Orthodontics goes Digital with CEREC from Sirona

By Dr. AbdelAziz Yehia, UAE

I t finally happened... Since DIAS. 2015, when Sirona unveiled the CEREC Ortho Software, a Software uniquely designed to send accurate 3D full arch scans to World-Class providers like, and in cooperation with Invisalign, 3M Unitek, Dolphin Software, and others... as well as the possibility to connecting to a Sirona laboratory, and the Dental Market has been waiting the release of this Software; with the Gulf (specifically United Arab Emirates) being no exception.


"On the 11th of December, the first CEREC Ortho training took place in the Raffles Hotel"
SMALL CHANGE.  
BIG DIFFERENCE.

The new imaging plate scanner XIOS Scan completes the intraoral family from Sirona. Whether you’re taking the first steps into the digital world or establishing or updating a fully digital practice, XIOS Scan and XIOS XG Sensors offer perfectly synchronized solutions for every workflow. Enjoy every day. With Sirona.
3M Oral Care at Saudi Dental Society

By SM

On 5-7 January 2016 3M Oral Care Saudi Arabia took part in the 16th King Saud University International Dental Conference and the 27th Saudi Dental Society Conference held at the Riyadh International Convention and Exhibition Center. Newest Oral Care products and solutions were presented and the exhibition booth which was equipped with designated areas for customer hospitality, product demonstrations and hands-on workshops.

Wide range of dental and orthodontic products used and recognized by thousands of oral care professionals worldwide was presented at the booth. Doctors demonstrated keen interest in new 3M products and solutions such as Filtek™ Bulk Fill Posterior Restorative, Ketac™ Universal Glass Ionomer Restorative, 3M™ True Definition Scanner as well as Clarity™ Advanced Ceramic brackets and APC™ Flash-Free orthodontic systems.

Traditionally core dental products such as Single Bond Universal Adhesive, Filtek™ Z50 XT Universal Restorative, Relux™ cements range, Pentz™ impression materials for Pentamix™ mixing units, temporization products including Protemp™ 4, Stainless Steel Crowns, Peds Strip Crowns as well as orthodontic products including Victory Series™ Bracket System, TADS and Incognito™ Appliance System were also displayed at the booth.

A special area equipped with products and all necessary tools for hands-on workshops was allocated at the booth. The workshops were run by 3M Scientific Affairs & Education Team specialists Dr. Haitham Youssef and Dr. Mustafa El Sammak. The 3-day workshop schedule included sessions on such actual topics as new trends in posterior restorations, precise conventional and digital impressions with innovative 3M™ True Definition Intra Oral Scanner. In the breaks between the workshops doctors could relax with the cup of fresh Arabic coffee and dates in the hospitality lounge with comfortable sofas.

“3M has been working hand in hand with the Dental Industry in the Kingdom of Saudi Arabia for over a decade. We strongly believe in transfer of knowledge and enhancing the level of patient care through a variety of hands-on workshops, lectures and seminars. We believe that once the dentist is convinced on the efficacy and efficiency of our products he will become a lifelong user. 3M tries to cater to the needs of all segments of the industry, be it government, private clinics or Universities. To further increase our relevance to the local requirements, 3M has recently started work on the set up of the first manufacturing facility in the Middle East & Africa region. The groundbreaking ceremony was held in December 2015 at the site in Hammaam. This step will bring us even more close to the customers as we will be able to customize our products and solutions for the local needs.” – commented Michal Miroswski, General Manager, Health Care Business Group, Saudi Arabia.

Contact Information
For more information please contact 3M at www.3Mgulf.com/espe

Large diastema closure with Filtek™ Z350XT Universal Restorative

By SM

Female patient, 26 years old. Main complaint about the spacing between her teeth with complete rejection of orthodontic treatment and laminate veneers. Direct restoration was made using Filtek™ Z350XT Universal composite (Enamel and Dentine), Single Bond Universal adhesive, Sof-Lex™ finishing and polishing discs and interproximal finishing strips.

Ketac™ Universal Glass Ionomer Restorative, 3M™ True Definition Scanner as well as Clarity™ Advanced Ceramic brackets and APC™ Flash-Free orthodontic systems.

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About the Author
Dr. Mohamed Fouad Haridy
Associate Professor of Restorative Dentistry, Cairo University.
Head of Restorative Department of British University in Egypt (BUE)
Postoperative sensitivity. All dentists worry about it. No patient wants it. With Single Bond Universal Adhesive, you can virtually eliminate it whether you prefer a total-etch, self-etch or selective-etch technique. And for strength and esthetics anywhere in the mouth, use Filtek™ Z350 XT Universal Restorative. Then complete the restoration with Sof-Lex™ Spiral Finishing and Polishing Wheels, which adapt to all tooth surfaces.

It’s one simple system that’s as versatile as it is effective. At 3M, we simplify outcomes. Especially happiness. For you and your patients.

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By SHOFU

**Vintage LD** is an innovative lithium disilicate system from Shofu that offers you greater flexibility, more treatment options and aesthetic versatility for a variety of all-ceramic anterior and posterior restorations. A combination of three perfectly compatible components comprising of high strength lithium disilicate glass ceramic ingots in varying levels of translucency, a naturally shaded, opalescent silicate based veneering porcelain and a comprehensive range of low fusing fluorescent stains offers the choice of pressing, staining and highly aesthetic cut back or full build-up layering techniques.

Designed to fulfill the demanding aesthetic requisites of discerning dental professionals, **Vintage LD** exhibits outstanding shade stability even with multiple firings with virtually non-existent reaction layer for a faster, simpler and error-free fabrication cycle. Available in sets or as refills to meet the individual needs of your lab.

---

By SHOFU

**Reduce chair time and your inventory too… with Beautifulil BULK, the new generation bulk fill resin restorative developed for easier, faster and predictable posterior restoration. Formulated in 2 discrete viscosities to fulfill individual preferences, Beautifulil BULK Flow, a flowable variant is ideal for dentin replacement and a sculptable Beautifulil BULK restorative to restore to full contour. Excellent chameleon effect is achieved with just two shades (Restorative Universal and A shade) of Beautifulil BULK restorative that blends in imperceptibly with surrounding tooth structure.

Developed with S-PRG filler technology, Beautifulil BULK Gionner resins come with additional anti-plaque benefits and sustained fluoride release and recharge to protect against recurrent caries. Exceptionally high filler load with unique filler resin structure maximizes light penetration for optimum cure (Up to 4 mm) while lowering polymerization shrinkage stress.
Splyce ID: Designing Bespoke Modern Wonder Clinics
Part III
(The Color White)

“Choosing the right white in itself is a job. There are unbelievable choices of white available to pick from...”

By Nijas Salim, UAE

There’s a lot of white at play in clinics. But it seems like we still can’t have enough... So what is with the color white I want to know?

That previous line almost plays out in my head like lyrics to a song. But that’s what I am asking Ranjit Prasad, the Principal Architect of Splyce. We know the obvious, white is the embodiment of cleanliness, of health and hygiene, the spick-and-span-germ-free hue, the sign that there is nothing sinister, however small in size, lurking, an RGB version of what you see is what you really get.

White has always been symbolic of purity and of freshness but Ranjit will tell you that despite white being a de facto color of use in the healthcare industry, white makes a massive design statement and its use has desired effects. White has the ability to expand the sense of space, and alter the experience of shapes. Though easy on the eye, it still needs utmost care, and this care is transformed into the assimilation of attributes of luxury. White is also quite relaxing and nourishing.

“Choosing the right white in itself is a job. There are unbelievable choices of white available to pick from. We once sourced the same paint used on the body of luxury cars for a wall to convey uber luxury. White really brings out the accents and suddenly accents get an elevated status. The warmth of wood or gold trimmings, they all finally get maximum exposure. White also brings artificial light sources into play, and the impact of the color of the light gets magnified. White helps natural light seeping in to get a magnificent glow. So much more can be done with finishes when coupled with white. I also like how white accentuates minute details and curves, thus allowing the care, thought, and stand out details of our design to be really seen and experienced.”

And suddenly I remember the importance of the color white, the understated king, the one that all colors unite to become. I remember that Krzysztof Kieślowski film, the one that imitates life, the one that is filled with humor, is called, White. Splyce Interior Designs is a boutique agency driven to meet satisfactions of a clientele that know the value of good design and has incorporated that into their own philosophy: Splyce believes its raison d’être is creating stunning designs that exceeds client expectations.

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→ Good wettability on the tooth surface

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Predictable Endo 102: Why warm and soft is so good

System ‘S’ for injectable or carrier-based GP

By John J. Stropko, DDS

The author has been in private practice and a continuing-education student for the past 50 years. The first half was spent growing endodontics in a new specialty and the second half in a specialty practice limited to endodontics. On the road to predictability, it became apparent there was a need to understand the relationship present between root canal treatment, periodontal status, prosthetic considerations, and the patient’s desires and expectations. The purpose of this article is to share a simple, six-step protocol (System ‘S’), in a straightforward manner, to achieve predictability of endodontic treatment for the benefit of the patient.

There are six important components to the System ‘S’ protocol: 1) Proper shaping with patency; 2) Adequate cleaning, disinfection, and drying; 3) Delivery of pre-warmed GP to the apex (Calamus/Obtrura); 4) Coronal seal for the rest of the system; 5) Respect for the endo-prosthodontic relationship; 6) Use of the surgical operating microscope (SOM) for the entire endo-therapy. The System ‘S’ protocol is a bit more labor-intensive than the System ‘A’ or ‘B’ protocols.

The author believes that as long as the gutta-percha is introduced to the apical third of the canal system, pre-warmed and pre-softerned, the deformation and adaptation to the canal walls is more predictable, resulting in a better seal that is significantly less “sealer-dependent.” It has been shown that the pre-warmed techniques (Obtrura) produce a better seal than lateral condensation.1

Due to the lack of deformity in hermetically sealed canals, the techniques utilizing non-prepouted GP are more “sealer-dependent.” The two most popular thermoplastic obturation techniques are the “carrier-based” (e.g., Thermafil) and “direct injection” (e.g., Calamus/Obtrura). The pros and cons of each will be discussed, but regardless of the technique used, the shape of the prepared canal system is of utmost importance and must be discussed.

Access and shaping the canal system

In the early ‘70s, Schlierd clearly stated the requirements for the proper shape using GP to achieve three-dimensional obturation of the canal system: 1) The root canal preparation should develop a continuously tapered cone shape. 2) It should have decreasing cross-sectional diameters at every point apically and increasing at each point as the access cavity is approached. 3) It should have multiple planes, which introduces the concept of “flow.” 4) The foramen should not be transported. 5) The apical opening should be kept as small as practically in all cases.

Other requirements that caused some controversy (and still does), besides the size of the access opening, was the need to keep the apical foramen as small as possible, and to maintain patency throughout the entire process. The majority of more recently published research and clinical studies have confirmed the rational for an appropriate access and correct shaping. In the early 1990s, technology brought about the introduction of rotary instruments, relieving the operator of considerable time spent creating an aceptable shape. The ProFile rotary bur (Tulsa Dental) with 0.04 taper, was introduced to the profession. Creating the shape necessary for the success of the warm obturation techniques was made easier and faster.

Irrigation for cleaning the canal system

After shaping is completed, final cleaning can be effectively accomplished by the alternative use of: 1) Warm 5- to 6-percent NaOCl 2) 17 percent aqueous EDTA for approximately 30 seconds (mean layer removal) 3) Warm 5- to 6-percent NaOCl for approximately 30 seconds (mean layer removal) 4) Warm 5- to 6-percent NaOCl for approximately 30 seconds (mean layer removal)

The NaOCl can be effectively warmed by placing the irrigating syringes in a beaker of warm water set on a small coffee warmer (Fig. 2). The canals are completely flooded with the desired solution; an Endo Activator (Dentsply) is appropriately used for the “tsunami effect,” then re-irrigated with the same solution for flushing of debris (Fig. 5). The NaOCl is then effectively removed with a capillary tip (Ultradent) attached to a high-speed evacuator. Other

Fig. 1. Typical rotaries, one of several popular brands, effective when used by John J. Stropko, DDS, unless other- wise noted

Fig. 2. NaOCl irrigating syringes can be warmed in a beaker on a coffee warmer. Note the anesthetic syringes on a heating pad in the background.

Fig. 3. The Endo Activator is used for the “tsunami effect” for cleaning canals.

Fig. 4a. The canal system can be very complicated.

Fig. 4b. The Weller Horn studies clearly demonstrated the complexity of canal systems.

Fig. 5. Set of three Endo Irrigators with various 25 gauge tips best for use. Arrow points to the dedicated ‘air-only,’ single-button DCI syringe.

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Dental Tribune Middle East & Africa Edition | January-February 2016

oomplexed and does join at some point (Figs. 4a,b). There are occasions, especially in lower molars, where the natural root canal system unexpectedly joins with the distal root canal system.

On occasion, the maxillary canal system will have the DBI or MB canals system connected to the palatal system. These "surprises" are important to be aware of, before obturation of the canal system, especially when using either carrier or injectable GP.

Drying canals with F·I·R·E

The canal(s) are dried with 95 percent ethyl alcohol (Eveready available at local liquor store), agitation of the fluids are initiated with an activator for the tunnelling effect, then be-irrigated with the 95 percent ethanol, and then evacuated with the capillary tip. The canal(s) are then heat dried by using a Stroko irrigator on a dedicated, air-only syringe (DCS), but if a three-way syringe is used, be sure to ensure there is no "kiss" of air is necessary, to easily dry the canal. The author prefers a "kiss" of air, but the "kiss" on the thin side. Using short, rapid apical compaction, the walls of the canal are completely coated with sealer. The use of the SOM is a great aid in directing the coating of the canal wall by the sealer is complete. The author recommends using the "fill" carrier and GP to repair the perforation. The author uses Kerr Pulp Canal Sealer EWT, mixed per usual di-turclic systems, but a little "on the thin side." Using short, rapid apical compaction, the walls of the canal are completely coated with sealer (Table 1). One of the most common mistakes is introduced in this step, the operator must ensure the canal has the correct shape, the operator must use a "light touch" on the canal, if the canal is parallel in shape, the canal becomes an extension of the root canal system, and the control is severely handicapped. Use of the som, is enough to convince any operator that there is indeed a "kiss" of air to a sensitive area on the walls of the canal (Fig. 9). This also gives the operator an indication to the tip of the carrier, to control the "depth" of the fill. When the carrier is complete, the operator does not want to fill the canal to the orifice of the canal before beginning. If the operator has control of the carrier and the orifice, this is an indication to use the small, 23-gauge needle. As long as it is not binding, the operator has control of the carrier, and canatalise the canal apically into the canal the needle is placed, as long as it is not binding. This is a safety feature, until the tip of the carrier is engaged with the canal orifice, the carrier is not ejected. When all is ready, the collar is pressed until the initial GP is extruded and then the collar is released. The slight amount of GP at the tip is removed. The needle is then placed into the canal axially, in which the operator has control of the carrier, and the collar is pressed to reactivate the plunger and initiate the flow of GP. It is good practice to barely move the tip, in a very slight apical-coronal direction. Use of the SOM is very helpful. The moment there is a sensa-
Table 1. A comparison of thermo-plasticized GP obturation with Calamus vs. Obtura.

<table>
<thead>
<tr>
<th>Calamus</th>
<th>Obtura</th>
</tr>
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<tbody>
<tr>
<td>1. High level of confidence</td>
<td>Poor level of confidence</td>
</tr>
<tr>
<td>2. Greater operator control</td>
<td>Lower operator control</td>
</tr>
<tr>
<td>3. Less operator fatigue</td>
<td>Moreoperator fatigue</td>
</tr>
<tr>
<td>4. Greater operator comfort</td>
<td>Less operator comfort</td>
</tr>
<tr>
<td>5. Less operator discomfort</td>
<td>More operator discomfort</td>
</tr>
<tr>
<td>6. Greater operator efficiency</td>
<td>Less operator efficiency</td>
</tr>
<tr>
<td>7. Less operator stress</td>
<td>More operator stress</td>
</tr>
<tr>
<td>8. Greater operator satisfaction</td>
<td>Less operator satisfaction</td>
</tr>
</tbody>
</table>

The carrier of the same size will meet the same resistance when it is placed. Therefore you would then drop down one size, test-spin that carrier to length, and would encounter less resistance. This then would be the correct size carrier to choose, regardless of what the final apical size was that you machined. Note: The carrier’s size has to be dependent on the prepared size of the canal. If the carrier’s size is smaller than the prepared size of the canal, there will be an apical resistance. If the carrier’s size is larger than the prepared size of the canal, it will be obstruse. The correct size carrier is the only one that will pass through the apical third of the canal, but be blocked off by the remaining core of the canal system (Fig. 15).

Excess filling material

Historically, any time a case was obturated, there was much concern when there was an excess of GP extruded beyond the apical terminus. Many endodontic failures were blamed on vertical overextension, but in reality the culprit was an “under-filled” canal system.

As Schilder stated, “You can only fill a canal 100 percent. If the canal is filled 100 percent, any excess material extruded beyond the canal will be of no consequence.” In fact, if the author obturated a canal system and there was no excess filling material, the GP would not extrude and re-obturated until there was.

The point was, “How else could you be sure the canal system was obturated 100 percent unless there was an excess of filling material present at the apex?”

Cases that have a significant amount of excess filling material are typically treated by shaping, cleaned and packed do heal. Over time, the excess material will slowly be resorbed (Figs. 16a, b). The biggest fear of the new user of injection or carrier-based GP is, “There will be a great amount of excess filling material after shaping, cleaned and packed do heal. Over time, the excess material will slowly be resorbed.”

A good way to imagine what is happening, while using thermo-plasticized GP in a properly shaped and patency canal, is to envision everyone in a theater rushing to get out the same door, but there is a huge crowd in front of the exit. And, of course, the exit is the canal, the apical third of the canal, obturated in the conventional manner. Then an accessory carrier can be inserted alongside the initial carrier (Fig. 15).

There are four cases that have excellent root canal obturation, but are often obtained by filling the entire canal system, filled at the final endodontic visit. Which one would you bet on for predictability?

The resistance it encounters is a function of the file/carrier being distal to the canal, the canal size, the greater the curvature, the greater the distortion that will occur when the file gets to the apical third of the canal. The closer the file is, however, the more the carrier is subjected to “rebound” effect after the carrier is inserted a few minutes into the canal. The release the carrier and it “riese” slightly from the canal space.

This is the GP pushing and pushing the carrier back out of the orifice level using either a Prepi bur or a thermal tip (Figs. 14a, b). Removal of the handle is essential when placing more than one carrier in the access, as this is the only way to be sure the GP will be resorbed (Figs. 16a, b). GP extruded into the PA area. The same will occur with excess sealer, and it will extrude along with the GP.

The carriers are placed singly into the canal by the correct size chosen, and the cores allowed to heat to the proper temperature. The small, plastic, and all the Gutta-Percha cores, are heated to 365; size 50 to 60 Thermafil Plus heated with the second setting of the ProPost drill (Dentsply) that will not displace the carrier.

Compaction of warm GP using Thermofil for carrier-based obtura- tion is slightly different. A simple technique is to segment a GP cone into approximately 3-5 mm sections prior to the obtura- tion process.

Immediately after the carrier is inserted into the canal, the carrier is flattened at the apical third of the canal system. The carrier is then inserted into the canal system and the operator to use enough pressure during the injection and compaction process. The carrier may be ribbed-shaped and large in the M-D or E-I direction, the apical third of the canal is obturated in the conventional manner. Then an accessory carrier can be inserted alongside the initial carrier (Fig. 15).

More segments of GP may be necessary depending on the size of the canal. In cases when the carrier can be ribbed-shaped and large in the M-D or E-I direction, the apical third of the canal is obturated in the conventional manner. Then an accessory carrier can be inserted alongside the initial carrier (Fig. 15).

The operator works toward the orifice in approximately 2-3 steps as the plugger takes “wavy strides” in the process. The shepherd- ing of the GP is continued until the desired depth in the orifice is reached. The neckline often made when working with warm GP is the tendency to “bounce” off the GP while compacting, instead of pushing the GP time to time to compact. Just a few seconds are needed for the newly compacted “wad” to cool.

The Shepard-process in two or three steps.

Fig. 15. A second carrier is inserted alongside the initial carrier, completing the entire canal system, filled at the final endodontic visit. Which one would you bet on for predictability?
are generally concerned with obturation. As endodontists, we complete the coronal half of the canal system and then medicate and fill the apical half to prevent occlusal leakage. These techniques are easy, fast and predictable for the practitioner.

The final step of the System “S” protocol is to fill the entire canal system. It is self-defeating to do anything but place a restoration in the coronal half of the canal system and then medicate and fill the apical half to prevent occlusal leakage. As endodontists, we are responsible for the coronal aspect of the tooth and the practitioner is responsible for the apical aspect. Therefore, it behooves us to do all that is possible to prevent it. If needed, the FibreKor post can be used to bridge the coronal aspect of the tooth and to obturate the entire canal system. Weine has stated that 95 percent of general/restorative dentists do not use the FibreKor post. However, those dentists who have the FibreKor post in their armamentarium have a higher percentage of endodontic success.

To illustrate this concept, look at the four cases depicted in Figure 18, and then decide which one would present the best chance of success. They all have well-done endodontic treatment. They all have the entire canal system filled. A recent study published in the end of 2014 showed that 95 percent of general/restorative dentists do not use the FibreKor post when placing a foundation restoration in an endodontically treated tooth. Therefore, the practitioner should be a bonded composite.

A good example of an easy-to-use temporary is auto-cure Tenure (Ultradent and Core Poste (Denmat)). CaOH (Ulbrad) is injected into the canal system and covered with a sterile cotton pellet (Fig. 19a). Then Tenure Rx is used to condition the access opening (Fig. 19b). After a few minutes, the auto-cure Core Poste is set completely, the occlusion is ready to be checked for any adjustments, and to make sure there are no interferences left to irritate the tooth between visits. On occasion, a patient is unable to keep the appointed return visit within a two-minute period to delay his or her return visit for weeks or even months (Fig. 19c). There may be an important change of events in his or her life, or the doctor may also have to change a scheduled visit. If a temporary is placed, such as Cavit, IRM or Tempx, all control of the bacterial environment in the canal system is lost in a relatively short period if the patient does not return in a timely fashion.

Who would be better to control the condition of the tooth following obturation than the “endo-doer,” while the case isolated with a rubber dam in place? As Dr. Denny Southard of Tulsa, Oklahoma, commented, “When we slap in Cavit and turn our heads, who is destined to be for contamination or worse [for perforation, for example].”

If a more definitive seal is maintained, that part of the equation becomes a nonissue.

An easy foundation restoration technique

After the obturation of all canals, the gatetooth is removed to the proper depth in the orifice as required for retention. This is easily and quickly done using a Murex Bar at approximately 5000 rpm. If a post space is required using carrier-based GP, it is a Profi Post drill (DeTrey). This requires a little GP at a time, until the desired depth is reached. The canal is then conditioned to the irrigator tube of the SOM and a precise flow of air from the Stropko Irrigator. The chairside assistant can aid in the removal of all bits of sealer and GP to maintain visibility while removing and cleaning the access/post space is done.

After the mechanical cleansing of the access is accomplished, it is flooded with 95 percent ethanol, use a Versa Brush (Vista) turning at approximately 300 rpm to assure the removal of all bits of sealer and GP to maintain visibility while removing and cleaning the access/post space is done.

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Conclusion

The System “S” protocol demands thoroughness in treatment of the entire root canal system. The author uses a calamus for obturation, but carver-based techniques of using warm GP can be used with the same degree of success, as long as they are done correctly. System “S” requires a commitment to complete all steps to avoid the many pitfalls that present themselves during treatment of the entire endodontic canal system. A survey of endodontists taken about nine years ago stated that 58 percent always used an SOM, 50 percent sometimes used it, and 12 percent never use it.12 Hopefully, things have changed.

The use of an SOM is essential for any “endo-doer,” as it allows us to deliver. We only know we see, and if we don’t see it we don’t know it. A good example is the high percentage of fourth canals (85 percent) that can be found in the maxillary molar segment.

The clinical use of the SOM significantly increased the number of canals that were discovered.13 If these canals are not found, predictability of success will be far less. It behooves all of us to do everything humanly possible to give our patients dental treatment that will create the health they expect from our profession.

In general, our current endodontic vision has been directed to treatment of the apical half of the root canal system. It should not be a problem in degrading the basic principles of bonding technology, restorative principles and post core placement into our normal endodontic treatment protocol. We, as a specialty, should be thinking in terms of being responsible for presenting something interesting and significant to give humanly possible to increase the predictability of our treatment. When endodontic failure occurs, it seems like everyone “stands around in a circle and points at one another.” Adhering to proven principles eliminates the probability of contamination of the canal system by providing a solid foundation for the restorative aspect of the patient’s treatment.

Obviously, those who are so concerned with the endodontic lack of respect for radicular structure have not witnessed what often happens to that same tooth when preparing it for a crown. It is imperative for the endodontic and restorative to be a team, working together for predictability, in the interest of the patient.

Our job as “endo-doers” is to learn, become teachers and educate the patients, staff and doctors we work with, so we can achieve dental health as a team. Let’s not “cave into” the demands of public convenience or political pressure, but rather be governed by proven dental principles, so we can achieve predictable endodontic success, saving the teeth our patients are born with, but isn’t that what endodontics is all about?

References


Beverly Hills Formula - Over 20 Years Perfecting the Business of Smiling

By Chris Dodd, CEO Beverly Hills Formula

M
anufactured in freewheeling Beverly Hills, the Beverly Hills Formula ranges are rapidly becoming the go-to whitening products, with many people opting to use these safe at-home whitening toothpastes over harsh and abrasive treatments. The company is constantly expanding its range and endeavors to have a whitening toothpaste to suit all preferences. With over 20 years experience, the company, based in Ireland, has grown considerably in the past few years. In 2015 Nielsen CheckOut Magazine named the Beverly Hills Formula as one of the top five oral care brands. This is an appreciable achievement when one takes into consideration the vast number of whitening toothpastes available on the market today.

The success of Beverly Hills Formula comes down to a number of factors:

• The company’s range of whitening products, with many people opting to use these safe at-home whitening toothpastes to suit all preferences. With over 20 years experience, the company, based in Ireland, has grown considerably in the past few years. In 2015 Nielsen CheckOut Magazine named the Beverly Hills Formula as one of the top five oral care brands. This is an appreciable achievement when one takes into consideration the vast number of whitening toothpastes available on the market today.

The operator doesn’t take the time to locate and treat them, the predictability of success will be far less. It behooves all of us to do everything humanly possible to give our patients dental treatment that will create the health they expect from our profession.

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References

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Discover the new
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4 mm to success
• Bulk filling is possible due to Ivocerin®, the patented light initiator
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• Esthetic results are achieved quickly and efficiently in the posterior region
In 2015, a study conducted in the US found that Beverly Hills Formula stain removal products had the lowest abrasion levels on the market. The independent study found that Beverly Hills Formula whitening products have abrasivity levels as low as 89, when compared with some leading stain removal products on the market which scored as high as 186. It is important to note that although there are many leading whitening toothpastes on the market, many of these contain extremely high abrasion levels, which will strip away at the enamel over time. This can cause a range of problems, including increased sensitivity to hot and cold products, as well as causing teeth to appear yellow over time - quite the opposite function of a whitening toothpaste!

It is important that patients are well informed of the dangers of using toothpaste which contain high abrasion levels, which generally will do more harm than good to one’s teeth. Beverly Hills Formula strives to help patients achieve professional whitening results without the need for harsh abrasives or bleach. Their innovative and cutting edge products have paved the way for high quality and safe teeth whitening in the home.

By Jordan

Sensitivity is a growing oral care health concern and preventing sensitivity starts by keeping the teeth enamel strong & healthy. Sensitivity is in fact a lot of markets the Nr 1 concern influencing purchase. Consumers want products that work well but are also gentle to their teeth enamel and gums.

Many people suffer from sensitive teeth and it can start at any time. It is more common in people aged between 20 and 40, although it can affect people in their early teens and when they are over 70. Women are more likely to be affected than men. If sensitivity effects so many people why are they not buying products more attractive and readily available with clear and easy to understand information. In 2014 there was a rise in the number of launches with enamel focus.

Teeth and gum sensitivity effects over 50% of adults
FDI and Royal Philips sign global agreement to promote the importance of oral health

By Philips

GENEVA, Switzerland: FDI and Royal Philips, the makers of the Philips Sonicare toothbrush, will team up to actively promote the importance of oral health and its impact on a person’s overall health, and together promote World Oral Health Day (WOHD) 2016. World Oral Health Day, celebrated on March 20, is an international day to raise awareness of the connection between oral health and overall health. FDI member national dental associations, dental student associations and other groups, organize a variety of global events.

“FDI and Philips will use their influence in their respective fields to promote the importance of oral health,” said FDI President, Dr. Patrick Hescot. “World Oral Health Day is an opportunity to position oral health where it belongs: at the heart of wellbeing and quality of life.”

“For Philips, the FDI World Dental Federation is a great partner,” said Egbert van Acht, CEO, Philips Health & Wellness. “Increasing education around the importance of looking after oral health is one of our key goals. We are committed to bringing meaningful innovation to address global societal needs. WOHD allows us to engage and encourage people to commit not only to their oral health, but also to systemic and the positive impact on their overall health. At Philips, we are actively promoting the link between oral and systemic health to help improve people’s lives.”

Activities for WOHD include poster, billboard and media campaigns, free dental screenings, oral health camps, literacy sessions and workshops, hook-and-kits, cultural activities, debates, and festivities such as flashmobs, walkathons and charity sporting events. In some countries, groups have made attempts on world records such as greatest number of people attending an oral health literacy session or brushing their teeth at one time.

For more information, visit www.worldoralhealthday.org.

Humble Brush: Charitable and eco-friendly approach to global oral care

By Kristin Höhner, DTI

STOCKHOLM, Sweden: Considering the more than two billion plastic toothbrushes that end up in landfills every year, wouldn’t anyone rather opt for an eco-friendly and sustainable alternative toothbrush, provided it has the same durability and bristle strength? Swedish company Humble Brush does.

It is an inspiring approach to making a change with which a group of enthusiasts and passionate about oral health around the world. For every Humble Brush sold, the company donates a toothbrush or alternative oral care to people in need. Furthermore, its range of eco-friendly bamboo toothbrushes are sustainably produced and packaged in all-recycled materials.

The charitable Humble Brush approach to making a change does not rely on donations. Instead, its business model enables consumers to help produce the brushes, which is where the bamboo is harvested too. “We are proud of our factory, which only employs adults with good wages and working conditions. The handles are then sent to a company that inserts the bristles and packs the brushes,” Humble Brush CEO Dr Noel Abdayer told Dental Tribune Online.

Bamboo, which is the fastest growing plants, has natural antibacterial properties that eliminate the need for any fertilisers or pesticides during cultivation. The brushes’ colourful bristles are free of the toxin bisphenol A and made from nylon, a material that degrades over time and can be processed through regular waste channels. In accordance with the company’s commitment to protecting the environment, all Humble Brushes come in fully compostable packaging.

Aside from their eco-friendly approach, Humble Brushes are no different to conventional toothbrushes and have been received enthusiastically by dental professionals and the dental community. Abdayer said: “Once they realise that the head is the same as a regular toothbrush and have tried the Humble Brush they embrace it as an eco-friendly, big-picture alternative for their patients.”

Complementing the company’s mission to improve oral health is the Humble Smile Foundation. “The donated toothbrushes go to children in need as part of a comprehensive preventive school programme. It is imperative that children living in underprivileged areas where there is no option for dental treatment receive the means to prevent oral disease,” Abdayer stressed.

Humble Brush’s bamboo toothbrushes are available in adult and child sizes. For every Humble Brush sold, the company donates a toothbrush or alternative oral care to people in need. (Photograph: Humble Brush)
A good option for the lifelike recreation of gingival tissue

The flawless reconstruction of gingival tissue requires sound teamwork as well as excellent materials and exceptional skill. Layering with the light-curing laboratory composite SR Nexco takes this procedure to a new level.

By Dr. Patrice Margossian, Marseille, & Pierre Andrieu, France

Careful planning is indispensable in the treatment of an edentulous jaw with implant-supported restorations. The axes and positions of the implants must correspond to the given biological, mechanical and esthetic conditions. In situations where severe bone recession has occurred, the work of the dental team will involve not only the reconstruction of dental but also of gingival tissue. The dentogingival complex must primarily fulfill two aspects: function (chewing and speaking) and esthetics (alignment of the teeth and gums and lip support).

Clinical case presentation

When the 57-year-old female patient presented to our practice her teeth and the related bone structure were in very poor condition (Figs 1 and 2). Numerous teeth were missing in both the upper and lower jaw. Furthermore, the upper jaw showed considerable bone and gingival resorption. The patient wished to have fixed teeth again and regain an attractive appearance. Due to the extensive damage that had occurred, the complete restoration of both jaws with implants was indicated.

Surgical phase

As a result of sufficient bone structure in the lower jaw, this part of the mouth could be restored at once with four immediately loadable implants. During the reconstructive phase, the upper jaw had to be treated with a provisional removable denture due to the atrophied jaw ridge. The tooth extractions in the upper and lower jaw took place during one day. At the same time, the four lower jaw implants were inserted and loaded. An immediate denture was placed in the upper jaw.

During the osseointegration period of the mandibular implants, the bones in the upper jaw were reconstructed. The maxillary sinus and the jaw ridge were augmented in one appointment. At the next appointment, ten implants were placed according to the treatment plan. Six months after this intervention, the implants were exposed. As a result of a well-planned soft tissue management strategy, firm keratinized tissue had formed in adequate form. The permanent restorations for the upper and lower jaw were fabricated two months later (Figs. 5 and 4).

Prosthetic phase

The determination of the occlusal plane and the ideal incisal guidance is an important procedure. When preparing the prosthetic bridge, the teeth must be adapted to the shape and contour of the opposing tooth. This should be prevented with the help of the light-curing laboratory composite SR Nexco.

Fig. 1: Initial portrait of the patient
Fig. 2: Extremely poor oral condition: The teeth could not be rescued. The jaw ridge in the upper jaw was considerably atrophied.

“...When the upper and lower jaw have to be restored, it is important to start with the upper jaw. Alternatively, both jaws can be restored simultaneously.”

Fig. 3: After bone augmentation measures had taken place, ten implants were inserted. The picture shows the situation prior to the prosthetic phase.
Fig. 4: Four implants were inserted in the lower jaw. Bone augmentation measures were not necessary in this case.

Fig. 6: The denture was set up with pre-fabricated teeth (SR Phonares II).
Fig. 7: Try-in of the CAD/CAM-fabricated titanium framework in the upper jaw
Fig. 8: The ground down composite resin areas were conditioned for receiving the light-curing laboratory composite SR Nexco.

Fig. 9: Application of the colour saturated intensive Gingiva materials (SR Nexco® Paste Intensive Gingiva)
Fig. 10: The application of various translucent materials imparted the prosthetic gingiva with the desired depth effects.
Fig. 11: Lifelike, vital, esthetic – the white and pink esthetics have been optimally imitated.
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Office No. +971 4 3622861
The success of an implant-retained denture depends on the systematic coordination of all the surgical and prosthetic requirements. A strict procedure needs to be followed. The treatment plan to the final outcome. Laying gingival portions with a laboratory composite represents a genuine improvement on previous materials and methods with regard to esthetics, handling and hygiene (Fig. 14).

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"The success of an implant-retained denture depends on the systematic coordination of all the surgical and prosthetic requirements."
Case study: Herculite® XRV Ultra™ and OptiBond™ XTR
Supporting the future generations in dentistry

By Kerr

A 52-year-old patient presented with a request to replace defective, old restorations and improve the aesthetics of the smile. A decision was made to remove the old restorations from teeth 11, 12, 21, and 22, as well performing coronooplasty to improve the final aesthetic results. For reasons related to the patient’s health, the treatment was performed over two sessions.

For the bonding procedure, the 2-step self-etching bonding system OptiBond XTR was chosen. The clinical procedure consisted of the application of a self-etching primer that changes the morphology of the enamel surface depending on its pH, followed by the application of the adhesive.

The pH of OptiBond XTR Primer is 2.5 and decreases to 1.7 during application. Then it switches to a value of 7, due to a chemical reaction with the calcium ions of the dental tissues. OptiBond XTR performs very well on the dentine surface as well, dissolving the smear layer effectively.

The self-etching primer was applied using a microbrush with gentle and active brushing for at least 20 seconds in order to promote the remineralisation and the infiltration of the substrate (“continuous brushing technique”). The solvent was evaporated using an indirect capillary action into air stream. The self-etching primer was applied using a microbrush with active “scrubbing”, waiting for 15-30 seconds in order to obtain the diffusion of the resin by capillary into the substrate and the excess was removed through a capillary action into air stream and light substrate, and for 10 seconds, using the LED curing light Kerr Demi Ultra.

The main benefits of using the OptiBond XTR Bonding System are:
1. Fast application and predictable results
2. No need to rinse and therefore no risk of issues related to moisture control of the dentine surface
3. Good bond strength to both enamel and dentine

Knowing the functional and aesthetic features of Herculite XRV Ultra composite, the cavity was prepared by completely removing the previous restorations and any carious dentine, without removing the discoloured/secondary dentine, which will be perfectly masked by the opacity of the dentine shade of Herculite XRV Ultra.

The opacity of Herculite XRV Ultra Dentine shade is able to cover the dentine discoulouration without the need for further opaque shades. The application and sculpting of the composite was performed using the Kerr Comporell™, a useful modelling tool that consists of a handle and interchangeable tips with different shapes to use depending on the type of restoration. Moreover, thanks to the unique material of which they are made, the composite doesn’t stick to the tips and therefore its placement is fast and easy.

Polishing and high gloss polishing of the restoration was performed in few fast and simple steps. Unlike other materials, Herculite XRV Ultra makes it possible to obtain high aesthetic results with a natural appearance in few minutes.

The results achieved show that use of Kerr Herculite XRV Ultra composite materials in the anterior can achieve a significant aesthetic improvement of the smile using conservative techniques and without recourse to prosthetic solutions.

In addition, the use of Herculite XRV Ultra as an anterior restorative can achieve a significantly improved aesthetic smile without using indirect restorations.

About the Author

Marco Bambace
Is currently a student at the University of Padova (Department of Dentistry) in his fifth year of studies. He will achieve the degree of Doctor in Dentistry in 2016. With his talent for direct restorations, Marco Bambace performed this in vivo case using Kerr restorative products and filling accessories.
Advanced Restorative Techniques and the Full / Partial Mouth Reconstruction - Part 1

As an introduction to a series of articles, Prof. Paul Tipton looks at restorative techniques and the impact of new dental materials

By Prof. Paul Tipton, UK

Most advanced restorative dentistry techniques, including that of full mouth reconstruction, have changed very little over the last 20 to 50 years. However, the impact of new dental materials, such as titanium and zirconia, has had a major influence on aesthetic dentistry and implantology during this time period. As a result, the profession may have an over-reliance on new materials rather than tried and tested techniques.

Some fundamental techniques are just as relevant today as they were when I started my Masters degree in conservative dentistry at the Eastman Dental Hospital in 1987. During the course of this series of articles on advanced restorative techniques, some old techniques will be revisited in light of today's aesthetic and restorative requirements and some newer concepts will be discussed in greater detail whilst dealing with the overall topic of full mouth reconstruction. This article previews the restorative techniques that will be discussed during the next 10 clinical articles on advanced restorative techniques.

Occlusal concepts

During my Masters degree at the Eastman and prior to that, my training in occlusion has been in gnathology and its principles as taught at the University of Michigan and by Derek Setchell, Richard Holton and staff at the Eastman Dental Hospital during the last 20 years. This includes the five principles of occlusion, which are:

1. Retruded contact position (ICP) = intercuspal position (RAP)
2. Mutually protected occlusion
3. Anterior guidance
4. No non-working side interferences
5. Posterior stability.

The article on occlusion will review these concepts and also discuss when alternatives, such as long centric, are required (Figures 1-5).

Treatment of severe wear cases

One of the fundamental approaches to partial or full mouth reconstruction (and aesthetic dentistry) is envisaging the end result prior to starting the case. There is no better way to see the end result than the full and complete diagnostic wax-up. The aesthetic ability of both dentist and technician is stretched during this process to complete a full mouth reconstruction at an increased vertical dimension so that the condyles are around rap or centre relative to the semi adjustable and on to the fully adjustable for the customisation of the condylar settings. The programming of these will also be looked at and discussed from 'fixed' settings to use of lateral and protrusive check bites, and finally the pantograph and newer ‘Cadiatix’ machine (Figures 7-9).

Vertical dimension

Changes in vertical dimension are often required for either gaining restorative space during restorative procedures or for improving facial aesthetics. Occlusal splints are used to first verify that the increase in vertical dimension can be tolerated and this is easily accomplished in most cases as long as this increase is done around rap or centre relation so that the condyles are in their most relaxed, bone braised and reproducible position. Increases and decreases in vertical dimension will be discussed showing positive changes in facial aesthetics as treatment is completed (Figures 10-12).

Dahl appliances

Bjorn Dahl first described the Dahl appliance in the early 1970s. Since then they have gradually been incorporated into the field of restorative dentistry although many Orthodontists still dispute their efficacy and relevance.
The article on Dahl appliances will cover its history and usage in today’s modern restorative dentistry, focusing on the use of traditional chrome cobalt ‘Maryland wings’ style of Dahl appliances and also the use of splinted temporary or prototype restorations used to gain space during crown procedures (Figures 15-15).

**Duralay bonnets**

Impression techniques demand a high degree of accuracy for the completion of the advanced restorative case. Often this is a difficult procedure for the restorative dentist when taking impressions both sides of the mouth at the same time (as a full arch impression where there are multiple teeth present) or undertaking an impression of mobile teeth as in the Lindhe/Nyman bridge.

Both of these procedures will be reviewed and clinical examples shown of how the duralay bonnets and coat hanger wire technique can be used not only for impressions but also for jaw registrations (Figures 16-18).

**Periodontal prosthesis**

The article on the periodontal prosthesis, commonly known as the Lindhe/Nyman bridge, reviews all the literature from the 1970s on this exciting technique, which allows multiple pontic replacement in fixed bridge work on often severely mobile and reduced number of abutment teeth. The science is overwhelmingly in favour of this type of bridge in certain situations where conventional dentures or implants are not possible (Figures 19-21).

**Peter Wohrle bridgework**

The duralay bonnet technique also crops up in this article on individual crowns cemented onto a pink porcelain fused to metal bridge work cemented onto gold copings and then onto abutments screwed into dental implants – hence the abbreviated name ‘Peter Wohrle bridgework’ for ease of use after the dentist who first described the technique. Several cases will be described using slightly different techniques to illustrate the technical difficulties in producing this bridge work but demonstrating the overall superior aesthetic outcome, optimal fit and maintenance potential (Figures 22-24).

**Aesthetic periodontics**

The last article in the series reviews the latest techniques in periodontology used to enhance optimal aesthetic restorative techniques. The periodontist is an essential team member of the aesthetic restorative practice and an increasing amount of patients are requiring pink as well as white aesthetics. Connective tissue grafting, pontic site development, crown lengthening etc will be reviewed and discussed with step-by-step protocols (Figures 25-27).

**Conclusions**

Restorative dentistry has gone full circle with old techniques revisited and amended for today’s dentistry. These techniques do not, however, get enough ‘air time’ in many journals as the importance of aesthetics takes over. It is my aim to help the reader understand these advanced restorative techniques and encourage them to put them into their everyday practice in order to help their patients and gain more clinical satisfaction.

For the writing of this article on advanced clinical techniques, I would like to thank certain members of my team, including Dr Ibrahim Hassain, BDS, M. Med. Sc. Implantology – implant surgeon, Mr Bradley Moore – dental technician, ADS Laboratory, Harrogate and Dr Andrew Watson, BDS, MSc, specialist in endodontics. Article was published in Private Dentistry.
Clinical Management Approach of Molar Incisor Hypomineralisation. A case report.

Abstract
Molar incisor hypomineralisation (MIH) is a relatively common dental defect that appears in first permanent molars and incisors and varies in clinical severity. The specific etiological factors remain unclear. Inappropriate diagnosis can result in mismanagement of the condition and results in early loss of first permanent molars (FPM) in particular. Therefore, the early identification of such condition will allow early intervention including monitoring and preventive interventions that might help in remineralisation of the hypomineralised tooth structure. These preventive measures can be instituted as soon as affected surfaces are accessible.

Clinical relevance statement
Failure of early diagnosis and dental management in cases of Molar Incisor Hypomineralisation (MIH) leads to rapid development of dental caries, increased pulpal inflammation and continuous enamel as well as restoration breakdown.

Objective statement
The reader should understand the Molar Incisor Hypomineralisation (MIH) condition and the availability of different management options of this condition.

Introduction
Molar Incisor Hypomineralisation (MIH) is a developmental defect that involves hypomineralisation of 1 to 4 first permanent molars (FPM), frequently associated with similarly affected permanent incisors. The pattern of enamel defects consists of asymmetric, well-demarcated lesions with localized composite, whitish-yellow or yellow-orange hypomineralised enamel can be soft, porous and look like discoloured chalk or old Dutch cheese. Subsurface porosity leads to breakdown after eruption, especially under occlusal forces, resulting in exposed dentine and sensitivity.

~ Prevalence
Available modern clinical prevalence data for MIH, mostly from Northern Europe, ranges from 3.6% to 25% and seems to differ between countries and birth cohorts.

~ An aetiology
An aetiology of this condition is poorly understood, with many associated factors (including environmental changes, feeding, respiratory diseases, oxygen shortage of ameloblasts and high fever diseases) but few proven causative agents.

~ Clinical Features
Fairly large demarcated opacities, whitish-yellow or yellow-orange in colour that may or may not be associated with post-eruptive enamel breakdown. Hypomineralised enamel can be soft, porous and look like discoloured chalk or Old Dutch cheese. Subsurface porosity leads to breakdown after eruption, especially under occlusal forces, resulting in exposed dentine and sensitivity.

~ Management
Permanent molars affected by hypomineralisation are prone to rapid development of dental caries and repeated breakdown of restorations. Therefore, careful planning is required, taking into account patient’s age (behaviour management issues), degree of crowding and co-operation. Sensitivity of affected teeth plays a major role in difficulty of achieving anaesthesia and thus behavioural issues.

- Preventive
  • Diet advice
  • Higher fluoride toothpaste (at least 1450 ppm F)
  • topical fluoride varnish
  • Casein phosphopeptide-amorphous calcium phosphate (CPP-ACP)

- Restorative:
  • A small lesion can be treated with localized composite, where the enamel is soft, or fissure sealants, where the hardness of the enamel appears no different from the unaffected enamel.
  • GIC is recommended as dentine replacement or as an interim restoration due to ease of placement, fluoride release and chemical bonding.
  • For extensive lesions with post-eruptive breakdown especially if the cusps are involved, preformed stainless steel crowns (SSCs) are preferred as an effective medium-term restoration. SSCs can preserve the FPM until cast restorations are feasible.

- To save the tooth or not?
  • The first decision in the management of the MIH FPM is whether the tooth should be saved or not. The decision to extract or restore will depend upon a number of different factors, some of these being the degree/extent of hypomineralisation, post-eruptive breakdown, sensitivity, age and co-operation of the patient, any

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By Dr. Shaikha Alraeesi, UAE & Dr. Manal Al Halabi, UAE

Fig. 1 (a, b, c, & d). Showing a direct filling of 36. 16 yellowish brown hypomineralised lesions. 36 and 46 large composite fillings.
Treatment

The treatment plan was set in two phases including Short/ Medium term and long-term phase. The short term will start with Emergency phase for restoring the 26 with GI as a temporary filling. An extensive preventive programme was implemented in addition to diet assessment, analysis, and advice and fluoride application. In several visits crown preparation was done under local anesthesia for 36, 46, 16, and 26 followed by stainless steel crown placement. Patient's occlusion was checked for any discrepancy in each visit.

As S.S is considered to be of high caries risk status, she was kept on regular recall programme including revisit and fluoride varnish application every 5 months, radiographs every 6 months. See Figures 5 (a, b, c & d) for radiographic findings.

Long-term treatment plan and future considerations

- Regular long-term diet monitoring and reinforcement of oral hygiene practices.
- Periodic review of the restorations with radiographic assessment.
- Review the first permanent molar status.
- Monitor eruption and development of dentition.
- Educate patient and parents about the poor long-term prognosis of first permanent molars these teeth and available future treatment options.

Discussion

Children with MIH have higher treatment needs and significantly challenging in behaviour management than other children. S.S was a quiet girl who was apprehensive in the beginning of the dental appointment but willing to have the treatment. S.S was diagnosed as MIH in first permanent molars. Using non-pharmacological behaviour management techniques including role-playing, distraction helped to acclimatize S.S to dental treatment. These techniques are widely used in children's dentistry and well accepted by parents. The technique works well combined with behaviour shaping. S.S was rewarded with a gift after each appointment as positive reinforcement for her good behaviour and cooperation. 26 was temporized with glass ionomer to relief discomfort, stabilize the situation and to reduce bacterial count present at the oral cavity.

Failure of achieving complete anaesthesia of first permanent molars was related to the nature of MIH. S.S received supplemental intralegmental infiltration. The innervations density in the pulp of hypomineralised molars is significantly greater than of normal molars. This can explain why lower left 6 was hard to be anaesthetised. Due to poor quality of the FPM teeth of S.S and significant tooth break down full coverage by preformed metal crowns was done. Premolar metal crowns prevent further tooth loss, control sensitivity, establish correct interproximal and proper occlusal contacts, are not costly and require little time to prepare and insert.

Conclusions

- The presence of MIH molars not only requires the dentist to identify problems at the earliest possible time but also to clarify the problem thoroughly and explain the treatment options to the patient and child.
- It is advisable to consider children with a poor general health in the first four years after birth at risk for MIH. These children should be monitored more frequently during eruption of the first permanent molars.

- Whilst many potential approaches exist for the restorative management of molar incisor hypomineralisation, few are yet supported by good quality clinical research data.

- Performed metal crowns have been recommended as the prophylaxis of choice in MIH affected posterior teeth with post-eruptive enamel breakdown in majority of the literature available.

- The use of nitrous oxide inhalation sedation can be a useful adjunct in obtaining satisfactory anaesthesia in MIH patients. Nitrous oxide was not used in case of S.S due to parental refusal because of limited financial resources.

- Had this patient presented earlier, consideration for enforced extraction of FPM would have been considered.

References


Case Report

A ten-year-old patient (S.S) with no significant medical history or allergies presented to the Department of Paediatric Dentistry at Hamdan Bin Mohammed College of Dental Medicine (HBMCMD) in Dubai Healthcare City, Dubai (UAE). Complaining of slight pain to a discoloured filling in her upper left region. Presently the tooth is asymptomatic. The pain is described as intermittent during the day, lasts for a while (hour or less), does not stop her playing or affect her sleep.

Detailed history was taken from the father. The father reported that (S.S) had a significant number of upper respiratory tract infections and tonsillitis during early years of life. Clinical and radiographic examination of (S.S) revealed yellowish discoloration of the enamel on the occlusal surfaces of 46 and 26, presented with a discoloured filling, 36 and 46 had big composite fillings. The presentation of the FPM is consistent with the diagnosis of MIH. The oral soft tissue examination of (S.S) revealed that (S.S) had a significant post-eruptive enamel hypomineralisation (MIH): a systematic review. Eur Arch Paediatr Dent. 2010;11(2):65–74.

A review of the medical history revealed that (S.S) had a significant post-eruptive enamel hypomineralisation (MIH). MIH was diagnosed based on clinical appearance. See Figures 1 (a, b, c & d) for clinical features. For the most optimum restorations with radiographic assessment.

Diagnosis

A fit and healthy 10-year-old girl in the late mixed dentition with molar incisor hypomineralisation (MIH). MIH was diagnosed based on clinical appearance. See Figures 1 (a, b, c & d) for clinical features. For the most optimum restorations with radiographic assessment.

Aims and objectives of treatment

- To alleviate the pain and sensitivity.
- To preserve the structure of the weakened FPMs.
- To formulate an individualized realistic preventive scheme and reinforce it regularly.
- To monitor the occlusion of developing dentition and treat as necessary.
- To maintain good oral health in the long term.

Treatment Plan

Short/Medium term

- Emergency phase (i.e., Sedative filling of 20)
- Preventive care phase (i.e., Oral hygiene instructions)
- Diet analysis and advice (i.e., Plaque score)
- Fluoride treatment
- Restorative treatment phase (i.e., Stainless steel crowns for all permanent first molars)
- Recall and reviews (i.e., Regular recall 3 months, radiographs every 6 months and fluoride varnish application every 3 months)

Medium/Long term

- Monitor the eruption of permanent dentition
- Interdisciplinary management

Radiographic investigations were done including (OPT and PA radiographs) to assess the proximity of the coronal defect to the pulp and to evaluate the periodontal region and to ascertain the presence and stage of development of remaining permanent post-eruptive enamel hypomineralisation (MIH). MIH was diagnosed based on clinical appearance. See Figures 1 (a, b, c & d) for clinical features. For the most optimum restorations with radiographic assessment.

A diagnostic list and treatment plan was formulated by a specialist of Paediatric dentist as well as orthodontist and explained in detail to the father.

Discussion

Children with MIH have higher treatment needs and significantly challenging in behaviour management than other children. S.S was a quiet girl who was apprehensive in the beginning of the dental appointment but willing to have the treatment. S.S was diagnosed as MIH in first permanent molars. Using non-pharmacological behaviour management techniques including role-playing, distraction helped to acclimatize S.S to dental treatment. These techniques are widely used in children's dentistry and well accepted by parents. The technique works well combined with behaviour shaping. S.S was rewarded with a gift after each appointment as positive reinforcement for her good behaviour and cooperation. 26 was temporized with glass ionomer to relief discomfort, stabilize the situation and to reduce bacterial count present at the oral cavity.

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Evaluation of dental implant therapy – peri-implantitis

By Dr. Olivier Carcuac, UAE

Peri-implantitis is one of the most common complications affecting patients with dental implants. The condition is characterised by an inflammation in peri-implant soft tissue and loss of supporting bone. Despite several similarities in clinical features with its counterpart at teeth, the disease progression of peri-implantitis is faster than that of periodontitis. Peri-implant mucositis is the precursor to peri-implantitis as is gingivitis to periodontitis.

Clinical and experimental studies demonstrated that peri-implant mucositis and gingivitis lesions are similar in size and cell composition (Laug et al 2011). Both lesions may progress and thereby influence supporting tissues at teeth and implants. Established peri-implantitis lesions exhibit critical histopathological differences when compared to periodontitis lesions (Berglundh et al 2011). Preclinical in vivo studies comparing the two lesions have used experimental techniques to induce periodontitis and peri-implantitis. In one such study, Carcuac et al (2013) demonstrated that disease progression differed at teeth and implants over a six-month period. Bone loss was more pronounced at implants with modified surfaces compared to teeth and implants with non-modified surfaces.

Modified surfaces. Histological analysis also demonstrated that periodontitis lesions were well contained and separated from the alveolar bone by a zone of non-inflamed connective tissue, while a similar border between the lesion and the supporting bone was absent in peri-implantitis sites (Figure 1). In addition, the most apical part of the peri-implantitis lesion was open towards the biofilm in the pocket, as the pocket epithelium only covered about 60-70% of the lesion. The lateral and apical portions of the peri-implantitis lesion extended to the bone crest, the surface of which was lined with osteoclasts. The histopathological discrepancies between the two types of lesions may be explained by the structural differences in the supporting tissues at teeth and implants. In a comprehensive study based on human soft tissue biopsies obtained from 40 patients with severe periodontitis and 40 patients suffering from severe peri-implantitis, Carcuac et Berglundh (2014) reported further differences between periodontitis and peri-implantitis lesions. In contrast to periodontitis samples, peri-implantitis lesions were more than twice as large and contained significantly larger area proportions, numbers, and densities of macrophages, plasma cells and neutrophil granulocytes than periodontitis lesions (Figure 2). These findings indicate a more severe disease character for peri-implantitis which may, in part, explain the higher rate of progression.

Peri-implantitis is diagnosed, as is periodontitis, in the presence of bleeding on probing and loss of supporting tissues. The discussion regarding the diagnosis of peri-implantitis usually focused on radiographic thresholds of bone loss. In this context, recommendations for clinical research and diagnostic guidelines for everyday clinical practice are necessary.
practice have been confused. Studies evaluating the prevalence of peri-implantitis used so-called case definitions. While there is consensus concerning the use of bleeding on probing as a clinical criterion, the use of at least seven different radiographic thresholds of bone loss has been suggested to determine peri-implantitis (Tomasi et Derks 2012).

Following a meta-analysis of data from different studies, Derks and Tomasi (2015) recently reported that about 22% of patients with dental implants suffered from peri-implantitis. Similar results have been presented in other literature reviews (Manubelli et al 2012). In a recently published nation-wide project, data from 596 patients were used to study the prevalence of peri-implantitis (Derks et al 2015). While about 45% of the patients presented with signs of peri-implantitis, 14.5% had moderate/severe forms of the disease (bleeding on probing ≥2mm bone loss) at disease (bleeding on probing ≥2mm bone loss) at different types of implants indicated that patients with rough-surface implants experienced more problems than those carrying implants with less rough surfaces (Baelum et Elleegaard 2004, Marrone et al 2015). Data presented in a Spanish study suggested differences not only in the occurrence of peri-implantitis at different implants, but also differences regarding the time of onset (Mir-Mari et al 2012). In order to identify risk factors related to patients, clinicians, and/or implants, large and randomly selected patient cohorts are required. The nation-wide project aforementioned includes such an evaluation of effectiveness (Derks et al 2015). Results of the different regression analyses revealed that several of the clinician-, patient-, and therapy-related factors were associated with moderate/severe peri-implantitis. Patients presenting with periodontitis were more likely to suffer from moderate/severe peri-implantitis. Factors related to clinicians were associated with moderate/severe peri-implantitis: patients provided with prosthetic therapy performed by general practitioners presented with a higher odds ratio (4.5). In addition, certain implant brands were associated with a higher risk for peri-implantitis: Straumann implants show the lowest rates of moderate/severe peri-implantitis when compared to Nobel Biocare, Astra Tech and the other implants represented in this observational study (including Biomet 5i, CrescoTi, Xive, Frrialit, LifeCore, Implanmed and API). Finally, a higher odds ratio (2.5) for moderate/severe peri-implantitis was observed for implants with a reduced distance (≤1.5 mm) from the prosthetic margin to the crestal bone as measured in baseline radiographs.

Recent trials, in particular, in a systematic review and meta-analysis, showed no statistically significant differences not only in the occurrence of peri-implantitis when compared to non-modified surfaces (Berghlund et al 2007, Albouy et al 2013). Data presented in a recent meta-analysis (including Biomet 5i, CrescoTi, Xive, Frrialit, LifeCore, Implanmed and API) showed that patients provided with prosthetic therapy performed by general practitioners presented with a higher odds ratio (4.5). In addition, certain implant brands were associated with a higher risk for peri-implantitis: Straumann implants show the lowest rates of moderate/severe peri-implantitis when compared to Nobel Biocare, Astra Tech and the other implants represented in this observational study (including Biomet 5i, CrescoTi, Xive, Frrialit, LifeCore, Implanmed and API). Finally, a higher odds ratio (2.5) for moderate/severe peri-implantitis was observed for implants with a reduced distance (≤1.5 mm) from the prosthetic margin to the crestal bone as measured in baseline radiographs.

References


Editorial note: The full list of references is available from the publisher.
Maintain your patients’ confidence and satisfaction with their dentures by helping them overcome daily social, emotional and physical challenges.

Help your patients eat, speak and smile with confidence with the Corega® denture care regime.
Dentine hypersensitivity protection, now in a daily mouthwash

The first Sensodyne mouthwash containing 3% potassium nitrate and fluoride, proven to provide ongoing protection from dentine hypersensitivity with twice-daily rinsing1–5*

* Rinse twice daily after brushing with a fluoride toothpaste.

Sinus Lift. Don’t Dream It: Do It!

By Dr. Dominique Caron, UAE

Do you know you are about to perform your very next sinus lift procedure? Once it is done, you will wonder why you have been waiting for so long. The issue that often fails is: one, two, three teeth missing, framed by no tooth, weak teeth, living teeth...

What is the best option to be ethical and efficient?

First option: a bridge. It means to damage several teeth, to do root canal treatments, to overload several roots, as well, the pontics are hard to clean, and the cosmetic effect is not always perfect...

Never forget: PRIMUM NON NOCEBE! First don't harm!

The smart way, of course, is to do implants: you will fix the problem where the problem is, without damaging the neighbors.

But now that you are alone without safety net, you don't know where to begin. It is time for you to become your own specialist.

All this is first a matter of state of mind: YES YOU CAN!

Yes, all what we have to do in this dental case is simple: it is a matter of screw and plank. If you can assemble an IKEA cupboard, you can do implants. You should never lose the sight that what we do on every day basis is a matter of building and civil engineering works. It is just at a very smaller scale. Nevertheless, we have the same constraints and an additional foe “the bacteria”.

Don't lose your common sense, consider the stair case step by step and “THINK SIMPLE”. You don't have a plank thick enough for your screw, add a back plate! The idea is the same, may be some more details to take into account, and the support is a living body you are supposed to “keep alive”...

This solution would be nice except that it cannot work like this. The sinus may “disagree” and will have no strength. What you dream of is that: “strong implants fit into a strong support!”

Simple, except that you never did it!

If you are ethical:

- You will leave the bridge to stone age
- You will manage to have the implants done in the best conditions.

To do so you can subcontract the implants surgical step with a colleague who knows how to do it, it is safe and professional, but who can you fully trust?

However, if you feel there is nothing beyond you and that you have learned, that you have been on training courses, you will need to take the plunge! I don't know if you feel the same but during a lecture every thing seems easy, quick, simple, It is like magi!

But now you are alone without safety net, you don't know where to begin. It is time for you to become your own specialist.

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This must not scare you. It is a logical process and we will go through together step by step and in fifteen minutes, you will wonder why you never did it earlier.

Go simply step by step:
1. Study the case with an accurate 3D image.
2. Open the way
3. Raise the “schneiderian membrane”
4. Fill the new empty space with the graft.
5. Set the implants through the bone and the graft
6. Cover the window

The most accurate and safe in the market is the cone beam system.

With a Cone Beam, you have:

- Safety: 70 to 100 times less radiations than with a CT scan.
- Accuracy: the image is much more detailed and you can navigate in 3D to lookout for the exact information you need. Then you will be able to set virtually your implants to stick perfectly with the needs.

On the crest, don't stay exactly in the middle, but little on the palatal side. The buccal flap will protect the implants more efficiently. Extend your inci-

Total the window
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On the crest, don't stay exactly in the middle, but little on the palatal side. The buccal flap will protect the implants more efficiently. Extend your incision at least one tooth front and one tooth back to have an easy access without a long vertical incision.

Make sure the incisions will not be close to the graft. You need to see easily what you are doing, it is a priority. The more you peel off the gums, the less you cut, the better your patient will heal. So you should always be smooth!
Now, big question: graft and implant in 1 or 2 times?
You came to all the conferences of CAP, you read a lot, you have watched many videos.

The result may be as follows: “The more you try to learn, the less you know”.
For the same question in the same conditions, you may be told anything and its opposite… Maybe this is not really helping but the state of mind is often: big graft, big delay!

Once more, I can tell you what I have done for more than 20 years. Don’t lose your common sense: a graft set in the bottom of a sinus is like a loose cargo in the middle of the treated site: Why?
- To keep the bottom of the sinus as a “bowl” for the graft
- To make sure the edge of the crest will not explode under the pressure of the implants.

One more benefit: you will save time: under 80 um: too small granules fit well to the defects and increase the reactive surface. Beyond 500 um stands the pressure of the soft tissues. The wider it is, the more you get hollows welcoming stem cells.

Today, the best I have found is MATRIBONE from BIOM UP. It is a kind of sponge you can shape, cut. It is malleable, repositionable and doesn’t crumble. It is made of a 10% frame of collagen type I and III surrounding 90% of mineral biphasic 60% Hydroxyapatite, 40% tri calcium phosphate.

What happens in you graft?
- First hours: collagen type III, which is roughly made of several type I, has a surface that activates the platelets and makes with fibrin, a quick and stable clot.
- First days: granulocytes, cytokines, growth factors start micro vascularization
- First 2 months: new vascularization in new growing tissue created by osteoclasts. Osteoblasts are at work, you find stem cells in the lacunae.
- 8 months: dense bone is available, osteoblasts become osteocytes.

What happens in the sinus after some months? Let us see more samples:

Histological evaluation of human tissue after bone reconstruction with MATRIBONE, a collagen-based bone graft substitute, in dental and maxillo facial surgery.

Process:
1. Collection of a bone biopsy at the center of the treated site with a trephine bar.
2. Fixation in 70% ethanol, dehydration and inclusion in methyl methacrylate resin. Realization of 7 microns sections (NOVOTEC laboratory, Lyon, France).
3. Trichrome Goldner staining and microscopic analysis.

Case 1: Biopsy after 6 months
45 year old female, 16 extractions, bone deficit in height and thickness.

Now softly lift off the membrane from the bottom of the sinus, the same way you would lift a carpet! Once more avoid “Parkinson” and take your time. This step is important, it is not a race! You will see many “movie stars” proud to say they are very fast. As a matter of fact, the quicker you work, the better is the healing, but the main point is to be accurate and smooth. The stop watch comes next…

Now, big question: graft and implant in 1 or 2 times?
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New coating could eliminate implant failure risk

By Dental Tribune International

TORONTO, Canada:

Although their success rate has been reported as about 80 percent, dental implants can fail owing to biological and technical issues over time. In many cases, the body's inflammatory response causes rejection. Canadian research has now presented a new implant coating that helps disrupt this immune mechanism to prevent both the risk of implant failure and the need for anti-inflammatory drugs.

The disruptive new anti-inflammatory polymer was developed by Dr. Kyle Battiston, a postdoctoral fellow at the Faculty of Dentistry and a recent graduate from the Institute of Biomaterials and Biomedical Engineering at the University of Toronto. It was originally designed as a tissue-engineering scaffold that allows tissue engineers to grow cells successfully.

Battiston and his colleagues were able to coat implants with the biomaterial, which is derived from a family of polymers found to reduce inflammation, specifically when it interacts with white blood cells, and discovered that the coating calms the body’s immune response.

“We’ve learned this family of materials can retain its anti-inflammatory character while adapting diverse physical properties,” said Battiston. The material could thus be used for a wide variety of medical treatments.

Battiston plans to market the coating through his new startup company KSP2 within the next five years.

According to the American Academy of Implant Dentistry, 5 million Americans already have dental implants and this number is growing by 500,000 a year. About 10 percent of all U.S. dentists place implants today. The association estimates that the U.S. and European market for dental implants will reach $4.2 billion by 2022.
Cast mounting using MaxAlign: The clinical component

By Dr. Les Kalman, Canada

The importance of records cannot be overstated. Records are a legal requirement, are vital in assisting with diagnoses, and facilitate treatment planning, patient comprehension and laboratory communication.1,2

The clinician has the choice between virtual or tangible records, which may include casts, a facebow, articulation and photographs.3-5 Accurately mounted diagnostic casts provide an immense amount of information for treatment and that information will have an impact on the final prosthodontic plan.6

Just as the correct mounting of casts provides valuable information, so too does incorrect mounting provide inaccurate information. In addition, incorrect mounting may result in false diagnoses and possibly even altered treatment plans, based on errors in inter-arch space, occlusal contacts and force directions (Fig. 1).7 Laboratory communication with the clinician remains an important aspect, yet this has been lacking.8 Without records, communication with the laboratory can be even more limited. Communication tools must be employed9 to provide information so that laboratory technicians can satisfy laboratory requirements. Lack of information results in guesswork, assumptions and incorrect dental work that is ultimately returned to the dental laboratory.8

Background: MaxAlign

The MaxAlign application (Max; Whip Mix) is a communication tool for the clinician that captures essential patient information. It is a tablet-based technology that offers a unique set of tools for the clinician and the patient. Max provides a calibrated photograph with clinical information and a novel technique for mounting of casts. This case report will explore the effective use of Max to acquire clinical information that is vital for the laboratory, third-party insurance, the clinician and the patient.

Clinical protocol

A healthy 36-year-old female patient with a non-contributory medical history presented for consultation regarding elective anterior aesthetic treatment. Records consisted of alginate impressions using stock trays, which were poured in JADE STONE (Whip Mix), and utilisation of Max.

The Max app was downloaded onto a Samsung tablet (provided) and launched (Fig. 2). Patient information was input (Fig. 3). The tablet was positioned in the tablet clamps (provided) and the clamps were tightened to ensure a vertical orientation (Fig. 4). The tablet must be placed such that the Samsung logo is on the right, so that the camera is located to the right. The patient was in the upright position, with the occlusal plane parallel to the floor, while the tablet was placed on the instrument delivery stand (Fig. 5).

Max has anatomical guides for positioning: maxillary incisor midline and edge, location of orbits and inferior facial outline. The delivery stand was positioned close enough to the patient for her facial features to line up with the guides on Max (Fig. 6). Cheek retractors were employed to offer a clear view of the dentition (Fig. 6). Once the patient was in the correct position, the “arm auto capture” button was pressed. The tablet then captured a photograph, with a flash, of the patient (Fig. 7). Once the photograph has been taken, the clinician has the ability to maximise patient position by sizing or moving the image. The width of the central incisors can be selected from the boxes (Fig. 7). Once completed, the image is saved.

The next step is to verify occlusion. This was done with standard 8 µ shimstock while the patient is in maximum intercuspation (Fig. 8).

The contacts were observed and input into the second Max screen (Fig. 9). This screen represents the quadrants of the dentition, and each box represents a tooth. In order to record occlusion, one touches the box that corresponds to the teeth contacting (Fig. 9). The image and record of occlusion are saved and the operator has the
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*** Vivo study to assess the effects of Philips Sonicare AirFloss Ultra, when used with antimicrobial rinse, on gum health and plaque removal.
† In a lab study, actual in-mouth results may vary.
option to exit the app or proceed with the laboratory component. If the mounting will be delegated to a laboratory, this concludes the clinical component of Max. The clinical information can then be e-mailed to the respective laboratory as a JPEG or PDF file. The laboratory would utilise the information according to the instructions in Max, as well as the peripherals, to mount a set of casts accurately (Fig. 10).

Discussion
Based on the records and examination, the following were determined: Class I occlusion, 20% overbite, 0/2 mm overjet, canine guidance and evidence of a parafunctional habit. The diagnosis included mildly discoloured anterior composites and bruxism. The patient was presented with several treatment plans, ranging from preoperative whitening followed by minimally invasive composite replacement to the laboratory options. The discussion would focus on the benefits and limitations of each option, considering the patient’s preferences and long-term goals.

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to anterior porcelain veneers. An occlusal splint was also recom-
mended. Although she was undecided on the treatment modality, the records obtained with Max provided valuable in-
formation for the clinician, the patient and third-party insur-
ance. If treatment is to proceed, important information on oc-
cclusion, guidance and aesthetic determinants will be accurately
conveyed to the laboratory. Utilisation of the clinical com-
ponent of Max provided a very simple approach to capturing
the clinical data. The process was straight-forward, the ana-
tomical guides proved very useful and the record of occlusion
provided additional crucial information that is often omitted.
There were no software glitches or errors during operation. The
patient also found the process extremely quick and comfort-
able. Max has several safeguards to guarantee optimisation. There
is a sensor to ensure it is properly positioned when taking the
photograph of the patient. If it is not properly positioned, image
capture will not occur. Calibration may be required in order
to ensure that the sensor is cor-
rectly set. This is achieved by po-
sitioning the tablet vertically in
the stand and then pressing the
“calibrate sensor” button.
The sensitivity of the position-
ning sensor may also be adjusted
with the “adjust sensitivity” but-
ton. If the clinician has become frus-
trated and must take the image
immediately, there is a “force
capture” button that will over-
ride the sensor and take an im-
age.
Future development may con-
sider the option of saving the im-
age in STL format. This would
enable various output options
and use with other digital image
and design software.

Conclusion
Max provides a novel and inno-
vative approach to the mounting
of casts using a tablet, reinforce-
ing the anatomical and aesthetic
considerations when establish-
ing a simulated patient case. The accurately mounted tan-
gible casts provide substantial
information for diagnostic and
treatment planning, beneficial
to dental students, new gradu-
ates and experienced clinicians.
Compared with traditional ap-
proaches, such as facebow
transfer, Max provides an easy,
efficient and accurate method
for clinical information acqui-
sition that has benefits for both
the clinician and patient. Its ease
of use would perhaps encourage clinicians to consider utilising
Max as a vehicle for obtaining
crucial clinical data. This would
enable greater overall com-
munication, improved success
in prosthesis fabrication, and a
more satisfying experience for
the patient and clinician.

Editorial note: The list of refer-
ences is available from the pub-
lisher.

About the Author
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University in London, Canada.
Interview with Xavier Cherbalvaz:
“We strongly believe in education, we are committed to be more present in the region.”

By Dental Tribune MEA/CAPPmea

Dubai, UAE: The 2nd Ormco MENA Symposium took place on 4 and 5 December 2015 at the Jumeirah Emirates Towers in Dubai, UAE. Dental Tribune Middle East had an opportunity to catch up with Xavier Cherbalvaz, Director for France and Middle East, to hear his views on the future of orthodontics.

The special course attracted 11 participants representing 4 Dental Centers in Dubai – U.A.E., and 1 Dental Center in Doha – Qatar.

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“The special course attracted 11 participants representing 4 Dental Centers in Dubai – U.A.E., and 1 Dental Center in Doha – Qatar.”

On the 11th of December, the first CEREC Ortho training took place in the Raffles Hotel (Dubai – U.A.E.) organized by Strona and conducted by Dr. Darren Cannell and Dr. Andy Stafford (New Castle – U.K.) with around 11 participants representing 4 Dental Centers in Dubai – U.A.E., and 1 Dental Center in Doha – Qatar. The event was a huge success due to the simplicity of the software, and the existing knowledge the participants had; either with CEREC, or with Invisalign (or both separately). Now, these experiences unite, with Strona and Invisalign joining efforts and experience to insure a successful and smooth with introduction and launch of this Software at one of the first regions World-Wide to officially launch CEREC Ortho Software. The 2nd Ortho Training is scheduled very soon, to welcome existing and new CEREC users from the U.A.E., Kuwait, Bahrain and Saudi Arabia.

By Dental Tribune MEA/CAPPmea

The network of dealers in some of the countries, like it is here like in Dubai for example.

DTMEA/CAPPmea: Could you tell us where is Ormco today?

Ormco is the largest company worldwide in orthodontics at this point, existing for over 50 years. At this moment the training of the professionals is the big part of Ormco mission. Also, most probably we are the company with the largest range of products, from the traditional to the twin brackets were you end wires toward the digital one were we deliver customized brackets with the right regulation and the wires that prevented so that the doctors spent time on adding value on the treatment plan and not spent lots of time in bandings. With this whole range we need to train our end user in order for them to be able to get to know the product.

DTMEA/CAPPmea: What is the main focus of today’s Symposium?

Our main aim is to keep a relationship with the customer we serve, through the product to the education so that’s why we are here at this 2nd MENA Symposium. Additionally, Insignia and DAMON are the main high end products of Ormco that we are presenting today during the Symposium in order for our users to expand their knowledge on those products.

DTMEA/CAPPmea: Do you spend lots of time with the end user?

Yes, we travel all the time to reach our customer. We spend a lot of time with the end user. We are the innovating company, we try to launch new product, but also try to simplify the life of our client. Today, the training part is a big part behind so we try to spend as much time with them as possible in order to teach them about the new developments.

In the country where we are, orthodontics is a niche market, with limited number of people, they are all specialists. So generally there is in each country corresponding body where we know the orthodontists. Ormco is existing for over 50 years where we have relation where in almost each country someone has a product from us, which is a single spring or bracket or wires, maybe not all the range but some for sure. Orthodontics is a service industry so bring close to the costumer is the top priority for us.

Our primary focus is to work with orthodontists, now in some countries there are also cases where GPs are doing orthodontics, like let’s take Spain for example there is no orthodontists, there are mainly dentists. They don’t have a title of orthodontics because it doesn’t exist, in Italy, the specialization exists for only 4 years so for them is also something new so before there were mainly GPs. We are working market by market, France is specialist market, people with strong specialty, scientific bodies so we work with them a lot. We are the company that adapts by markets.

DTMEA/CAPPmea: During last year’s Symposium you shared with us that there are aspirations on organizing education programs. How is this going on?

It is going very well at this point. Over the past four years, there were no courses in the region, only few. In 2014 we organized 25 courses we had close to 1500 people coming to our courses, orthodontists. This year we have organized 50 courses and we have 2400 and we organize that all across the countries from Qatar to Egypt to Lebanon. Our aim is to be as close to the costumer as possible, so we organize courses as much as we can to their offices. Here we have selected Dubai as it is convenient to come and this is Symposium.

DTMEA/CAPPmea: Do you already have plans for the next Symposium?

Yes, of course. Next year we will have another Symposium in India, it will be the first one, we had one in South Africa last year and this was also the first one. Traditionally, when we enter the market for the first time, we organize Symposium and then a range of courses with different speakers in order to adapt to local needs from basic level to the advanced. We strongly believe in education, we are committed to be more present in the region. This is what we did in last three years and what we continue to do. Ormco is the largest company worldwide so we have almost every philosophy of product to serve the orthodontics.