 2.9 mm. Percentages may not add to 100% because of multiple answer potential or additional non-indicated miscellaneous answers. See the CR analysis of the survey below.

Survey Demographics

• 1435 respondents: 96% GPs; 67% do only implant prosthodontics; 29% do both surgery and prosthodontics
• Placement of implants: 37% standard diameter only, 14% mini only, 49% both
• Restoration of implants: 68% standard diameter only, 1% mini only, 31% both

Surgical Placement

• Standard diameter brands placed most: 23% Implant Direct; 16% Nobel Biocare; 10% BioHorizons; 7% Camlog; 5% each Ankylos, Astra, and Hiossen; 4% each BIOMET 3i, Zimmer, and Neoss; 3% Straumann; 2% Bicon; 1% each Blue Sky Bio, Friadent, and MIS; <1% - 30 other brands
• Overall opinions on standard diameter implant surgical components: Cost to dentists acceptable to too high; 87% rated kit acceptability very good to excellent; features liked most: proven clinical success and ease of use; 75% rated placement to be easy or very easy; 96% will continue to use their current brand; surgical kits range in cost from $1265 to $2565
• Failure of standard diameter implants: 62% reported 1–5% failed; 27% reported 0%; 10% reported 6–10%; 1% reported 11–15%
• Mini diameter brands placed most: 63% 3M ESPE; 11% Intra-Lock; 6% Sterngold/Zimmer; 3% Dentatus, Glidewell, and MiniMARK; 2% Zest; 1% each Lew and OCO; <1% other brands
• Overall opinions on mini diameter surgical components: Cost to dentists acceptable to most (83%); 96% rated surgical kits good to excellent; features liked most: ease of use, low cost, and clinical success; 81% rated placement to be easy or very easy; 96% will continue to use their current brand; surgical kits range in cost from $638 to $1001
• Failure of mini diameter implants: 43% reported 1–5% failed; 22% reported 6–10%; 21% reported 0%; 6% reported 11–15%; 5% reported 15–20%; 3% reported 20% or more failed
• CR Analysis of Survey Data
  • Surgical kits, standard and mini, rated very good to excellent overall
  • Minimal clinical failure of standard diameter implants
  • Standard diameter implants surviving somewhat better than minis
  • Standard diameter implant surgical and prosthodontic kit cost perceived to be acceptable to too high
  • Mini surgical and prosthodontic kit cost more acceptable than standard diameter
  • Major brands are restored most by respondents, probably because most implants placed by referring surgical dentists are major brands
  • GPs show trend toward placing less expensive brands
  • Placement of both standard and mini implants in healthy patients with adequate bone rated to be relatively easy

CR Conclusions:

More patients should be receiving implants! Become educated on those implant procedures you want to increase. If you are considering changing brands, study the popular brands indicated by this CR survey of mainly GPs (listed in decreasing order, Standard diameter: Implant Direct, Nobel Biocare, BioHorizons, Camlog, Ankylos, Astra, Hiossen, BIOMET 3i, Zimmer, Neoss, etc.; Mini diameter: 3M ESPE, Intra-Lock, Sterngold/Zimmer, Dentatus, Glidewell, MiniMARK, etc.). Don’t overlook other emerging new brands. Information about them is readily available on the internet. Send those patients with needs above your educational level and clinical comfort zone to appropriate specialists.

Which Implant Procedures Do You Want to Emphasize or Increase in Your Practice?

Observe the following list of implant procedures and decide which you want to continue to do or increase in your practice. Then obtain adequate CE and implement the procedures. Currently most GPs do 1 and 2 below. Some do 1–6. After considerable CE, postgraduate or graduate education, a few do 1–8. Very few do 1–9. The best interest of patients should be your primary consideration. Stay within your education and comfort zone.

1. Implant prosthodontics for single tooth replacements (90% of implants are singles)
2. Implant prosthodontics for replacement of several teeth
3. Mini implant placement for healthy patients with adequate bone (generally considered to be 4 mm facial–lingual and at least 10 mm crestal–apical bone presence)
4. Single standard diameter implant placement for healthy patients with adequate bone (generally considered to be 6 mm facial–lingual and at least 10 mm crestal–apical bone presence)
5. Socket grafting for single tooth replacement (see Clinicians Report May 2010)
6. Multiple implant placement for healthy patients with adequate bone
7. Bone grafting for multiple implant placement
8. Sinus lift procedures
9. Complex cases involving grafting, guided implant placement, and complex prosthodontics

Use of Specialists for Implant Procedures

• Talk with the surgical and prosthodontic specialists with whom you work and inform them that you want to do more of the implant surgery and complex prosthodontics than you are now doing.
• Work with your respective implant specialists just as you work with those in other specialty areas. Conjointly decide which procedures each of you will do.
• Such cooperation wins three ways: GP, specialist, and most importantly patients.

Fees for Implant Procedures

• Most recent ADA data on implant related fees 2011 (add for inflation):
  Surgical placement of implant body........D6010, mean $1,741
  Prefabricated abutment..........................D6056, mean $605
  Custom abutment.................................D6057, mean $761
• Surgical placement of mini implant. No ADA code for this procedure (coming soon).
  Suggest using above codes and note in comments that implant is mini (small diameter).
• Mini implant placement (from Feb 2012 CR data): $760

Survey of Implant Restorations

96% of implants placed are major brands
68% of implants placed are mini brands
90% of implants placed are standard diameter
37% standard diameter only, 1% mini only, 49% both
6% mini only, 31% both

CR Analysis of Survey Data

• Surgical kits, standard and mini, rated very good to excellent overall
• Minimal clinical failure of standard diameter implants
• Standard diameter implants surviving somewhat better than minis
• Standard diameter implant surgical and prosthodontic kit cost perceived to be acceptable to too high
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Are Surgical Handpieces Really Fit for Surgery?  (Continued from page 1)

What is Cross-Contamination/Bio-Load/Disinfection?

- **Cross-contamination:** Passing of pathogens indirectly from one patient to another via unsterile equipment or procedures (example: touching unsterile light handle or loupes).
- **Bio-load:** Amount of pathogens on contaminated object; a significant factor of the infection triad: bio-load, organism virulence, and host resistance.
- **Disinfection:** Chemical process of reducing pathogenic microorganisms. Not appropriate for surgical procedures. Bacterial spores may survive.

**Common Errors of Contamination:**
- a. Non-heat sterilized handpiece, cords, and burs
- b. Non-sterile irrigating solutions
- c. Air/mist exhaust into wound (biofilm)
- d. Non-sterile gloves
- e. Touching non-sterile objects: lights, bur holders, adjusting N₂O flow knobs, etc.
- f. Non-sterile suction tubing
- g. Non-sterile drapes

**CR Surgical Handpiece Survey**

<table>
<thead>
<tr>
<th>General Dentists (n=313)</th>
<th>Oral/Maxillofacial Surgeons (n=221)</th>
</tr>
</thead>
<tbody>
<tr>
<td>44% use a “surgical” handpiece</td>
<td>58% use electric models</td>
</tr>
<tr>
<td>84% are air-turbine models</td>
<td>48% use air-turbine models (66% Hall)</td>
</tr>
<tr>
<td>90% are contra-angled</td>
<td></td>
</tr>
</tbody>
</table>

**Popular Surgical Handpiece Companies:**

- Oral/Maxillofacial Surgeons Companies:
  - 31% Palisades Dental
  - 17% NSK
  - 9% Medidenta
  - 6% Sabra Dental
  - 5% Kavo
  - 13 additional companies

**Irrigation Solutions**

<table>
<thead>
<tr>
<th>Solution</th>
<th>General Dentists</th>
<th>Oral Surgeons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sterile saline</td>
<td>32%</td>
<td>59%</td>
</tr>
<tr>
<td>Sterile water</td>
<td>2%</td>
<td>10%</td>
</tr>
<tr>
<td>Non-sterile water (tap or distilled)</td>
<td>41%</td>
<td>28%</td>
</tr>
<tr>
<td>Air/water spray from handpiece</td>
<td>22%</td>
<td>2%</td>
</tr>
</tbody>
</table>

**Infection Control Practices**

<table>
<thead>
<tr>
<th>Practice</th>
<th>General Dentists</th>
<th>Oral Surgeons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat sterilize handpiece</td>
<td>99%</td>
<td>99%</td>
</tr>
<tr>
<td>Heat sterilize cords</td>
<td>18%</td>
<td>42%</td>
</tr>
<tr>
<td>Disinfect cords</td>
<td>82%</td>
<td>67%</td>
</tr>
<tr>
<td>Type of disinfectant</td>
<td>65% wipes</td>
<td>70% wipes</td>
</tr>
<tr>
<td></td>
<td>26% spray</td>
<td>22% spray</td>
</tr>
<tr>
<td></td>
<td>9% liquid</td>
<td>8% liquid</td>
</tr>
</tbody>
</table>

**Important Note:** 10% reported having experienced an air embolism/empysema from an air-turbine handpiece. More than 60 cases were reported including a case of thoracic pericardial tissue emphysema involving ICU hospitalization.

**Potential Hazards from Handpieces:**

- Biological contamination
- Burn from over-heating (electric handpieces)
- Air emphysema or embolism from air-driven handpieces (see Clinicians Report April 2009)
- Contaminated water spray (water biofilm, see Dental Hygiene Newsletter January/February 2006)
- High-speed operative handpieces used for surgery forcing debris into mouth/wound

**Ideal Properties of Surgical Handpieces:**

- Heat sterilizable handpiece and cords
- RPM >70K (4X faster cutting than 35K rpm)
- Good torque >1.42 ncm
- Easy manipulation
- Variable bur selection

**Air Driven**

- **Advantages:**
  1. Air compressor readily available
  2. Less expensive
  3. Familiarity
  4. Sections teeth faster
  5. Repairs less costly

- **Disadvantages:**
  1. Some exhaust air into mouth which can result in potential air embolism/empysema
  2. Unable to heat sterilize attachment tubing (other than Hall System)
  3. Air spray from biofilm potential contamination
  4. Handpiece and attachment cord more flexible
  5. Minimal/no risk of air emphysema
  6. Longer burs available, better visibility

**Electric**

- **Advantages:**
  1. Fully autoclavable handpiece and cord ensures sterility
  2. Implant attachment available for motor units
  3. Quieter
  4. Handpiece and attachment cord more flexible
  5. Minimal/no risk of air emphysema
  6. Longer burs available, better visibility

- **Disadvantages:**
  1. More expensive
  2. May overheat, potential burn to patient
  3. Repair more expensive
  4. Additional console unit required

**Alternate Sleeve Techniques to Minimize Cross-Contamination (less desirable):**

- Commercially available sterile “Rapid Roll” at $3.00 single use (Salvin)
- Nylon sterilization 2-inch tubing sleeve/rubber band at 28¢ (to be autoclaved with instruments), multiple use (Septodont and many others)

**Aids to Minimize Cross-Contamination:**

- Silicone autoclavable suction tubing
- Silicone tubing adapter to unit vacuum
- Rapid Roll Sleeve
- Nylon autoclave tubing sleeve
- Head light
- Autoclaved aluminum foil wrapped over light handle
- Sterile disposable drapes
Characteristics of Current Units

The table compares the features of three current units. Additional brands are available and similar models are marketed under other names.

<table>
<thead>
<tr>
<th>Brand</th>
<th>Manufacturer</th>
<th>Nomad Pro 2</th>
<th>Xray2Go</th>
<th>EXARO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Aribex</td>
<td>Denterprise International</td>
<td>Hiossen</td>
</tr>
<tr>
<td>Photo/Manufacturer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td>$7,795</td>
<td>$4,995</td>
<td>$4,500</td>
<td></td>
</tr>
<tr>
<td>Weight*</td>
<td>5.3 lbs (2.4 kg)</td>
<td>5.6 lbs (2.5 kg)</td>
<td>5.2 lbs (2.4 kg)</td>
<td></td>
</tr>
<tr>
<td>Output</td>
<td>Fixed 60 kV, 2.5 mA Adjustable 0.01–1.00 sec</td>
<td>Fixed 60 kV, 2.0 mA Adjustable 0.05–1.35 sec</td>
<td>Fixed 60 kV, 2.0 mA Adjustable 0.01–1.60 sec</td>
<td></td>
</tr>
<tr>
<td>Battery</td>
<td>2X, built into handle 530 exposures</td>
<td>1X, in compartment ↑ 220 exposures</td>
<td>1X, clips to belt 130 exposures</td>
<td></td>
</tr>
<tr>
<td>Controls and Ease of use</td>
<td>Excellent</td>
<td>Excellent–Good</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>Backscatter shield</td>
<td>Yes, fixed</td>
<td>Yes, removable</td>
<td>Yes, removable</td>
<td></td>
</tr>
</tbody>
</table>

Example bitewing radiograph using suggested setting for digital sensor (exposure can be adjusted for desired contrast):

- **0.17 sec**: Excellent
- **0.90 sec**: Excellent–Good
- **0.40 sec**: Good

Overall grade:
- **Excellent**
- **Excellent–Good**
- **Good**

*As measured by CR with all necessary accessories  †Device can function on internal or external battery source

CR Conclusions:
Handheld x-ray heads are well proven for mobile imaging outside the conventional office setting, and are now replacing wall-mounted units for routine radiography. New brands offer competitive pricing and features, but clinicians should use caution and request safety data. All units tested were easy to use and made acceptable radiographs. Nomad Pro 2 had best combination of features, ease of use, and established safety record.
CE Self-Instruction Test—August 2013  

Check the box next to the most correct answer.

1. Because of reported differences in implant brand placement between general dentists and specialists, general dentists are:  
☐ A. Restoring about the same amount of major brands of implants and less known brands  
☐ B. Restoring more major brands of implants and fewer less known brands  
☐ C. Restoring fewer major brands of implants than lesser known brands  
☐ D. Not restoring major brands of implants

2. About ________ million adults in the U.S. are edentulous and could use implants to help retain and support mandibular complete dentures.  
☐ A. One  
☐ B. Fifteen  
☐ C. Twenty-five  
☐ D. Thirty-five to forty

3. Potential hazards of using operative handpiece for surgical procedures include:  
☐ A. Air embolism/emphysema and/or contaminated debris blown into wound  
☐ B. Bio-film contamination from water spray  
☐ C. Overheat, burn patient  
☐ D. All of the above

4. Which factors are significant to the infection triad?  
☐ A. Bio-load, organism virulence, and host resistance  
☐ B. Chemical process of reducing pathogenic microorganisms  
☐ C. Passage of pathogens indirectly from one patient to another  
☐ D. Weather

5. Factors for minimizing cross-contamination include:  
☐ A. Sterile gloves, saline irrigation, and suction tubing  
☐ B. Heat sterilized handpiece and tubing  
☐ C. Once gloved, touch nothing but sterile objects and the patient’s mouth  
☐ D. All of the above

6. Which statement regarding handheld x-ray heads is true?  
☐ A. Handheld x-ray heads must be held absolutely still to get an acceptable radiograph.  
☐ B. Handheld x-ray heads are approved for use in all locations and applications.  
☐ C. Handheld x-ray heads cannot replace wall-mounted units.  
☐ D. Handheld x-ray heads can be used with digital sensors, film, and phosphor plates.

7. Which of the following should be considered when purchasing a handheld x-ray unit?  
☐ A. Legal use in your locale  
☐ B. Proper safety certification of unit  
☐ C. Cost and intended applications  
☐ D. All of the above

8. RelyX Ultimate is different from RelyX Unicem 2 in the following way(s):  
☐ A. RelyX Ultimate contains a dual-cure activator that will initiate the otherwise light-cured adhesive, Scotchbond Universal.  
☐ B. RelyX Ultimate requires application of Scotchbond Universal on the internal of the restoration as well as optional application onto the tooth surface.  
☐ C. RelyX Ultimate has higher bond strength to zirconia, lithium disilicate, and Lava Ultimate.  
☐ D. All of the above

9. Digitest II is a handheld device designed for:  
☐ A. Apex location  
☐ B. Torque control on endodontic handpiece motor  
☐ C. Pulp vitality testing with controlled stimulus for patient comfort  
☐ D. Pulpectomies

10. Quick Up is a:  
☐ A. Pick-up material with easy/fast use, and technique that does not require vent holes  
☐ B. Lab produced pick-up of attachments  
☐ C. All-in-one component pick-up material  
☐ D. Rapid set impression material

Print Participant Information. For additional participants, photocopy this page and list requested information.

Name ___________________________ Email ___________________________

Address ___________________________ Phone ___________________________

City ___________________________ State ______________ ZIP ___________________________

☐ Please send my tests results directly to the Academy of General Dentistry. (AGD# ___________________________)

Annual Enrollment Fee for 2013. Select one:  
☐ $88 Clinicians Report Subscriber  
☐ $108 non-subscriber  
☐ Already enrolled

Payment Method:  
☐ Visa ☐ MC ☐ AMEX ☐ Discover ☐ Check (Payable to CR Foundation®)  

Cardholder’s Signature ___________________________ Exp. __________ CID __________

To receive credit, all 2013 tests are due by December 15, 2013

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Earn 1 Credit Hour for successfully completing each month’s test. Tests are available at www.CliniciansReport.org. This is a self-instructional program.

At the completion of this test, participants should be able to:  
• Determine which implant placement procedures might increase or improve patient care in their practice  
• Evaluate their current surgical handpiece and infection control practices  
• Discuss the benefits of a handheld x-ray unit and potential situations where this technology might be useful
**Noteworthy Products (Continued from page 1)**

### Resin Cement is Easy to Use, is Dual-Cure, and has High Bond to Both Tooth and Restoration

RelyX Ultimate is resin cement delivered from an auto-mix syringe and packaged in a kit with Scotchbond Universal Adhesive. RelyX Ultimate contains a dual-cure activator that will cure Scotchbond Universal Adhesive making the light cure optional for the adhesive. The Scotchbond Universal Adhesive component may also serve as a primer/silane on the restoration in addition to its application to the tooth surface for bonding. Following are compatible restorations and placement suggestions:

- All-zirconia, zirconia-base, metal-base, lithium disilicate, all-porcelain, and resin nano ceramic (Lava® Ultimate), and all-resin restorations: place Scotchbond Universal Adhesive as the primer/silane on the internal of restoration; cement with RelyX Ultimate.
- Scotchbond Universal Adhesive is placed on the tooth for increased bond strength. It is compatible with self-etch, selective-etch, or total-etch bonding.

Available in four shades: Translucent, B0.5 (Bleach), A1 and A3 Opaque with corresponding try-in pastes.

**Advantages:**
- No post-operative sensitivity reported with self-etch technique
- Easy clean up
- High bond strengths to all esthetic restorations and metal base restorations
- Easy to use; fewer steps and components than total-etch resin cement
- Good simple shade choices

**Limitation:**
- Additional steps of adding Scotchbond Universal to both restoration and tooth surface compared to cement only with RelyX Unicem 2

**CR Conclusions:** 77% of 26 CR Evaluators stated they would purchase RelyX Ultimate for their practice. 85% rated it excellent or good and worthy of trial by colleagues.

### Pulp Vitality Tester that is Not Objectionable to Patients

Digitest II is a handheld, small-sized, batter-powered pulp vitality tester that allows the user to pre-select the rate of stimulus (slow, medium, fast with range 0–60+). Simple push-button activation allows for gradual stimulus increase for greater patient comfort. Unit remembers the previous rate of speed programmed, has 4 autoclavable probes, and uses 9-V alkaline battery.

**Advantages:**
- Easy to use
- Four autoclavable probe shapes for access to all teeth
- Three rates of stimulus increase: slow, medium, and fast
- Reasonably priced
- Digital readout is easily viewed
- Easy to hold and manipulate

**Limitation:**
- A few Evaluators did not like the lip clip

**CR Conclusions:** 74% of 23 CR Evaluators stated they would purchase Digitest II for their practice. 91% rated it excellent or good and worthy of trial by colleagues.

### Gingival-Colored Pick-up Material is Easy and Fast to Use for Securing Attachments to Dentures

Quick Up is a gingival-colored, self-curing pick-up composite for securing attachments into dentures. System promotes no need for vent-holes and ability to avoid accidental locking of denture to implant. Components include: Quick Up self-cure composite, block out material (Fit Test C&B), adhesive, and light cure material for finish.

1. Remove acrylic in area where attachment is to be located
2. Fill void with Fit Test C&B to make sure enough acrylic has been removed for attachment, try into oral cavity
3. Place Fit Test C&B around undercuts on implant to avoid locking implant to denture
4. Place adhesive on underside of denture in voids in acrylic
5. Fill void 2/3 full with Quick Up self curing composite and seat denture in patient's oral cavity
6. Any voids around attachment can be filled with light-cure material and finished

**Advantages:**
- Technique and products allow for fast easy use
- Good consistency of pick-up material
- Strong bond of pick-up to acrylic
- Fast setting time

**Limitation:**
- No major limitations reported

**CR Conclusions:** 86% of 21 CR Evaluators stated they would purchase Quick Up for their practice. 100% rated it excellent or good and worthy of trial by colleagues.

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