Cleaning and shaping with new technology

Revo-S®, developed by MICRO-MEGA® with only three nickel titanium files, simplifies the initial endodontic treatment and optimizes the cleaning action.

The asymmetrical cross-section of Revo-S facilitates penetration by a snake-like movement and offers a root canal shaping that is adapted to the biological and ergonomic imperatives.

This system promotes a thorough root cleaning and also offers apical finishing, which is adapted to the anatomical and ecological criteria of the canal. This sequence functions according to a cutting, clearance and cleaning cycle, thus allowing an active upward dentinal chips elimination.

What are the advantages of the asymmetrical cross-section?
• An asymmetrical cross-section enables a better root canal penetration because of a “snake-like” movement and thus equals better progression of the instrument toward the apical region of the root canal.
• Thanks to the increased available volume, the elimination of debris upward to the coronal is facilitated.
• The large helical groove cannot be obstructed and that avoids the risk of extrusion of debris beyond the instrument tip and apical foramen.
• It reduces the stress on the instrument thanks to the rippling movement of the file along the canal walls.
• In addition, there is no screwing effect, more flexibility and a better ability to negotiate curves.

The Revo-S sequence has only three instruments. This technique is easy to use and adapted for most root canal anatomies.

Advantages of SC1, SC2 and SU instruments include:
• Inactive tip.
• Extended helical machining up to the coronal region increases the instrument flexibility.
• Less stress on the instrument.
• Better debris elimination and more efficient cleaning because of the asymmetrical cross-section of the SC1.
• SC2 is an instrument without asymmetrical cross-section whose taper of .04 enables an easier penetration. Its equilateral section (three identical sides) ensures a perfect guidance of the instrument to the apical zone, thanks to the balance of the forces.
• The equilateral section of the SC2 ensures the path through the canal to the apical zone.
• The SC2 has a better debris elimination and more efficient cleaning. There is no extrusion.
• The progressive pitch of the SC2 avoids zipping effects.
• SU smoothes the root canal walls.
• Thanks to its asymmetrical cross-section, SU recapitulates the action of the first two instruments, SC1 and SC2, thus respecting the tapered shape of the canal.
• The SU has an adequate canal preparation with an apical finishing of .06.

The apical finishing
For a successful canal preparation, apical finishing is essential. MICRO-MEGA offers an additional adapted solution with specific instruments AS30, AS35 and AS40.

These instruments are complementary and not systematically used. They enable to efficiently enlarge the apical preparation, respecting the .06 taper already formed, without modifying the obtained preparation with the basis sequence (SC1, SC2 and SU).

Modifying the pitch and the crown section of this instrument has made it possible to limit the screwing effect of the file in the canal considerably and to improve flexibility. In this lecture, the guidelines for use of these instruments will be described.

Manufacturers’ recommendations are presented and modified by use of Revo-S to achieve the fundamental principles of endodontics published by Herbert Schilder more than 30 years ago.

Revo-S is a new system and the concept of the asymmetrical cross-section and adapted pitch is of particular interest. Modifying the pitch and the crown section of this instrument has made it possible to limit the screwing effect of the file in the canal considerably and to improve flexibility. In this lecture, the guidelines for use of these instruments will be described.

Manufacturers’ recommendations are presented and modified by use of Revo-S to achieve the fundamental principles of endodontics published by Herbert Schilder more than 30 years ago.

The InGeT® (to use with an InGeT micro-head contra-angle) and in classics (standard handle adaptable on any endodontic contra-angle).

The InGeT system includes files and an InGeT contra-angle, which has the smallest head on the market. It is revolutionary in that its driving gear is part of the rotary file, which simplifies the mechanism of the head.

InGeT ergonomics enable an easy access to posterior teeth and a better visibility of the operative field.

To learn more about the Revo-S, join Dr. Bettina Baxrani from 2:40–3:40 p.m. Tuesday, Nov. 30, when she discusses “Cleaning and Shaping with New Technology” as part of the DTSC Symposia, taking place on the exhibition floor in Aisle 6000, Room No. 3.

Her presentation will center around how cleaning and shaping of a root canal are two inseparable concepts of endodontics. Shaping facilitates the penetration of disinfecting solutions into the deepest regions of the root canal system, including those that cannot be reached by instruments. The Revo-S is a new system and the concept of the asymmetrical cross-section and adapted pitch is of particular interest. Modifying the pitch and the crown section of this instrument has made it possible to limit the screwing effect of the file in the canal considerably and to improve flexibility. In this lecture, the guidelines for use of these instruments will be described.

Manufacturers’ recommendations are presented and modified by use of Revo-S to achieve the fundamental principles of endodontics published by Herbert Schilder more than 30 years ago.
Class II fillings in everyday clinical work

By Dr. Sylvain Mareschi

Making proximal cavity fillings require a rigorous clinical procedure that must be repeated easily. The aim is to obtain a dental morphology that reconstructs a tight contact point and avoids future food impaction. Another very important goal is respecting the anatomy and physiology of the patients’ interdental papillae as well as guaranteeing the balance and integrity of the proximal space.

Compression of the papillae

It is much more difficult to obtain a good contact point with composite compared to amalgam because of the way composite material needs to be light cured.

If the proximal matrix does not have a good adaptation to the tooth, then too much compression on the composite filling material will result in cervical overhang. This in turn compresses the interdental papillae and may cause periodontal damage to the patient’s tooth (Figs. 1, 2).

The matrix

It is easy to understand the importance of the role of the matrix both in forming the filling proximately and channelling the filling material to the correct position.

Directa’s FenderMate matrix perfectly fulfills the clinical needs of completing Class II cavities (Figs. 3, 4). The concept of a steel plate and plastic interdental wedge in one piece was initially introduced by Directa in the concept of FenderWedge – its excellent and innovative device for protecting the adjacent tooth during preparation – and replicated under the name FenderMate as a matrix system.

The aim is to facilitate the insertion of a wedge and an anatomically adapted matrix at the same time. The matrix can be removed in two stages. The interdental wedge can be taken out first, separating from the steel matrix, which can then be removed in a second stage.

The matrices are available in two sizes, narrow and regular, and for right and left application. They are color-coded, green or blue, for ease of identification. FenderMate may be applied either buccally or lingually.

The contact point

The interdental wedge with a flexible wing keeps the lower part of the matrix in contact with the cervical walls of the cavity. This causes a slight separation of the teeth so that when the filling is made, it is slightly larger than usual in the proximal direction.

Once the matrix is removed, the patient’s teeth will return in their natural position, assuring a tight contact between the approximal spaces with the adjacent tooth.

The matrix’s convex shape positions the interdental contact point in the highest third of the tooth and creates a papillary splay compatible with the physiology and the natural interdental space for cleaning. The curved shape of the combined matrix and interdental wedge forms the matrix around the buccal and lingual limits of the cavity box, and the pre-shaped contact former creates a natural contact point on the patients tooth (Fig. 3).

For more information on Directa AB, stop by the booth, No. 1511, during the GNYDM.

About the author

Dr. Sylvain Mareschi is a dentist and private practitioner, a DFCD Paris V Member and founder of the Dental Laser Academy in Paris.

(Editor’s note: This clinical case was originally published in DENTOSCOPE on Nov. 20, 2009.)
Invisalign G3 expands on original product to deliver better results

Upgrades also streamline overall planning process

In the decade since the commercial launch of the Invisalign® system, Align Technology has continuously worked to innovate and improve Invisalign products to deliver the outcomes patients want and doctors expect.

This fall, Align introduced Invisalign G3, the most significant collection of new features and innovations in the company’s history.

Invisalign G3 is engineered to deliver even better clinical results, with new aligner and software features that make it easier to use Invisalign, including SmartForce® features designed for increased predictability of certain tooth movements, simpler, more intuitive software to streamline treatment planning and review, and new aligner and software features that make it easier to use Invisalign with Class II and Class III patients.

Invisalign G3 builds on a new and improved feature set introduced in the Invisalign product line in 2009. “The innovations in Invisalign G3 really get at the heart of what doctors have been asking for from Invisalign treatment,” said Sheila Tan, Align vice president, marketing and chief marketing officer.

“With technology and tools that are designed to expand the clinical scope of Invisalign, deliver greater predictability across most clinical situations and make treatment planning more efficient, Invisalign G3 represents a tremendous leap forward in Invisalign innovation and demonstrated how we leverage our technology to deliver the clinical outcomes doctors expect.”

SmartForce features designed for greater predictability of tooth movement

SmartForce features are attachments and aligner features engineered to deliver the forces needed to achieve predictable tooth movements.

Based on biomechanical principles, SmartForce features are customized to each tooth using advanced virtual modeling and are positioned precisely to deliver the proper forces.

New SmartForce features include an optimized rotation attachment for bicuspids (previously available only for cuspids), a new Power Ridge™ feature for lower anteriors (previously available for the upper arch) and a Lingual Power Ridge feature for upper anteriors.

A new variation of the optimized rotation attachment is also being introduced to address clinical situations where placement of the attachment may have previously been difficult.

ClinCheck 3.0 and the Invisalign Doctor Site

Invisalign G3 also streamlines the overall treatment planning process with a significant evolution of the ClinCheck software, making it easier and more intuitive for dentists to access Invisalign patient records, review and approve ClinCheck treatment plans, view patient account status, order treatment supplies and more.

At the GNYDM

For more information on Invisalign G3 and any of its features, stop by the booth, No. 4420, during the GNYDM.

Features that make it easier to use Invisalign to treat Class II and Class III patients

The treatment of Class II/III malocclusion often require the use of interarch elastics to provide anchorage control. The new precision cuts make it easier to use Invisalign to treat Class II and Class III patients as these clinician-prescribed pre-cuts in the aligners accommodate the use of elastics on cuspids, bicuspids and molars.

The improvements and innovation in Invisalign G3 also include new clinical preferences, improved staging for interproximal reduction (IPR) and the addition of compliance indicators to Invisalign Assist.

These features are available now at no additional cost to Invisalign-trained dentists in North America, with international availability in 2011.

The Invisalign treatment options are designed to help dental professionals achieve the clinical results they expect, utilizing leading-edge technology. Today, with more than 1.3 million patients treated, the Invisalign system enjoys broad acceptance as an effective, in-demand treatment option.

Treatment is flexible and can be used to treat a wide range of clinical situations. It’s an ideal solution for the majority of adults and teenagers—and patient love it. In fact, according to Align Technology, nine out of 10 patients would recommend Invisalign to their friends and family.

ELEVANCE DENTAL CHAIR

Midmark announces the availability of its newest chair for the dental office, the Elevance Dental Chair.

Years of research and development yielded a patient chair that is a genuine departure from any chair on the market today. With its unique Cantilever Forward™ design, advanced hydraulic system and the fully integrated heat and massage option, the Elevance chair delivers optimal patient access and comfort.

Unobstructed access to the patient’s oral cavity is crucial for a dentist to maximize performance and maintain an ergonomically correct working position. The Elevance chair has a unique backrest that is thin and narrow and cradles patients.

Providing an unprecedented range of travel, the Cantilever Forward design brings the patient to the clinician. Starting at a low seat height of 15 inches and extending to a seat height of 34 inches, the chair accommodates a broader range of operators and offers greater flexibility whether seated or standing.

The Elevance chair has multiple features that were created to relax the patient and provide comfort during lengthy procedures. The sculpted headrest, advanced lower lumbar support and two layers of foam offer increased support. The patented, integrated armrests and cast aluminum backrest deliver a comfortable secure patient regardless of size. The advanced hydraulic system delivers smooth, responsive operation while supporting patients weighing up to 450 pounds.

The optional SerenEscape™ heat and massage system offers patients a massage, while lumbar heat warms muscles for further relaxation. The patient’s personal preferences are easily controlled with a remote hand control. Settings include high and low heat, three different massage patterns and adjustable speed and intensity.

Midmark has also expanded upholstery options to include limited seams Ultraleather upholstery as well as two-toned plush upholstery that allow customers to personalize their office. Expanded upholstery color selection now includes 20 standard Ultraleather colors and 12 Royal Hampton seamless vinyl colors.

For questions regarding this new product, please contact the Midmark Dental Customer Service department at (800) MIDMARK, visit midmark.com/elevance or stop by the booth, No. 217, during the GNYDM.
For the third year in a row, the DTSC hosts its annual CE Symposia at the GNYDM, offering four days of focused lectures in various areas of dentistry. Find us on the Exhibition Floor in Aisle 6000, Room # 3.

Each day will feature a variety of presentations on topics, which will be led by experts in that field. Participants will earn ADA CERP CE credits for each lecture they attend. DTSC is the official online education partner of GNYDM.

PLEASE SEE PROGRAM DETAILS UNDER WWW.DTSTUDYCLUB.COM/GNYDM

REGISTER NOW: WWW.GNYDM.COM

FREE FOR REGISTERED GNYDM ATTENDEES, BUT PRE-REGISTRATION IS RECOMMENDED.

For more information, please contact Julia E. Wehkamp, C.E. Director, Dental Tribune Study Club
Phone: (416) 907-9836, Fax: (212) 244-7185, E-mail: j.wehkamp@DTStudyClub.com

SUNDAY, NOVEMBER 28
10:00 - 11:00 Howard Glazer, DDS, FAGD
BEAUTIFUL: GO WITH THE FLOW - COURSE: 3020
11:20 - 12:20 John Flucke, DDS
LIGHT CURED ADHESIVE DENTISTRY - SCIENCE AND SUBSTANCE - COURSE: 3030
12:00 - 2:00 Martin Goldstein, DMD
A SIMPLIFIED APPROACH TO MULTI-LAYER DIRECT COMPOSITE BONDING - COURSE: 3040
2:40 - 3:40 Jay Reznick, DMD, MD
3D IMAGING AND CT-GUIDED DENTAL IMPLANT SURGERY - 3050
4:00 - 5:00 Louis Malamzhev, DDS, MAGD
TOTAL FACIAL ESTHETICS FOR EVERY DENTAL PRACTICE - COURSE: 3060

TUESDAY, NOVEMBER 30
10:00 - 11:00 George Freedman, Fay Goldstein and Edward Lynch
SOFT TISSUE LASERS AND CARIES DIAGNOSIS - COURSE: 5110
11:20 - 12:20 Greg Diamond, DDS
LASERS IN PERIODONTAL THERAPY - COURSE: 5120
12:00 - 2:00 Don Almos, DMD
INTRODUCTION TO CONE BEAM CT (CBCT), ESPECIALLY AS IT PERTAINS TO PREVENTION OF FAILURES IN ORAL IMPLANTOLOGY - COURSE: 5130
2:30 - 3:30 Maria Ryan, DDS, PhD
DETECTING CORONARY HEART THROUGH PERIODONTIS AND PERIIMPLANTITIS - COURSE: 5140
4:00 - 5:00 Dwayne Karateew, DDS
CONTEMPORARY CONCEPTS IN TOOTH RELACEMENT: PARADIGM SHIFT - COURSE: 5150

WEDNESDAY, DECEMBER 1
10:00 - 11:00 Mr. Al Dube
BEST MANAGEMENT PRACTICE, WASTE MANAGEMENT FOR THE DENTAL OFFICE AND OSHA COMPLIANCE - COURSE: 6060
11:20 - 12:20 Glenn van As, DMD
HARD AND SOFT TISSUE LASERS - COURSE: 6070
12:45 - 4:45 Dr. Benedict Bachstein, Dr. David Hoest, Dr. Jeffrey Hoec, Dr. Dwayne Karateew, Dr. Enrique Cerino, Dr. Ethan Parks
THE FIRST ANNUAL OSSEO UNIVERISTY SUMMIT: IMPLANT DRIVEN DENTISTRY - COURSE: 6080

THIS PROGRAM IS SUBJECT TO CHANGE
Hand hygiene has received a lot of public attention in recent years, fueled by the H1N1 pandemic and fear of "superbugs" such as MRSA. According to the Centers for Disease Control and Prevention, the No. 1 way to prevent the spread of infection is hand hygiene.

The message to health-care workers is direct and unwavering: Wash your hands, a lot. But for dentists, hygienists and office staff, the price for frequent hand hygiene is often chronically dry and irritated hands.

To combat this problem, Sultan Healthcare offers Moist SURE— a complete line of hand hygiene products designed exclusively for dental practices. The line offers professional level protection but without the irritating side effects of frequent hand washing. The product line consists of:

- **Moist SURE Liquid Sanitizer**: A powerful, 63-percent isopropyl alcohol sanitizer that’s clinically proven to moisturize but is also a lotion. It is the only brand for dental practices that kills MRSA and VRE in five seconds.
- **Moist SURE Foaming Sanitizer**: A 62-percent ethyl-alcohol foaming sanitizer that’s as effective as 4 percent chlorhexidine-glucosamine surgical scrub, yet so gentle it keeps skin hydrated for up to two hours after application.
- **Moist SURE Lotion Soap**: A smooth and soft, antimicrobial, health-care personnel hand wash that contains 0.5 percent triclosan. Its clinically mild formulation has a pleasant, light fragrance.
- **Moist SURE Foaming Soap**: A clinically mild, foaming, health-care personnel hand wash with 0.75 percent triclosan. Its performance is comparable to a 4 percent chlorhexidine hand soap.
- **Moist SURE Lotion**: A skin conditioner with a long-lasting moisturizing effect, even through several hand washes.
- **Moist SURE Automatic Dispenser**: A touch-free, contained dispensing system that minimizes cross contamination. (For use with both Moist SURE Lotion Soap and Moist SURE Liquid Sanitizer.)

“Time and again, dental professionals I speak to complain about dry, cracked skin from having to wash their hands so often,” said Tim Lorencovitz, product manager for Moist SURE. “They don’t realize, though, that the hand hygiene products they buy at the grocery store are not designed for the high frequency use of a health-care professional—and their hands are paying the price.”

What makes Moist SURE unique, according to Lorencovitz and the products’ substantial clinical data, is that it offers the efficacy dental workers need, but without the drying effects of many products available on the market. Moist SURE soaps and sanitizers meet FDA-proposed requirements for a health-care personnel hand wash.

In addition, all products have been clinically tested for mildness to the skin—with Moist SURE Liquid Sanitizer having moisturization properties equal to that of Vaseline® Intensive Care Hand Lotion.

“In essence, you have all the protection of an alcohol-based sanitizer, but in a formula that’s proven to moisturize as well as a hand lotion,” said Lorencovitz. “The feedback we’re getting is extremely positive. People can feel a difference as soon as they put it on their hands.”

For those who have to scrub and sanitize all day for their jobs, that’s welcome news.

Free samples of Moist SURE are available at www.MoistSUREsample.com. The entire Moist SURE line is available exclusively through dental dealers.

Moist SURE is just one of Sultan Healthcare’s complete cycle of infection prevention products, designed to help protect dental workers before, during and after patient treatment. To learn more, visit www.sultanhc.com.

**Sultan Healthcare’s new Moist SURE line of hand hygiene products is available through dental dealers. The products provide professional-level protection in formulas clinically proven to be mild to the skin. This will minimize the common complaint from dental workers that their hands are overly dry from frequent hand washing. (Photo/Provided by Sultan Healthcare)**

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**At the GNYDM**

For more information on Sultan Healthcare’s new Moist SURE line of hand hygiene products, stop by the booth, No. 812, during the GNYDM.

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**DentalVibe to host gathering with key opinion leaders on Nov. 28**

On Sunday, Nov. 28, after the Greater New York Dental Meeting is done for the day, DentalVibe will sponsor a one-of-a-kind event, "Off the Podium," a gathering of neighborhood dentists and key opinion leaders, at the Marriott Marquis from 5:30–7:30 p.m.

The event will feature an open bar, appetizers and prizes. The event will be a unique opportunity for dentists to mingle and chat with the lecturers they typically only see on a podium.

Dr. Louis Malcmacher, Dr. Joe Blaes, Dr. George Freeman, Dr. Ron Kaminer, Dr. Marty Jablow, DentalVibe founder Dr. Steven Goldberg and other surprise guests will be on hand.

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**SUREFIL SDR® FLOW POSTERIOR BULK FILL FLOWABLE BASE**

SUREFIL® SDR® Flow Posterior Bulk Fill Flowable Base, the unique posterior flowable composite that can be placed in bulk, saving up to 40 percent in placement time, is now available in three new shades: A1, A2 and A3.

The stress decreasing resin (SDR) technology provides 60 percent less polymerization stress, allowing for 4 mm increment placements with a 20-second cure time.

It also has a unique, self-leveling handling that allows it to adapt to the walls of the prep with minimum to no manipulation.

For more information, visit www.surefilsdrflow.com, call (800) 532-2855 or stop by the DENTSPLY Caulk booth, Nos. 2603/2803, during the GNYDM.