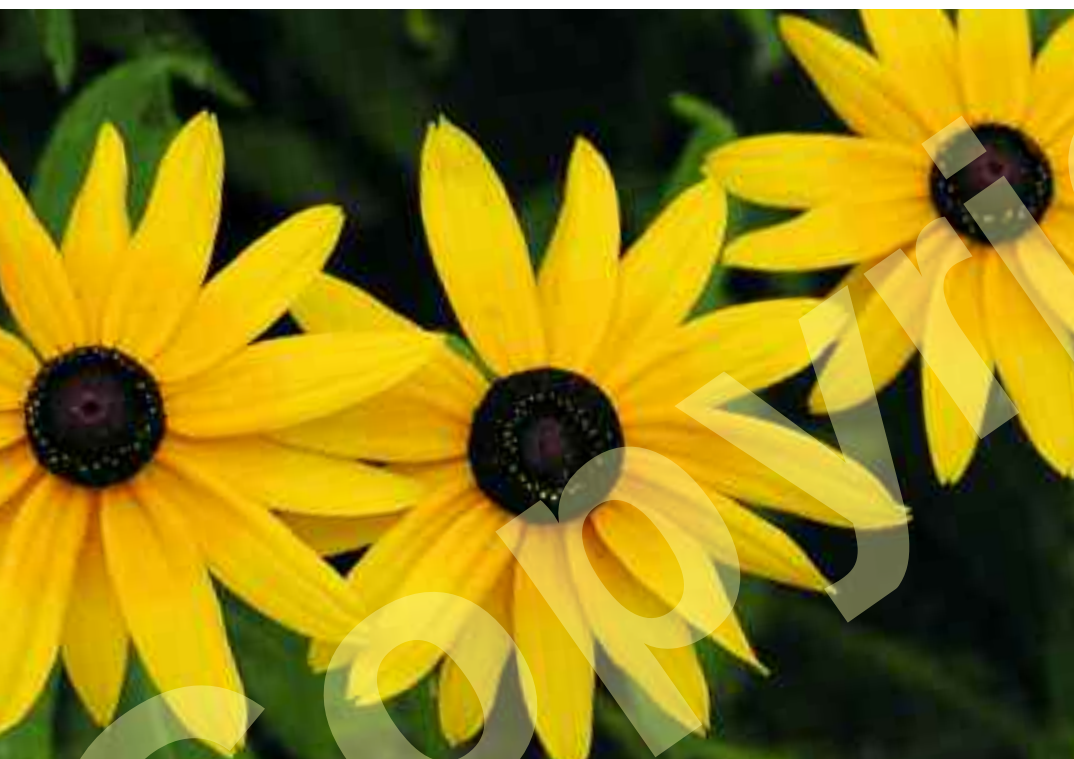


THE DENTAL ADVISORTM

"Improved Patient Care Through Research"



Photography by Gloria G. Poy, R.N., D.A., Hartland, Michigan

Tissue Management Systems

Tissue management is a critical step in obtaining quality results in restorative dentistry. There are many systems available, including a variety of hemostatic agents, different types of cords, pellets, and pastes for tissue management. What are the advantages and disadvantages of these different systems? Which materials work best? Are there harmful effects associated with using certain astringents?

This issue of THE DENTAL ADVISOR will answer some of the commonly asked questions regarding tissue management and compare over 50 products.

2005

Vol. 22, No. 5
June

TISSUE MANAGEMENT SYSTEMS 2

EDITORS' EVALUATION

PROSPEC MI Paste 11
(Recalcification paste)

CLINICAL EVALUATIONS

2-YEAR CLINICAL PERFORMANCE

3M ESPE Filtek Supreme 6
(Universal resin composite)

3M ESPE Impregum Penta Soft Quick Step 6
(Impression material)

G-Force 8
(Diamond burs)

Saliva-Check 8
(Saliva testing kit)

One-Up Bond F Plus 9
(Bonding agent)

OneCoat Self-Etching Bond 10
(Bonding agent)

EDITORS' CHOICE

PRODUCT

PROSPEC MI Paste 11
(Recalcification paste)

EQUIPMENT

DentalEZ J/V-Generation Chair 12

PRODUCT UPDATES

NUPRO Prophylaxis Paste, Chocolatté 9

Microlux 10
(LED transilluminator)

EDITORIAL

Lecture Schedule 12

Ratings

Excellent	++++
Very Good	+++
Good	++

EDITORS

John W. Farah, D.D.S., Ph.D.
John M. Powers, Ph.D.

ASSOCIATE EDITORS

William A. Gregory, D.D.S., M.S.
Peter Yaman, D.D.S., M.S.
Lori K. Brown, D.D.S.
Santine E. Anderson, D.D.S.
Charles I. McLaren, D.D.S., M.S.
John D. McLaren, D.D.S., M.S.
Larissa K. Bishop, D.D.S.

ASSISTANT EDITORS

John Shamraj, D.D.S.
Kenneth Stoffers, D.M.D., M.S.
Ann-Marie Neme, D.D.S., M.S.
Mert N. Aksu, D.D.S., J.D., M.H.S.A.
Mark T. Waranowicz, D.D.S., M.S.
Darren R. Marsh, D.D.S.

CONTRIBUTING AUTHOR

Kathy L. O'Keefe, D.D.S., M.S.

ADVISORY BOARD

John O. Burgess, D.D.S., M.S.
Gerard Kugel, D.M.D., M.S.
Karl F. Leinfelder, D.D.S., M.S.
John A. Molinari, Ph.D.
Frederick A. Rueggeberg, D.D.S., M.S.
Edward J. Swift, Jr., D.M.D., M.S.
Charles W. Wakefield, D.D.S.

CREATIVE DIRECTOR

Lynn St. Pierre

EDITORIAL GROUP MANAGERS

Stephanie D. Farquhar
Annette M. Frederick

ADMINISTRATIVE STAFF

Tricia G. Price
Samantha Baker

DIRECTOR OF CONTINUING EDUCATION

Laurie Lazorka

PUBLISHER

Dental Consultants, Inc.

SUBSCRIPTION INFORMATION

\$99 one year/10 issues
\$187 two years/20 issues
\$258 three years/30 issues
Canada add \$10 per year
Airmail overseas add \$20 per year

Please send inquiries and address changes to: **THE DENTAL ADVISOR**,
3100 W. Liberty, Suite B, Ann Arbor, MI 48103

Call: 800.347.1330 • 734.665.2020
Fax: 734.665.1648
Email: info@dentaladvisor.com
Web Site: www.dentaladvisor.com

No unauthorized duplication or reprints may be made. Inquiries concerning duplication may be directed to the publisher. Copyright ©2005, Dental Consultants, Inc. All rights reserved. Printed in the U.S.A. (ISSN 0748-4666) by University Lithoprinters.

Tissue Management Systems

Hemostatic Agents

The most common medicaments used for tissue retraction are alum (aluminum potassium sulfate or aluminum ammonium sulfate), 5%-25% aluminum chloride, 2% zinc chloride, 13% ferric sulfate, and 0.1% racemic epinephrine. All of these chemicals have been shown to produce some combination of tissue shrinkage and/or hemostasis by control of leakage of oral fluids, precipitation of protein, blood coagulation, or shrinkage of blood vessels. Astringents also have a variety of consistencies, ranging from liquid, to viscous gel, to a putty-like rope.

Adverse Effects

- Aluminum and zinc chloride – caustic to gingival tissues, especially at higher concentrations, interferes with the surface detail of addition silicone impression materials
- Ferric sulfate – although not damaging to tissues, does not actually shrink the gingiva; interferes with the surface detail of addition silicone impression materials

- Epinephrine – systemic effects, such as tachycardia, increased respiratory rate, hypertension, and nervousness
- All astringents – negatively affect the bond strength of adhesives to dentin. Scrubbing with a cavity cleanser, such as **Consepsis** or **PrepQuick**/Ultradent Products, before bonding can return the bond strength to normal values.

continued on page 4

	Product	Company	Active Ingredient	Cord	Pellet	Paste	Gel	Liquid	Cost	Features
Hemostasis Products	Astringident	Ultradent	Ferric sulfate					•	\$24.99/30 ml	ADA-accepted, 15.5% ferric sulfate, unique delivery system
	Astringident X	Ultradent	Ferric sulfate and ferric subsulfate					•	\$34.99	Aqueous 12.7% iron solution, for difficult bleeding, 48-month shelf life
	Epidri Tissue Management Pellets	Pascal Company	Racemic epinephrine		•				\$21.95	For localized hemostasis, intraoral moisture activates pellet, can be used with water for activation, self-dispensing container
	FS Hemostatic	Premier	Ferric sulfate					•	\$30.60-2 oz bottle	Epinephrine-free
	Gel Cord PRO PACK	Pascal Company	Aluminum sulfate				•		\$36.95/Pro Pack 12, \$98.95/Pro Pack 40	Viscous gel, stays in place during procedure, aids in cord placement, no tissue necrosis, does not react to impression materials, raspberry flavor
	Gingi-Aid	Gingi-Pak	Aluminum chloride					•	\$17.00/15 ml	Leaves a clean field
	Hemodent	Premier	Aluminum chloride					•	\$27.15-20 oz jar	Epinephrine-free
	Hemodettes	DUX Dental/Van R	Aluminum chloride		•		•		\$21.00/25 unit-dose cups	Individually packaged, pre-saturated, cranberry flavored and scented blue gel, does not migrate, easy to identify
	Hemogin L	DUX Dental/Van R	Aluminum chloride					•	\$16.00/10 ml, \$26.00/20 ml, \$43.00/40 ml	Green color, non-aqueous base, slight viscosity, will not migrate
	Hemogin L Saturated Pellets	DUX Dental/Van R	Aluminum chloride		•		•		\$18.00/100 count jar	Green color, ideal for dabbing in sulcus before and after cord placement
	Orostat	Gingi-Pak	Racemic epinephrine					•	\$17.00/15 ml, \$37.00/40 ml	Leaves a clean field
	Racellet Tissue Management Pellets	Pascal Company	Epinephrine		•				\$21.95	Controls slight bleeding and seepage, green color, two sizes, moisture (intraoral or water) activates pellets, self-dispensing container
	Rastringent 2	Pascal Company	Aluminum sulfate					•	\$15.75	Prevents adhesion between impression material and gingiva, mint flavor
	Rastringent Tissue Management Pellets	Pascal Company	Aluminum sulfate		•				\$21.95	For local hemostasis, color-coded orange, self-dispensing container
	Stasis	Gingi-Pak	Ferric sulfate					•	\$17.00/15 ml and \$37.00/40 ml	Quick hemorrhage control, used with mini syringe, tip or pellets
	Stat-Gel FS PRO PACK	Pascal Company	Ferric sulfate					•	\$36.95/Pro Pack 12, \$98.95/Pro Pack 40	Indicated for excessive bleeding, buffered pH reduces tissue trauma, gel formula is neat and clean to apply, delivery system maintains control of material
	Styptin	DUX Dental/Van R	Aluminum chloride					•	\$21.00/15 ml, \$36.00/30 ml	Cranberry-flavored and scented, blue color for easy detection, non-aqueous base, slight viscosity, will not migrate
	TISSUEgoo	Clinician's Choice	Aluminum sulfate					•	\$69.95/four, 3-ml syringes and tips	Non-irritating, does not contaminate impression or bonding sites, acts as lubricant for cord packing, gooseberry flavor
Ultradent Buffered Aluminum Chloride	Ultradent	Aluminum chloride					•	\$18.99/30 ml	25% aluminum chloride in a buffered aqueous solution	
ViscoStat	Ultradent	Ferric sulfate					•	\$24.99/30 ml	New wintermint flavor, 20% ferric sulfate coagulative hemostatic gel, IndiSpense syringe delivery system	
Tissue Retraction Products	Comprecap	Coltène/Whaledent	Plain						\$19.73 – \$119.74	Compression, absorbs moisture, three sizes, tightly woven cotton with recess
	Comprecap Anatomic Compression Caps	Coltène/Whaledent	Plain						\$20.73 – \$30.78	Compression, absorbs moisture, three sizes, tightly woven cotton with recess
	GingiBraid+	DUX Dental/Van R	Plain	•					\$8.85/6 ft	Highly absorbent, no memory, holds integrity due to construction
	GingiKnit and GingiYarn	DUX Dental/Van R	Plain	•					GingiKnit – \$10.50/6 ft, GingiYarn – \$7.50/6 ft	No memory, cuts cleanly with rotary instrument, six sizes
	KnitTrax	Pascal Company	Plain	•					\$9.95	100% cotton, knitted interlocking loops are very absorbent; readily displaces tissue for aiding crown preparation; color-coded by size for quick and easy identification
	Magic Foam Cord	Coltène/Whaledent	Polyvinylsiloxane			•			\$151.64/Intro kit, \$122.18/Refill	Expanding silicone
	Original 2-Ply Gingi-Plain	Gingi-Pak	Plain	•					\$7.00/plain	Packed cord puts outward force on the sulcus, ply can be separated, 100% cotton, easy to pack, stays in place, KutterKap cuts and stores cord aseptically
	Sil-Trax	Pascal Company	Plain	•					\$9.00	Braided cotton cord, will not separate, resists snagging on placement instruments, can be soaked in hemostatic agents
	Soft-Twist Gingi-Plain	Gingi-Pak	Plain	•					\$7.00	Tightly twisted, three sizes, 100% cotton, easy to pack, stays in place, KutterKap cuts and stores cord aseptically
	Stay-put	Coltène/Whaledent	Plain	•					\$15.31	Internal copper filament for stability
	Ultrapak	Ultradent	Plain	•					\$10.99/#000, \$9.99/#00, \$8.99/#0, #1, #2, & #3	Cord is knitted for ease of placement
Z-Twist Weave Gingi-Plain	Gingi-Pak	Plain	•					\$7.90	Five sizes, 100% cotton, easy to pack, stays in place, KutterKap cuts and stores cord aseptically	

Delivery Systems

Cords of various configurations, pellets, cotton strands, liquids, gels, and pastes are common forms of delivery of hemostatic agents to the tissue.

Characteristics of Cords

- Cords, pellets and cotton can be introduced to the tissue with or without having been impregnated with astringent.
- Cords are usually knitted or twisted to entrap more hemostatic agent.

- Knitted cords appear larger than twisted cords, but shrink and conform to the sulcus as they are being placed into the tissue.
- Cords can range in size for use in different areas of the mouth.
- In general, cords are used circumferentially around prepared teeth, whereas pellets and/or cotton strands impregnated or dipped in astringent can be used for extra retraction in interproximal areas, or in concentrated areas of stubbornly bleeding tissue.

Paste delivery systems are the newest form of tissue retraction. With this technique, the paste is either injected into the sulcus (*Expa-syl/SDS Kerr*) or placed in an impression tray (*GingiTrac/Centrix*), in which the patient bites down for several minutes, pushing the material into the sulcus. An advantage of these systems is that little or no pressure is applied to the sulcus, which causes less damage to the epithelial attachment. The paste sets up in the tissue and is then either washed away after two minutes (*Expa-syl*) or the impression tray is removed from the mouth (*GingiTrac*). Paste systems tend to result in less reduction in bond strengths of bonding agents.

Clinical Tip

- With paste systems, fluid management and moisture control are essential to the setting reaction and general success.

Another protocol involves the scrubbing of a viscous ferric sulfate gel (*ViscoStat/Ultradent*) with a small brush to cause coagulation of capillaries, followed by packing a knitted cord, and re-scrubbing the tissue with more ferric sulfate if needed. This method provides excellent hemostasis, but the area must be rinsed thoroughly to remove coagulated blood from the area. ■

Featured Products



GingiBraid+
(DUX Dental/Van R)



GingiTrac
(Centrix)



Hemodent
(Premier)



Magic Foam Cord
(Coltène/Whaledent)

Hemostasis and Tissue Retraction Combination Products	Product	Company	Active Ingredient	Cord	Pellet	Paste	Gel	Liquid	Cost	Features
	4-Ply Crown-Pak	Gingi-Pak	Racemic epinephrine	•					\$14.00	Packed cord opens putting outward force on the sulcus, controls bleeding, ply can be separated for versatility, 100% cotton, easy to pack, stays in place, KutterKap package cuts and stores cord aseptically
	Expa-syl	SDS/Kerr	Aluminum chloride			•			\$333.35/Starter kit	Little or no pressure needed to apply minimizing the chance of rupturing the epithelial attachment
	GingiBraid+	DUX Dental/Van R	Epinephrine alum or aluminum potassium sulfate	•					\$8.85/6 ft	Highly absorbent cord, no memory, holds integrity due to construction
	GingiCord	DUX Dental/Van R	Epinephrine alum 87	•					\$12.75/6 ft	Twisted, long strand cotton fiber
	GingiGel	DUX Dental/Van R	Aluminum chloride	•			•		\$13.00/6 ft	Presaturated cord coated in 20% gel
	GingiKnit	DUX Dental/Van R	Aluminum potassium sulfate	•					\$10.50/6 ft	Soft and absorbent twisted cotton fiber construction
	Gingi-Pak Pellets and Cotton Coil, Gingi-Plain Pellets and Cotton Coil	Gingi-Pak	Racemic epinephrine or plain	•	•				\$14.85/plain & \$17.00/epinephrine	Control hemorrhage quickly, 100% cotton, easy to pack, stays in place, used instead of cord, can be shaped to the right width and depth
	GingiTrac	Centrix	Potassium aluminum sulfate			•			\$149.95/Starter kit	Easy clean-up, mechanical and chemical retraction, good for single/multiple prep
	GingiYarn	DUX Dental/Van R	Epinephrine aluminum or potassium sulfate	•					\$7.50/6 ft	Soft and absorbent twisted cotton fiber construction
	Hemodent Cords	Premier	Aluminum chloride	•					\$13.30	Epinephrine-free, available braided or twisted
	Original 2-Ply Gingi-Pak	Gingi-Pak	Racemic epinephrine	•					\$8.00/epinephrine	Packed cord opens putting outward force on the sulcus, controls bleeding, ply can be separated for versatility, 100% cotton, easy to pack, stays in place, KutterKap package cuts and stores cord aseptically.
	Retracto	Coltène/Whaledent	Plain or aluminum chloride	•					\$8.16	Braided or twisted
	Racord	Pascal Company	Racemic epinephrine	•					\$9.95	Tightly twisted to prevent unraveling and fraying, saturated and then dried for hemostasis and retraction
	Racemistat	Pascal Company	Racemic epinephrine					•	\$21.50	For hemostasis and retraction, aqueous solution of 8% racemic epinephrine, for topical application only
	Pascord	Pascal Company	Aluminum sulfate	•					\$9.95	No epinephrine, saturated and then dried for excellent hemostatic and retraction
	Soft-Twist Gingi-Pak	Gingi-Pak	Racemic epinephrine	•					\$8.00/epinephrine	Tightly twisted, three sizes available, controls bleeding easily, 100% cotton, easy to pack, stays in place, KutterKap package cuts and stores cord aseptically
	Sulpak Retraction Cord	Sultan Dental Products	Potassium alum and/or racemic epinephrine	•					\$8.95	Wound cord, unique Pull N' Cut dispenser, color-coded labels, memory free, super absorbent
	Ultrax Retraction Cotton	Sultan Dental Products	Potassium alum and/or racemic epinephrine	•					\$8.95	Braided cord, unique Pull N' Cut dispenser, color-coded labels, memory free, super absorbent
	Ultrapak E	Ultradent	Racemic epinephrine hydrochloride	•					\$10.00/#0, #1, & #2; \$11.99/#00	Cord is knitted for easy placement
	UniBraid	DUX Dental/Van R	Epinephrine alum or potassium aluminum sulfate	•					\$11.50/50 count package	Pre-cut 2" lengths in individual packages, absorbent
	Z-Twist Weave Gingi-Pak, Gingi-Aid	Gingi-Pak	Racemic epinephrine or aluminum sulfate	•					\$8.50	Five sizes available, controls bleeding easily, 100% cotton, easy to pack, stays in place, KutterKap package cuts and stores cord aseptically

3M ESPE
800.634.2249
www.3MESPE.com

Description

3M ESPE Filtek Supreme is a universal composite for anterior and posterior use. The composite is filled 57-60% by volume with 5-20 nm particles and 600-1400 nm particle clusters. The composite is available in dentin, body, enamel and translucent shades. All shades, except for the translucent shades, are radiopaque. Curing time is 20 seconds for enamel, body and translucent shades and 40 seconds for dentin shades. **3M ESPE Filtek Supreme** is available in both syringes and unit-dose capsules in 34 shades.

Clinical Evaluation Protocol

- Over 1000 restorations have been placed as part of an ongoing clinical evaluation of **Filtek Supreme**. Additional restorations are continuing to be placed.
- 340 of these restorations have been in service for at least two years.
- 205 restorations in 119 patients were available for evaluation of clinical performance at two years.

2-YEAR CLINICAL PERFORMANCE



Consultants' Comments

- ▶ “Many restorations are virtually invisible.”
- ▶ “Composite holds a nice polish.”
- ▶ “Performs well, even in large restorations.”

- 10 anterior and 195 posterior restorations were evaluated, 64% of which involved one or two interproximal surfaces.
- Restorations were evaluated on a 1-5 rating scale: 1 = poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent

Clinical Observations

Resistance to Fracture/Chipping

At the 2-year recall, the amount of fracture and chipping was very low. Ninety-three percent of restorations recalled showed no chips or fractures at two years. Slight chipping occurred on 5% of the restorations, mostly at the tooth-filling interface. Two premolar interproximal restorations (2%) chipped on the marginal ridges, requiring repair. None of the restorations required replacement.

Shade Match/Esthetics

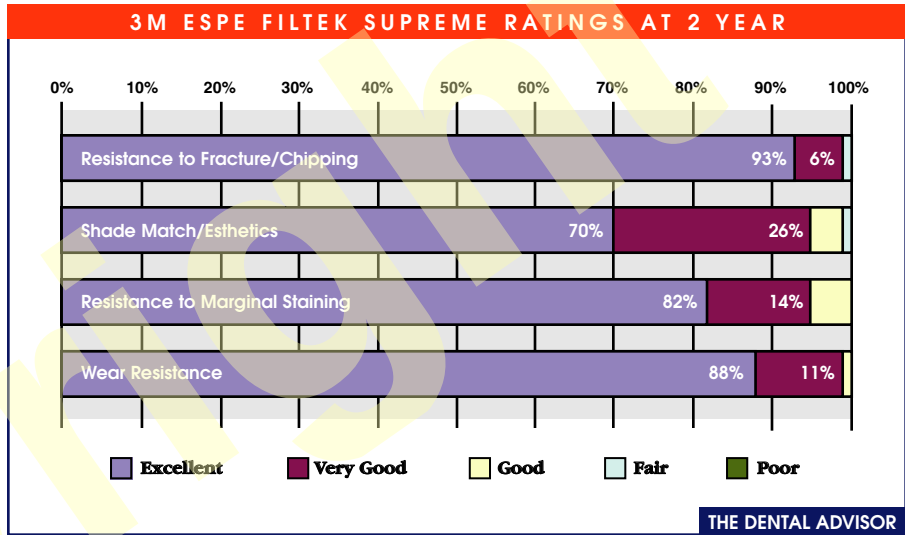
Overall, shade match and blending with the tooth were maintained well. At the 1-year recall, a small number of restorations showed a yellow or gray shade shift through the entire restoration. Esthetics were rated very good to excellent in 96% of restorations. Surfaces were generally smooth with a high level of gloss.

Resistance to Marginal Staining

Eighty-two percent of restorations exhibited no marginal discoloration at one year. Mild staining was noted in 18% of restorations.

Wear Resistance

No visual signs of wear were noted on 88% of restorations. Minor wear was observed on restoration margins. ■



3M ESPE Impregum Penta Soft Quick Step + + + + ½

3M ESPE
800.634.2249
www.3MESPE.com

Description

3M ESPE Impregum Penta Soft Quick Step is a fast-setting polyether impression material, available in light, medium and heavy viscosities. The medium body is intended for use in a monophase impression technique. The heavy and light body (purple and dark pink, respectively) are to be used as a tray and wash, one-step technique. The material is designed to have an improved taste and good hydrophilicity and accuracy in a moist environment. Intraoral working time is one minute and the intraoral setting time is three minutes. The medium and heavy viscosities are supplied in 300-ml/60-ml cartridges for use with the **Pentamix 2** machine. The light body is

supplied in a 50-ml automix cartridge for dispensing by hand. Thirty-three consultants evaluated **Impregum Penta Soft Quick Step**, taking over 230 impressions.

Suggested Retail Cost

- \$150.00/introductory kit of heavy and light or medium body

Product Features

Impregum Penta Soft Quick Step was well received by consultants who were accustomed to regularly using polyether materials. The instructions for use and the automix packaging system gained high ratings. In fact, all categories evaluated were ranked as very good to excellent overall. Among the most-liked features were the even consistency of the mixed material, adequate working time, the color contrast of the heavy and light bodies, and the rigidity of the final impressions. The improved taste compared to other polyethers and the fast



Consultants' Comments

- ▶ “Big improvement in taste compared to original Impregum.”
- ▶ “Good color contrast – easy to read margins.”
- ▶ “Fast setting and accurate!”
- ▶ “Light body was too viscous, heavy body too flowable.”

setting time were appreciated by most consultants. Detail of final impressions is excellent and margins are easy to read. In certain cases, the dark pink color of the light-body masks the presence of blood residue. Light-body flow was found to be very good,

Soft Quick Step to be better than or equivalent to the impression material they were currently using. One-half would switch to **Impregum Penta Soft Quick Step** and 62% would recommend the material to a colleague. ■

but many consultants indicated that they would have preferred less viscosity. The medium- and heavy-body viscosities were highly rated with minimal concerns. Numerous consultants also remarked on the stickiness of the material, which adhered to extraoral soft tissues. Two out of three consultants found **Impregum Penta**

SENIOR CLINICAL CONSULTANTS

E. Alpert, CT
R. Anthony, OH
K. Baker, TX
R. Ciccone, MI
P. Esmond, NY
M. Evans, TN
R. Fisher, OH
G. Franco, NY
P. Grandsire, NY
K. Hamlett, TX
G. Hart, OH
R. Kaprielian, NJ
E. Katkow, MD
L. Katkow, MD
C. Kehr, MI
E. Maitland, NJ
E. Mosso, PA
G. Mosso, PA
D. Peterson, MD
V. Plaisted, NY
W. Powell, TX
G. Poy, MI
G. Sayre, TX
K. Schwartz, FL
B. Shumaker, NJ
B. Sims, NY
A.M. Thompson, NY
R. Trushkowsky, NY
L. Wee, MI

CLINICAL CONSULTANTS

A. Abate, MI
M. Aksu, MI
A. Alexander, PA
J. Allen, MI
J. Amara, CT
R.M. Arnett, MI
R. Averbach, CO
A. Azrak, NY
M. Bannan, MI
D. Barnes, MD
F. Berman, PA
M. Beyramian, MI
L. Bishop, MI
J. Bostic, OH
D. Bowen, MI
E. Bowser, PA
H. Bowser-Sletten, PA
R. Bozell, MI
M. Braverman, NY
L. Brimhall, MT
M. Briskin, NY
C. Brown, LA
W. Browncombe, MI
H. Buckwald, NJ
J. Bush, PA
H. Cadorette, MI
P. Campo, NY
M. Chaben, MI
D. Chacko, TN
S. Cheff, TX
P. Chiaravalli, MI
T. Chuang, NJ
A. Colarusso, NY
M. Conrad, PA
K. Dancy, GA
M. Danner, IL
J. Dingman, WI
J. DiPonziano, NJ
R. Donelli, NY
R. Dost, VA
J. Doueck, NY
M. Dwoskin, MI
M. Eannaccione, NY
R. Engle, IL
K. Fairbanks, MI
T. Faiver, MI
R. Fay, TX
N. Fehmi, MI
M. Feinberg, NY
J. Fine, NJ
K. Fischer, IN
S. Galster, ND

G-Force + + + + ½

Garrison Dental Solutions
888.437.0032 • 616.842.2244
www.garrisdental.com

Description

G-Force is a line of dental rotary diamonds in 22 shapes designed for the gross reduction of tooth structure during crown preparation. They are provided in a single grit size and are identified by a distinctive diamond-shaped band in the neck. They are produced with brazed synthetic diamonds having a uniform length-to-width ratio, allowing the crystals to bond at the same level to the instrument blank. On other instruments, high diamond crystals or clusters prevent lower crystals from sharing the cutting burden. These high crystals dull quickly and produce high spots on the bur that reduce its concentricity causing vibration. On **G-Force**, a more uniform layer of crystals shares the cutting burden and provides a smoother cut. Optimal crystal



Consultants' Comments

- ▶ **"Best diamond bur I have used."**
- ▶ **"A nice bur for light shoulders."**
- ▶ **"Make the bur coarser."**
- ▶ **"No visible identification to distinguish them from disposable diamonds."**

spacing prevents diamonds from piling up during the brazing process. The spacing reduces high spots and allows cutting waste to be flushed away. Thirty-five consultants evaluated **G-Force** in over 350 uses.

Suggested Retail Cost
• \$49.25/package of five burs

Product Features

Consultants rated the cutting efficiency of the **G-Force** as very good. Clogging resistance, durability and the effectiveness of tooth reduction were also rated as very good. Consultants noted the durability, the lack of clogging and chatter during use. A color-coding band on the shank would help to distinguish the **G-Force** from other diamonds, especially disposables, in the office. A selection of diamonds with shorter shanks would be helpful for use in the posterior. Sixty-eight percent of consultants would recommend **G-Force** while 58% would switch. ■

Saliva-Check + + + + ½

GC America
800.323.7063 • 708.597.0900
www.gcamerica.com

Description

Saliva-Check is a six-step, in-vitro test to analyze the quality and the quantity of a patient's saliva. In 10 minutes, **Saliva-Check** provides information regarding salivary resting flow rate, resting pH, stimulated salivary flow, stimulated pH, and buffering capacity. All necessary items to accomplish these tests are provided in an individually boxed kit. The kit contains three pH testing strips, collection cup, wax ball, buffer test strip, cotton gauze, and a pipette. A chart appropriate for inclusion in a patient's record to document the results is also included. Patients should be directed to refrain from smoking, consuming food or drink, tooth brushing or using mouthwash for at least one hour before testing. This evaluation is based on results from 38 private dental offices in testing over 125 patients.

Suggested Retail Cost
• \$108.35/10 patient kits

Product Features

Consultants reported that the manufacturer's instructions, packaging and ease of administering the tests were good. **Saliva-Check** was especially useful for patients with high caries risk as well as geriatric patients and those with xerostomia. The kit is complete, providing all needed items for all analyses.

Consultants' Comments

- ▶ **"This is an excellent patient education procedure."**
- ▶ **"Very useful for a selected number of my patients."**
- ▶ **"Patient education brochures would enhance the impact of the findings."**
- ▶ **"I'd like to have the test identify pathogens for caries and periodontitis."**
- ▶ **"An additional appointment is necessary to administer and complete the test."**

The color comparison charts (pH, buffering capacity) are easy to read and the test results provide good aids in patient education and preventive treatment planning. Consultants felt the value of the test would need to be appropriately communicated to the patient. The time and cost required to administer and interpret the test and then counsel patients would need to be delivered as part of a comprehensive oral wellness program. Patients were more comfortable collecting saliva in privacy. About one quarter of the consultants indicated they would purchase and recommend this product. When compared to other means of measuring pH buffering capacity, consultants felt this was the best product available today.

Clinical Tips

- Dentists and hygienists should do practice tests on themselves before using it with patients.
- Read the instructions carefully. ■

One-Up Bond F Plus + + + +

J. Morita USA/Tokuyama Dental Corp.
800.831.3222 • 949.581.9600
www.jmoritausa.com

Description

One-Up Bond F Plus is a self-etching, fluoride-releasing, light-cured adhesive for direct restorations and for treatment of cervical sensitivity. The kit contains 5 ml each of Bonding Agent A and B, dispenser, mixing well, and applicator tips. The product must be refrigerated overnight. Bonding Agent B should be shaken well before dispensing to mix the filler particles that may have settled during storage. The color of the pre-mixed A and B solutions is yellow, and it changes to pink once they are mixed. The color indicators provide visual verification of proper mixing and placement on the prepared tooth. The adhesive should be rubbed into the tooth surface for 10 seconds or left for 20 seconds before curing. The color changes to a pale brown when the adhesive is cured. Twenty-six consultants evaluated **One-Up Bond F Plus** in 364 clinical applications.

Suggested Retail Cost
• \$112.00/intro kit

Product Features

The bonding agent bottles have a small orifice for better control during dispensing. Although the dispenser has a cover, it does not seal the bottles tightly, which may result in evaporation of the liquids. Since no etching, rinsing or air drying is necessary, the total application time requires about 25 seconds, contributing to clinical efficiency. The ease of use and viscosity of the adhesive received a very good rating. The mixed adhesive's pink color is helpful for visualizing correct placement on the tooth surface. No immediate restoration discoloration was reported as a result of the adhesive color. Eighty-three percent of the consultants rated **One-Up Bond F Plus** as equivalent to or better than their current bonding agent; 53% would switch while 83% would recommend it. ■



Consultants' Comments

- ▶ **"Minimal number of steps reduced the application time."**
- ▶ **"The color change is a nice feature."**
- ▶ **"It worked great for cervical tooth sensitivity."**
- ▶ **"The adhesive has a strong odor."**
- ▶ **"Note the need for refrigeration as clearly indicated on the exterior packaging."**

Product Update



Prophylaxis Paste Zinnamon and Cookie Dough flavors were evaluated clinically in THE DENTAL ADVISOR in Vol. 19, No. 5, June 2001 and received a 4.5+ rating. ■

DENTSPLY Professional (800.989.8826 • www.professional.dentsply.com) recently introduced the newest flavor of **NUPRO® Prophylaxis Paste, Chocolatté™**. As with all 11 flavors of **NUPRO Propphy Paste, Chocolatté** contains fluoride and is available in fine, medium and coarse grits. Each grit is color-coded for easy identification; fine-gold, medium-blue, and coarse-red. Dental professionals also have their choice of unit-dose cups, jars or variety packs. **Chocolatté** is one of four flavors offered in the Child-Medium Grit Variety Pack, along with *BubbleExtreme™*, *Mint* and *Razzberry*. **NUPRO®**

CLINICAL CONSULTANTS

D. Garber, CA
N. Garlisi, OH
M. Gay, MI
L. Gee, OK
A. Giovanardi, MI
J. Glick, MI
B. Goldsmith, NY
I. Goldstein, NJ
K. Goodman, MI
S. Graber, IL
A. Gray, MI
D. Griggs, OH
J. Grover, MI
B. Gursky, MI
E. Gutman, NY
D. Haas, Canada
H. Hamerink, MI
S. Harden, GA
B. Hermann, CA
R. Herwig, KS
M. Hewko, OH
S. Hoekman, MI
S. Hondrum, GA
J. Hoste, MI
M. Hovel, WI
S. Hutt, NJ
P. Indianer, MI
G. Isaacson, NJ
S. Isaacson, NJ
J. Jaghab, MI
J. Jacobs, NY
N. Johnson, MN
T. Jowett, KS
C. Kamin, OH
J. Kaminski, MI
T. Kaminsky, PA
D. Kaplan, NY
M. Kastner, OH
S. Kelly, OH
D. Keren, NY
J. Kim, NY
B. Klym, MI
J. Kostohryz, TX
J. Kotapish, OH
J. Kotnour, WI
M. Kruscke, MI
M. LaMarche, WA
F. Leal, VA
M. LeVasseur, MI
S. Lever, MD
I. Levine, NY
R. Lezell, MI
R. Lieder, MI
M. Livernois, FL
J. Lockwood, MI
M. Lodge, MI
M. Man, NY
B. Manne, FL
N. Mansour, MI
N. Markarian, CA
D. Marsh, MI
M. Mason, NY
R. Mason, NY
W. Mason, MI
J. Mayer, OH
J.R. Meagher, NY
J. Mikesell, IL
C. Miller, PA
S. Miller, NV
R. Mizrahi, NY
L. Montes, NY
D. Montgomery, CA
P. Moratto, MD
M. Morin, MI
S. Munro, WI
W. Nagy, TX
J. Nash, MI
A. Nazarian, MI
J. Neme, MI
L. Neuberger, ND
C.J. Noe, MD
E. Odenweller, OH
R. Oshrain, NY
J. Paris, TX

OneCoat Self-Etching Bond + + + + ½

Coltène/Whaledent, Inc.
800.221.3046 • 330.916.8800
www.coltenewhaledent.com

Description

OneCoat Self-Etching Bond is a 6th-generation, type I adhesive system – a two-step system consisting of a self-etching primer and a bonding agent. It is indicated for use with direct and indirect restorations, dentin sealing, and bonding to amalgam. The adhesive is water-based and may be used on wet, moist, or dry dentin. The self-etch formula creates a homogeneous bond layer to cover the dentin and reduce post-operative sensitivity. Application involves rubbing in the primer for 20 seconds, light air stream, rubbing in the bonding agent for 20 seconds, light air stream, and then light curing. The bonding agent is compatible with halogen, LED and PAC lights. Curing time is 10 seconds for high-output lights (>800 mW/cm²) and 20 seconds for lights



Consultants' Comments

- ▶ *"Shiny tooth surface is easily visible after application."*
- ▶ *"Color-coding simplifies the procedure."*
- ▶ *"There is quite a bit of waste in the unit-dose."*
- ▶ *"There is a strong odor."*

with lower intensity. It is available in an introductory kit with 5-ml bottles each of primer and bonding agent plus accessories or in 50 single-dose units of 0.1-ml each of the primer and bond. Sixteen consultants evaluated **OneCoat Self-Etching Bond** in 312 clinical applications.

Suggested Retail Cost

- \$122.85/introductory kit
- \$ 99.00/single dose kit

Product Features

The packaging and the laminated instructions were highly rated along with the ease of dispensing the primer and bond from their respective bottles. The single-dose ampules are individually wrapped in foil with printed instructions on the back of each pouch. The viscosity of the primer and bond is fairly high, yet they coat the tooth well when rubbed into the surface for 20 seconds. The yellow/black color-coding of the applicator brushes to the bottles eliminates cross-contamination of the materials. There were no reports of post-operative sensitivity during the evaluation period. Seventy-five percent of the consultants rated **OneCoat Self-Etching Bond** equivalent to or better than their current adhesive, while 67% would recommend it and 47% would switch. ■

Product Update

The **Microlux** (AdDent, Inc. – 203.778.0200 • www.addent.com) is a portable, hand-held, fiber-optic LED transilluminator, which can be used to aid in the visual identification of caries, crown fractures, calculus, and endodontic canal orifices. It was initially evaluated and selected as Editors' Choice in THE DENTAL ADVISOR, Vol. 20, No. 5, May 2003. It now has updated features including a new *Nose Cone* with a snap-lock design, which firmly holds the light guide in place. Also, a new LED produces twice the output and offers the same battery life as the previous LED. A smaller *Microtip* with an output diameter of 2 mm offers 50% higher power density. Custom fit *Disposable Plastic Sleeves* are also available. Original **Microlux** units can be easily upgraded by the user. ■



Editors' Choice
PRODUCT

PROSPEC MI Paste + + + + ½

GC America, Inc.
800.323.7069 • 708.597.0900
www.gcamerica.com

Description

PROSPEC MI Paste is a water-based topical paste containing a patented bioavailable calcium and phosphate combination called **Recaldent**. It is for use in the dental office or may be dispensed to patients for use at home. When applied to the oral environment in the presence of saliva, the manufacturer reports that it binds to biofilms, plaque, bacteria, hydroxyapatite, and soft tissues, localizing the bioavailable calcium and phosphate. This mechanism in turn assists in inhibiting demineralization and promoting remineralization by releasing calcium and phosphate under acid challenge and helps facilitate the immediate sealing of dentinal tubules. Indications for use include high-caries risk individuals such as orthodontic patients and those with xerostomia as well as patients who experience sensitivity as the result of recession, scaling and root planing and bleaching. **PROSPEC MI Paste** may be applied with a prophy cup following routine prophylaxis or at home in a custom tray or with a fingertip. The patient is advised not to eat or drink for 30 minutes after use. The 40-g tube of **PROSPEC MI Paste** is available through the dental professional in five flavors (Strawberry, Melon, Vanilla, Mint, and Tutti-Frutti). Twelve editors used **PROSPEC MI Paste** on over 100 patients during the six-week evaluation period.

Suggested Retail Cost

- \$133.35/box of 10 tubes

Editors' Observations

Manufacturer's Instructions

The description and instructions for use are very clear. Patients and clinicians reported the material

was easy to use and were encouraged by the possibility of remineralization and caries prevention.

Viscosity

The viscosity of the material is excellent for direct application with a finger or toothbrush or for use in a custom tray. **PROSPEC MI Paste** flows into embrasures and interproximal areas, thoroughly coating the surfaces. The material is easily contained in the custom trays. A more viscous material would be preferred for use as a prophy paste for polishing during hygiene appointments.

Patient Perception of Flavor

The availability of several flavors and pleasant taste increased patient acceptance and compliance.

Efficacy in Reducing Sensitivity

Many patients with a history of generalized tooth sensitivity indicated a reduction in discomfort after seven days of use. Most who used **PROSPEC MI Paste** immediately following in-office bleaching and during home tooth whitening reported a reduction in sensitivity.

Ease of Use as a Polishing Paste

The low viscosity of **PROSPEC MI Paste**, as compared to traditional prophy paste, creates more splatter during application with a prophy cup. The smooth texture of **PROSPEC MI Paste** is less effective in removing stain. Hygienists found it most efficient to apply with a toothbrush following use of a regular prophy paste.

Ease of Rinsing

The material is designed to adhere to tooth and tissues; therefore, more vigorous rinsing is necessary to remove excess. Neither patients nor clinicians found it to be too tenacious. ■

Exclusive Review

EDITORS' EVALUATION

Editors' Comments

- ▶ *"Effective in the reduction of sensitivity following tooth whitening."*
- ▶ *"The taste was pleasant. Even my teenage patients were compliant with the use of PROSPEC MI Paste."*
- ▶ *"If using during prophylaxis, remove stain with a traditional paste before application."*

CLINICAL CONSULTANTS

D. Parris, GA
D. Parsons, NY
M. Patel, MI
T. Paumier, OH
L. Perratto, NY
S. Picazio, NJ
T. Pieper, WY
D. Pietz, NC
W. Piskorski, MI
D. Pitak, MI
M. Pitzen, WA
D. Powers, MI
L. Pozarny, NY
C. Price, TX
D. Qualliotine, NC
G. Raichelson, Canada
S. Ratner, NY
R. Reichl, NC
G. Reskakakis, NY
C. Rice, MA
J. Riggs, MI
R. Ritter, FL
J. Robison, MI
M. Rogers, PA
W. Roper, TX
F. Ross, WI
K. Ross, MI
K. Rowan, MO
R. Sambuchi, MI
A. Sandak-Albright, NY
P. Sandvick, WI
D. Schimmel, PA
G. Schultz, PA
J. Sedlock, WI
R. Shah, MI
M. Shapiro, MI
J. Shea, MO
J. Sinkwitz, MI
T. Slade, MI
R. Smith, NY
S. Smith, FL
M. Sonne, MI
J. Spingarn, FL
D. Stutman, NY
K. Swearingen, OH
M. Sylvester, CA
P. Symeonides, NY
J. Tabash, MO
H. Tetelman, OH
F. Tom, MA
R. Tonelli, WI
G. Trompeter, MI
C. Trubschenck, CA
P. Tu, CA
S. Ura, NH
J. Utess, MI
H. Vann, MS
J. Van Tiem, MI
W. Walcott, MI
L. Walsh, MI
M. Waranowicz, MI
M. Warshanna, MD
J. Weissman, NY
R. Wilkie, MI
S. Williams, MO
R.G. Willis, SC
K. Wilson, MI
R. Wolf, IN
F. Wood, PA
H. Yeung, CA
D. Young, MI
S. Young, NY
M. Zahn, MI
P. Zanetti, MI
G. Zann, FL
S. Zimmer, MI

LABORATORY CONSULTANTS

Alpha Dental Studio, MI
Nellmar Laboratory, LLC, MI

DentaleZ Group
866.383.4636
www.dentalez.com

Description

DentalEZ J/V-Generation Chair equipped with the **Galaxy Euro-style Delivery System** was evaluated. The following is a description of the chair features evaluated; however, it is not a complete list of the available options. The **J/V-Generation Chair** was evaluated by 11 consultants and their patients over a six-month period.

- Combination of the thin, narrow back and independent seat tilt of the **J-Chair** and the split back of the **V-Chair**.
- Independent seat tilt allows the operator to tip the head of the patient into the proper working position without fully reclining the back of the chair.
- Magnetic headrest
- Sling armrests rotate up for entry and exit
- Eight pre-set positions and manual controls for back height and seat tilt



Consultants' Comments

- ▶ **"This chair is very comfortable."**
- ▶ **"Upholstery and cushioning are excellent."**
- ▶ **"The optional seat tilt is excellent for patient comfort and operator visibility."**
- ▶ **"The Airglide makes it very easy to position the chair."**

- Chair position controls on both sides of the chair
- Head rest is separate from back of the chair and can be changed to a different configuration to accommodate different dental procedures
- **Airglide** feature for easy floor positioning
- Ultraleather upholstery

Suggested Retail Cost:

- \$8,250.00
- \$8,890.00 with Airglide
- \$ 630.00 Ultraleather (optional)

Equipment Features

Patients rated the **J/V-Generation Chair** excellent for appearance, head support, and ease of entering and exiting. While the sling arm rests are of little assistance to small patients, they provide excellent support to larger patients who typically experience challenges with arm support in most dental chairs. The arm rests are easy for the clinicians to operate. As the chair reclined, patients experienced a loss of lumbar support. After a slight adjustment, toward the headrest, the lumbar support was re-established and patients rated the chair excellent for overall comfort. The chair position settings are easy to program. Assistants and doctors appreciated the touch pads on both sides of the chair; however, the low position became an obstruction for some operators. The magnetic headrest is soft, easy to move, and adheres to the fixed support. The independent seat tilt allows the operator to place the patient in a comfortable reclined position and then tilt the chair to optimize visualization of the oral cavity. ■

Upcoming Lecture Schedule

Shared Secrets:

Enhance Your Practice with Esthetic Dentistry's "Best Kept Secrets"

John W. Farah, D.D.S., Ph.D., Editor

7-Credit C.E. Course

Sept. 16, 2005
Sept. 23, 2005
Nov. 2, 2005
Nov. 11, 2005

Utah Academy of General Dentistry – Sandy, Utah
Western Colorado Dental Society – Grand Junction, CO
Greater Cleveland Dental Society – Cleveland, OH
THE DENTAL ADVISOR: Empower Your Practice – Ann Arbor, MI

Dr. Kent Seal – (801) 572-4430
Dr. Mark Madison – (970) 256-9500
Ms. Barbara Godley – (440) 717-1891
Laurie Lazorka – (734) 665-2020

Invite Dr. Farah to be your next guest speaker!

For information on attending a lecture or scheduling Dr. Farah to speak to your dental group, please contact:
Ms. Laurie Lazorka at 734.665.2020 or 800.347.1330, laurie@dentadvis.com

www.dentaladvisor.com