Interview: “It is not magic—it is not going to make the diagnosis for you…”

By Dental Tribune MIA

The Ortho Tribune Dubai 2018 took place from 06 to 08 December 2018 at Palazzo Versace, Dubai, UAE. Dental Tribune had a pleasure to ask the key speakers of the Ortho Forum Dubai 2018 about the Damon System.

Could you please share more about yourself?

Dr Firas Hamzeh: I am simply an orthodontist, working in a private practice in Dubai, who has a special interest in digital orthodontics and all the new concepts in orthodontics. I am always willing to give the best treatment options to my patients. Over the past few years, I have become an educator for Damon System and Insignia and I started spending more time educating other doctors and sharing my clinical experience with them.

Dr Bill Dischinger: I am a licensed orthodontist in the United States of America and I received my certification in 1999. I have two private orthodontics practices in the northwest area of America. I also teach at the University of the Pacific’s Orthodontics Department in San Francisco.

Dr Matias Anghileri: I am from Buenos Aires, Argentina. I am married to Dr Damon, the inventor of the Damon System philosophy. developed this type of bracket. Self-ligating brackets are the present philosophy of the Damon System. For example, with Damon System braces we use very light elastics from light wires from the very beginning, which we cannot do with traditional braces. We also use variable torque for the front teeth—based on each individual’s case—which we cannot do with traditional braces.

What are the main advantages of the system?

Hamzeh: The main advantages of the Damon System are: a reduction in treatment time with less sessions and a reduction in the number of extractions. No headgear or expanders are required [as with traditional braces] and the improved aesthetics and functional results of the Damon System. However, the force required to move the teeth with the Damon System is much lower than with traditional braces. This leads to less inflammation with the teeth, bone and gums, which allows the teeth to move more efficiently, with little or no damage done to the body during the process.

Dischinger: As mentioned above, the force required to move the teeth with the Damon System is much lower than with traditional braces. This leads to less inflammation with the teeth, bone and gums, which allows the teeth to move more efficiently, with little or no damage done to the body during the process. The teeth hurt less with this process (I know as I have had both types of braces in my mouth). This leads to a healthier, more biologically sound way of moving the teeth, in my opinion.

Anghileri: We have to understand that the biology is always the same. A bracket or a system will not change the biology. However, I see the same positive results every day in each and every one of my patients, teeth move faster and healthier, because of the low forces acting on them. The treatments turn out to be simpler and more comfortable for the patient—with reduced treatment time.

What are the overall results of using the Damon System in a practice, not just clinically, but also in terms of patient loyalty?

Hamzeh: Using the Damon System improves the entire patient journey during their orthodontic treatment. You will also end up treating more patients, because you spend less time and less sessions on the treatment, which affects the practice’s productivity allowing the orthodontist to treat more and more new patients, which would result in a better reputation.

Dischinger: When we explain the Damon System process to patients, it just makes sense to them. They often ask us why it is that everyone does not use this system. Our answer is that it is more expensive than traditional braces and there is a learning curve required to get comfortable and knowledgeable in using the system, because of these reasons, some doctors are hesitant to change.

Anghileri: It is not magic—it is not going to make the diagnosis for you—but I can assure you that if you are a good orthodontist, with the Damon System in your hands, you are going to achieve wonders in your patients.

What would you say to your colleagues who are hesitant about using the system?

Hamzeh: I would encourage every orthodontist to use the Damon System, not with the same conventional mechanics that were used before. Follow the Damon System’s treatment protocol and use its mechanics and compare the results and treatment time with previous results. Of course you cannot apply it only to a few cases, you need to treat more and more Damon cases. We keep learning from our mistakes and the mistakes of the others, which is also why we attend the Damon courses.

Dischinger: Look at the biology of moving teeth. We are in the health care world and we need to do everything we can to move teeth in the most efficient, healthiest way we can. Take courses that teach you how to use the system and try some cases with it. You will immediately see the difference in how the teeth move, in the comfort to the patient and the overall efficiency of the cases being treated. Do not be afraid to make a change.

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Six keys to effectively using alveolar corticotomy
A different perspective on surgically assisted tooth movement

By Dr Raffaele Spena, Italy

Introduction
Alveolar decortication (corticotomy) has long been used with orthodontic treatment in order to accelerate orthodontic tooth movement (OTM) while reducing the undesired effects of root resorption, loss of vitality, periodontal problems and relapse of the corrections. The acceleration of tooth movement should shorten the therapy. However, the scientific and clinical assumptions of the early days were totally different from the more recent ones: we moved from a pure mechanical approach to a biological and physiological one.

In 1983, Suya proposed a great improvement of the surgical approach described in 1959 by Kole2 modifying the cortical bone in a corticotomy, avoiding the alveolar crest in the vertical cuts and eliminating the location of the blocks. He proposed this “corticotomy-assisted orthodontics” to treat adult patients, ankylosed teeth and crowded extractions. Like Kole, Suya believed the therapy. However, the scientific and clinical assumptions of the early days were totally different from the more recent ones: we moved from a pure mechanical approach to a biological and physiological one.

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The concept of corticotomy-assisted OTM, drastically changed in 2001 after the publication of Wikko et al.1 In this key case report, two adult patients received a selective corticotomy, along with alloplastic resorbable grafts, to increase the bone level and avoid the risk of regressions. An accurate evaluation with CT scans before and after treatment, and histological sections in one case, allowed the authors to formulate a new hypothesis about what really happens at the bone level after corticotomy. No movement of tooth-bone block, but a transient reduction of mineralisation of the alveolar bone and modifications similar to those described by Fratta7 during the healing of fractured bones and named “regional acceleratory phenomena” (RAP) most likely occur. The surgery-orthodontic protocol proposed by Wikko et al.1 has been subsequently patented as Periodontally Accelerated Osteogenic Orthodontics (PAOO). The claims of PAOO are (a) accelerated tooth movement with reduction of the total treatment time, (b) osteogenic modifications with transportation of the bony matrix, and final improvement of hard and soft tissue support of the teeth treated orthodontically, (c) increase of the short- and long-term stability of the orthodontic treatment. So far, scientific evidence has been given only on the acceleration of tooth movement, but not on the quality of the end result.

The initial difficulty of the malocclusion and tooth malposition, the age of the patient, the variability of the individual response to the treatment, the quality of the end result, and the patient’s compliance are just a few of the variables that should be considered. Numerous case reports have been published showing how treatment time can be reduced when patients are treated with corticotomy. Case reports, however, have limited scientific validity.

The predictability and quantification of treatment time reduction are still not scientifically possible. The additional expenses and morbidity associated with the use of alveolar corticotomy should always be carefully evaluated to determine whether they are worth the saving of few months. A shorter orthodontic treatment is desirable, but certainly not at the expense of a high-quality end result.

Regarding OTM, numerous studies have shown that its speed is influenced by bone turnover and the individual response to mechanical forces and it is not related to the level of the forces.12–15 Clinical experience confirms this: there are slow movers and fast movers, but we are still far from recognising them. In addition to this variability, there is the temporary effect of alveolar corticotomy, which will be diminished under the third key. A faster treatment may be a secondary advantage and may be obtained in a substantial way only in those “simple” orthodontic cases that require a naturally short treatment.

In conclusion, alveolar decortication should not be combined with orthodontic treatment with the only objective of accelerating OTM and reducing treatment time: the risk of not obtaining either as desired may be high.

Despite this scientific evidence against its major claims, alveolar corticotomy has its place in orthodontic therapy. Let us consider the surgical insult and the associated RAP reaction produced at a biomechanical level: the increased metabolism, the transient reduced regional density and cell turnover created by the increased osteoactivity, the reduced denervation resorption and hysteresis (we still do not know exactly what happens in humans) facilitate OTM. The decorticated teeth is less resistant to orthodontic forces and will be easier to move and will require less anchorage. Spena et al in two studies conducted on a total of 12 adult patients with Class II malocclusions treated with disturbance of the maxillary molars showed how maxillary molars could be bodily distalised with simple bicuspid mechanics and no anterior anchorage. Corticotomy was performed only on the teeth to be moved, thus reducing the anchorage needs and their resistance to distal forces.

The term “Periodontally Facilitated Orthodontics”, instead of “Periodontally Accelerated Osteogenic Orthodontics”, is used to describe a procedure that has the primary goal of simplifying, enhancing and improving OTMs that are difficult or risky, from a biomechanical and biological point of view. The surgical procedure and the associated orthodontic treatment and biomechanics depend on the initial problems and the goals of every single specific treatment. This is in agreement with Cisneros et al. corticotomies should be used to facilitate the implementation of mechanically challenging orthodontic movements and enhance the correction of moderate to severe skeletal malocclusions.18

1. Alveolar corticotomy has limited effect in time
Since the early studies of Frost on the biology of fracture healing, it is

Tab. 1. Surgical protocols for performing alveolar corticotomy.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incision</td>
<td>A minimal incision is performed to expose bone.</td>
</tr>
<tr>
<td>cortexcision</td>
<td>The cortical bone is incised with a microsaw or a piezolithotome.</td>
</tr>
<tr>
<td>piezocision</td>
<td>The cortical bone is incised using a piezoelectric device.</td>
</tr>
<tr>
<td>MOP</td>
<td>Micro-osteoperforations are created in the interproximal bone.</td>
</tr>
<tr>
<td>RAP</td>
<td>Regional acceleratory phenomena are observed.</td>
</tr>
</tbody>
</table>

Fig. 1: Six keys to effectively using alveolar corticotomy.
Fig. 2: A detailed description of each rule follows.
Fig. 3: Proper patient selection for corticotomy is essential.
Fig. 4: A proper surgical procedure must be followed.
Fig. 5: Proper orthodontic management after corticotomy must be performed.
Fig. 6: Any corticotomy performed during an open flap surgery.
Fig. 7: Root resorption, loss of vitality, periodontal problems and relapse of the corrections.
Fig. 8: The acceleration of tooth movement should shorten the therapy.
Fig. 9: The concept of corticotomy-assisted orthodontics to treat adult patients, ankylosed teeth and crowded extractions.
known that the altered metabolism of bone after a traumatic (or surgical) event has limited duration: it is the natural search for equilibrium or homeostasis.

The burst of hard- and soft-tissue remodelling starts a few days after the insult, peaks at the first or second month, and returns to a normal pace after a maximum of four to six months. This RAP reaction, when applied to the alveolar bone, causes an accelerated/facilitated movement of the teeth subjected to applied orthodontic forces. The effect lasts for as long as there is this reaction, so for a limited part of an orthodontic therapy. This has been confirmed by experimental studies on animals and by clinical studies on patients. Clinically, this temporary phenomenon leads to the need to perform the alveolar corticotomy when the RAP is necessary. Timing is fundamental.

Alveolar corticotomy may be repeated during the treatment with the objective of prolonging the effect. The effective benefit, cost and risks must be taken into account. Sanjideh et al. in a split-mouth study on foxhounds found that a second corticotomy performed after 28 days in the mandible produced a higher rate of tooth movement and a greater total tooth movement. However, they concluded that proper timing for a second corticotomy needed to be better determined.

Wilcko, Dibart and Murphy claimed that continuously activated orthodontic forces applied after decortication may maintain a constant mechanical stimulation, and allow a prolonged osteopenic state during which teeth can be moved rapidly.

In order to achieve this effect, they recommended seeing patients frequently (every two weeks) and continuing the activation of the applied orthodontic forces. If not, remineralisation would complete the healing process and bring the bone metabolism to a normal level. It must be said that these claims have never been demonstrated either clinically or histologically.

3. Alveolar corticotomy has limited effect in space

The effects of alveolar corticotomy are localised to the area immediately adjacent to the site of injury. Different surgeries may affect differently the resulting OTM. Glenn et al. and Tuncay and Killiany, in two experimental studies on animals published before the new trend on corticotomy, found that fiberotomy (a corticotomy limited to the crestal side of the alveolar bone) affected the rate of OTM and shifted the centre of rotation toward the apex of the roots, thus modifying the biomechanical behaviour of the teeth under the orthodontic forces. If the surgical insult is applied to a limited area of the alveolar bone (i.e. middle third and only buccal surface: Fig. 1), the RAP reaction will not be extended to the entire root area. The modifications at the bone level will be limited at the area of the decortication, and control of the apical and lingual sides will not be influenced as desired.
As a general rule, if a mesiodistal bodily movement or better control of the apical area are the biomechanical needs of the OMT to be achieved and enhanced (i.e. intrusion/extrusion), the deconnection needs to be extended to the entire alveolar bone surrounding the roots of the teeth, buccally and lingually (Fig. 2), if the movement is less complex or anatomical limitations of the surgical area impede an extended deconnection, the cuts may be limited in the direction of the OMT. These biomechanical needs determine the type of procedure in both the open flap and the flapless surgeries.

4. A proper surgical procedure must be followed
Several surgical protocols for performing alveolar corticotomies have been proposed. Most of them have been tried in the last 15 years on several patients. These surgeries may be divided into two groups: the open-flap and the flapless corticoctomies (Tab. 1).

The original corticoctomies were performed after raising a flap. This type of surgery is still preferred when an extended or critical area of deconnection has to be managed and when an extended grafting is planned.

The flap can be designed according to the periodontal characteristics of the site and has to be full thickness in the area of deconnection and split thickness below this area to ensure a good blood supply. Interproximal and subapical cuts of 2–3 mm in the cortical bone (Figs. 3 & 4) are performed together with a light scraping of the external cortex in between the cuts. This extended surgical insult will produce a wide RAP reaction and prepare a bleeding bed for any grafting material eventually placed in association with the deconnection. Micro-surgical calibrated micro-saws are preferred to rotating surgical burs because of their selective, safer, micrometric and more precise cuts, better irrigation/cooling effect from cavitation, better comfort for the surgeon, and better healing for the patient. The open-flap corticotomy procedure is routinely used along with orthognathic surgery, when exposing impacted teeth, to treat transverse maxillary deficiencies and periodontally involved cases.

Flapless surgery has been proposed as an alternative way of performing a corticotomies. Corticocentes and Peri-occlusal corticotomy have been attempted to reduce the invasiveness of the deconnection and the possible periodontal damage and postoperative discomfort with raising a flap. Even if attractive, they seem to have surgical and biomechanical limitations.

The surgical limitations include risks when performed in crowded areas, limited visibility when cutting the cuts, limitation of the cuts to the interproximal areas and to the middle third of the roots, difficult control of the grafting in the apico-coronal direction and need for optimal extension of the attached gingiva in the area of deconnection. The biomechanical limitations are strictly related to the fact that corticotomy is performed only on the buccal side and middle third of the roots.

They are definitely not minimally invasive surgeries as claimed and are quite expensive for the patient, since only a well-trained periodontists/oral surgeon can perform them and they often require complex planning with digitally designed 3-D surgical guides.

The Micro-Osteo-Perforations (MOPs) described by Alikhani et al.34 and Tonetti et al.35 are an effective and minimally invasive way of producing insult to the cortical alveolar bone. These MOPs may be created with manual instruments (Excellerator, Propel Orthodontics) or with dedicated burs on a reduced speed electric handpiece (Fig. 5).

MOPs are produced with a penetration in the cortex of a maximum of 1–2 mm. Instead of conventional local anesthesia, a strong anesthetic gel placed on the mucosa for three minutes is sufficient to control the patient’s pain and discomfort. It is advisable to produce two to three MOPs in each interproximal area of the teeth and both buccally and lingually (Fig. 6), to ensure that the metabolic changes are extended around the entire radicular alveolar bone. Manual MOP is usually created in the posterior and lingual areas (Figs. 7–9). The procedure and the precautions are similar to the insertion of mini-screws. Orthodontists can easily create MOPs at the chairside, and the cost is a great deal more affordable for the patient. Finally, they can be easily repeated during treatment if additional bone maturation is needed. No packing and no sutures are necessary after MOP. The limit is that no grafting can accompany MOP.

Whenever possible and desirable, grafting may accompany alveolar corticotomies. The grafting is usually planned before surgery, based upon initial clinical and radiographic evaluation, the desired OMT, and the short- and long-term periodontal considerations. In situations of thin bone and a thin gingival biotype, with risky movements like expansion, labial proclination or antero-posterior movements in reduced bone volumes, grafting may be indicated to reduce/eliminate fenestrations and dehiscences, produce additional support for the roots, and improve final aesthetics and stability.

Grafting may include hard-tissue, soft-tissue and autologous growth factors. Quality and quantity may be modulated at the surgery depending on the clinical characteristics of the surgical site. As a general rule, composite bone grafts where allogeneic bone (bone from human cadavers that is freeze-dried to reduce antigenicity and demineralized to increase the porosity) with bone morphogenetic proteins (osteogenic) properties, is mixed with xenogenic bone (bone usually from bovine animals that provides a physical matrix or scaffold suitable for deposition of new bone and that prevents its rapid resorption) with osteoconductive properties are preferred (Fig. 10).

Soft-tissue grafts are added to bone graft when a thin biotype or gingival recession is present. If the area to be regenerated is small, an autologous connective tissue graft is the gold standard procedure. Large areas may be managed with allogeneic human acellular dermal matrices, that are available in different sizes and thicknesses (Fig. 11).

Soft-tissue grafts are sutured with comparable sutures. Both bone and soft-tissue grafts are coupled with autologous growth factors. With aging, the number of stem cells rapidly decreases. These cells are important in case of injury and healing processes. Studies have shown that growth factors from platelet- derived plasma (platelet-derived growth factor, vascular endothelial growth factor, transforming growth factor beta 1 and 2) rapidly increase the number of the available stem cells, stimulate their activity, as well as reduce inflammation and pain during the healing processes. Platelet-rich fibrin (PRF)37, 38 and the platelet rich in growth factors (PRGF)39, 40 are prepared via two different protocols in which blood centrifugations allow separation of the plasma platelets from the red and white cells. PRF contains leukocytes and the process for its preparation produces membranes with a light compression of the centrifuged fraction.

The process for preparing PRGF allows the separation of three fractions with different concentrations of platelets. They may be mixed with bone grafts (increasing the graft’s resiliency and adherence to the surgical site, thus facilitating its application) and soft-tissue grafts. Activating and

...
heating the PRGF fraction produces clots/membranes of fibrin that are placed on the bone grafts, stabilising their position (Fig. 12).

When using grafts along with alveolar corticotomy, a tension-free flap closure must be achieved at the end of the surgery, to provide optimal coverage of the decorticated area and the grafted material, and to enhance final soft-tissue healing. Non-resorbable sutures are left for at least 14–21 days.

5. Proper orthodontic management after corticotomy must be performed

Orthodontic treatment associated with periodontally facilitated orthodontics may be carried out with any fixed or removable appliances. It is the clinician’s choice to combine periodontally facilitated orthodontic procedures with fixed, active self-ligating appliances (In-Ovation) with the new prescription of the CCO System (GAC-Dentsply Sirona; Fig. 13).41 The management and wire changes are similar to those of any orthodontic case. No initial heavy force is necessary. There is no rule regarding timing of the bond rig. In some cases, appliances are placed a week after the surgery, while in others (for example, when distalising maxillary molars or repositioning impacted teeth) several months before corticotomy.

The enhanced tooth movement deriving from the RAP reaction is obtained when needed. The major difference is that, after the periodontal surgery and until tooth movement is clearly enhanced, the visits for wire activations or wire changes are every two weeks instead of the usual six to eight weeks.

When corticotomy is performed along with aligner treatment, the frequency of appliance changes is every three to four days.

Alveolar corticotomy may easily be associated with skeletal anchorage devices. Temporary anchorage devices are used to increase anchorage, while corticotomies are used to reduce anchorage.

6. Proper patient selection for corticotomy is essential

Alveolar corticotomy is not for every patient, and it is not feasible to use it on a routine basis in clinical practice. The main indication is in clinical cases with complex OTMs. Open-flap surgery is indicated in impacted teeth, surgery-first procedures with extractions, orthognathic surgery with major postoperative OTMs, complex space closures with reduced supporting tissue, and maxillary expansion in periodontally compromised cases. MOF is indicated in treatments with aligners, complex OTMs without periodontal problems and patients with financial limitations.

One case treated with open-flap corticotomy and two cases treated with MOF will be shown to elucidate the concepts described in this article.

Case 1

A 19-year-old male patient with a Class III dental malocclusion with an anterior midline discrepancy wanted to be treated only with aligners (Figs. 14a & b). Treatment was carried out with 71 aligners and two MOPs performed at the second month and at the fifth month of treatment, only on the premolar and molar maxillary dentition (Fig. 15). Class III elastics were prescribed throughout the therapy. Treatment was completed in seven months with acceptable intercuspal jaw relations in the buccal segments and correction of the midlines (Figs. 16a & b) and with good anchorage control in the lower arch (Fig. 17).

Case 2

A 22-year-old female patient with a Class II Division 1 dental malocclusion with a missing mandibular right first molar and mandibular anterior midline deviated toward the right presented for treatment (Figs. 18a–c). The treatment plan was to extract the maxillary first premolars and close the mandibular right molar space with minimum anchorage. MOFs were performed after insertion of the mandibular working wire (0.019 × 0.025 in., stainless steel; Figs. 19a–d). Nickel–titanium closed coil springs were applied right after the decortication (Fig. 20). Treatment was completed with good intercuspation, coincident midlines and all spaces well closed (Figs. 21a-c). Figures 21a to d show the dental panoramic tomograms and lateral cephalometric radiographs before and after treatment.

Case 3

A 30-year-old male patient, after two unsuccessful previous orthodontic treatments, with a Class II malocclusion with an anterior open bite, a unilateral cross bite and generalised recession on the buccal aspects of maxillary teeth presented for treatment (Figs. 22a & b). The ideal treatment would have included surgically assisted maxillary expansion, followed by combined orthodontic-orthognathic surgery. The patient refused this treatment, but accepted an alternative treatment with open-flap corticotomy extended from molar to molar and generous hard- and soft-tissue grafting (Figs. 23a & b). Treatment started a week after the surgery and continued with visits every two to three weeks. Once arch coordination had been slowly achieved with 0.019 × 0.025 in. stainless-steel archwires (Figs. 25a & b), followed by 0.021 × 0.025 in. stainless-steel archwires (Figs. 26a & b and 27a & b), the anterior open bite spontaneously closed (Figs. 28a & b). The CBCT images before and after treatment reveal the increased volume of the maxillary alveolar bone that allowed the successful expansion of the upper arch, despite the age of the patient and the initial periodontal problems (Figs. 29a & b).

Conclusion

Alveolar corticotomy (or periodontally facilitated orthodontics as we prefer) is an effective procedure in which alveolar decortication is associated with orthodontic treatment with the primary goal of enhancing OTM and reducing anchorage needs. By accelerating the rate of OTM and reducing the complexity of a clinical case, bone decortication may reduce treatment time. However, this effect is considered a side-effect and not the primary reason for using this periodontal surgery. According to the patient’s needs, it may be performed with an open-flap or a flapless procedure and may be associated with hard- and soft-tissue grafting. Further studies are still needed to evaluate indications, contra-indications and risks. The procedures described herein will certainly evolve and improve with the improvement of the materials, devices and appliances utilised.

Editorial note: A list of references is available from the publisher.

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Align Technology reaches 6 millionth Invisalign patient milestone with tween patient from China

By Align Technology Inc

Align Technology, Inc. (NASDAQ: ALGN) today announced that over 6 million Invisalign patients have benefited from treatment with Invisalign - the most advanced clear aligner system in the world, including 1.4 million teenage patients*. This is a significant milestone for the company and the over 190,000 Invisalign-trained doctors worldwide, reflecting accelerating adoption of Invisalign treatment by adults and teens alike.

The 6 millionth Invisalign patient, Yuzhe, is a 12-year-old student of the International School of Beijing, who began treatment in October 2018 using Invisalign Comprehensive with Mandibular Advancement treatment with Dr. Jiawei Wo from Yuxueyuan Dental clinic. Dr. Wo is a Gold Invisalign trained doctor based in Beijing, China who specializes in pediatric orthodontics.

Dr. Wo prescribed Invisalign clear aligner therapy to his patient Yuzhe to address her class II type of teeth misalignment and because it fit well into her busy, student lifestyle: "Invisalign treatment with Mandibular Advancement is great, because it moves the lower jaw forward, while simultaneously aligning the teeth. With Invisalign as my treatment system, my patients need much fewer appointments than with traditional orthodontic appliances. This allows them to continue their studies and daily activities without interruption." We are delighted to be celebrating another significant milestone with Invisalign trained doctors and their patients. This achievement is a reflection of growing demand for Invisalign clear aligners from international markets, especially China, which is our second largest country market, nearly doubling each year since the Invisalign system was launched in China back in 2011. I would like to thank Dr. Jiawei Wo and all of the Invisalign trained doctors around the world for helping us make Invisalign treatment the clear aligner orthodontic method of choice among teens such as Yuzhe, as well as for giving our patients a chance to have beautiful, straight teeth and smile with confidence," said Joe Hogan, Align Technology president and CEO.

Julie Tay, Align Technology senior vice president and managing director, Asia Pacific recognized the importance of the 6 millionth Invisalign patient coming from China: "I was absolutely delighted and pleased to hear that 6 millionth patient is from Asia Pacific. China is our fastest growing market with approximately 70% annual growth rate! I believe there is an enormous opportunity in the region for Invisalign providers to treat millions of young patients like Yuzhe. I would like to thank Dr. Wo for his confidence in treating Yuzhe with the Invisalign system, and Yuzhe’s parents for trusting that it is the best solution for their daughter."

In support of this major milestone for the company, Yuzhe will be featured in an upcoming Invisalign global campaign, entitled "6 Million Invisalign Smiles" that will follow Yuzhe and her family through her Invisalign treatment journey. The campaign will highlight key reasons why she and her parents decided to choose Invisalign clear aligners to help her achieve a new, beautiful smile.

For additional information about the Invisalign system or to find an Invisalign doctor in your area, please visit www.invisalign.com. For additional information about Itero digital scanning system, please visit www.itero.com.

Interview: “We will continue to commit to our clients the best orthodontic customer service experience in the industry…”

By Dental Tribune MEA

Dental Tribune MEA had a pleasure to speak with Dr. Ramy El Zoghby, Regional Sales Director - Dealers EMEA at Ormco.

Dr. Ramy, congratulations on yet another successful year. The highlight of the year must have been the 3rd ORMCO Forum Dubai. How do you reflect on this unique event for the region’s Orthodontists?

I have to say that 2018 has been an exceptional year for Ormco in the region and the 3rd Ormco Forum in Dubai was the great highlight of this success through the whole EMEA region, another real and exceptional record of participation with more than 500 Orthodontists & 8 Internacional speakers coming from more than 15 countries all over the world, sharing their knowledge and clinical experiences using the most advanced techniques in Orthodontics and definitely our unique products.

What was the base for the choice of your scientific speakers and content for the event?

We tried to diversify the scientific content, and the speaker’s backgrounds taking the participants through an exciting journey during the three days. The delegates could discuss their concerns and find out all the new updates in conventional esthetic systems, self-ligating techniques and digital orthodontics which is our future blighting trend in Ormco.

The past year have been very dynamic, not only for ORMCO but also the dental industry. How do you manage to continue delivering top quality products, services and education to your client base, distributors and partners in the Middle East?

I agree with you that 2018 was one of the most challenging and dynamic years for the whole industry in the region, however, we successfully completed the year smoothly by continuing to focus on the best products we sell in Ormco globally. In terms of education, more than 25 international scientific courses were conducted successfully, keeping our clients updated with the latest techniques and products. It also makes our partner’s job easier to deliver Ormco’s message to the largest, ext number of clients in the shortest possible timeline.

How important is it for ORMCO to have such annual events and be close to your regional partners and clients?

Ormco partners are a crucial part of our success in the region. We do our maximum efforts to ensure the best customer service experiences to all our clients especially in terms of continuous products availability and on time delivery. Moreover, keeping our clients’ satisfaction at the highest level possible is one of our major goals within the whole Ormco organization.

What is your plan for the region in the coming year?

This year, we have an ambitious plan to increase our educational courses by more than 20% in comparison to last year, strongly participating in the big regional orthodontic conferences (i.e: Saudi Orthodontic Society meeting – SEO in Jeddah/ SSA Europe, more we will be having our 2nd Ormco Forum in Saudi Arabia in November 2019 with more and more exciting speakers and topics. After the success of the 2nd MEANA Symposium in 2019, Ormco has recently launched their 3rd edition of the Dubai Forum, that took place in Palazzo Versace Hotel between the 6th-8th of December 2018.

In the year of IDS Cologne 2019, what can we expect from ORMCO and your Middle East partners?

We will continue to commit to our clients the best orthodontic customer service experience in the industry whilst continuing to focus more and more on educating orthodontists.

This is considered the biggest Ormco scientific event EMEA region with more than 300 participants and 8 international speakers from around the globe. Not only International speakers but also international delegates from 15 different countries including Middle East, E, and East Europe, Russia and Africa all gathered to attend the big event as well as the launch of the 2 new products Damon Q2 and Symetri Clear and Invisalign new technologies in the world of digital Orthodontics.

Looking forward for more success in the next edition of the Ormco Forum
Ormco Forum Dubai 2018 Impressions
06-08 December 2018 | Palazzo Versace | Dubai | UAE

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Participants
Main Conference
Dr Skander ELLOUZE, Mini Screw Lecture
Main Conference
Main Conference
Damon Workshop with Dr Skander ELLOUZE
Main Conference
Damon Workshop with Dr Bill Dschinger
Main Conference
Damon Workshop with Dr Bill Dschinger
Ormco team with heads of Saudi Orthodontic Society
Ormco team with heads of Saudi Orthodontic Society
New release of the MBT bracket Symetri Clear
3M Oral Care Ortho Programme Highlights

Impressions from the 3M Oral Care Symposium orthodontic programme which took place in Abu Dhabi on 04-05 October 2018. Over 200 dentists and orthodontists attended.

Dr Anoop Sondhi, USA presented two lectures as the keynote speaker on Contemporary Orthodontic Treatment with Self-Ligating Appliances as well as a full day seminar on TMD.

Dr Khaled Al Khayat, Kuwait presented The ABC’s of growing your Practice Today.

Dr Abdelhakim El-Gheriani, UAE lecturing during the Ortho programme.

The newly opened Grand Hyatt Hotel & Residences Emirates Pearl was the majestic venue of this unique symposium in Abu Dhabi, UAE.

Over 40 delegates attended the TAD & Self-Ligating workshop.

Prof Albert Waning from The Netherlands lectured on Prevention for Orthodontics, a new trend of clean, treat, protect and maintain the health of teeth.

Three parallel workshops took place on various hot topics.

Dr Jose Chaques Asensi from Spain during his workshop on The Path to Excellence with Class II correctors.

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Dr Jose Chaques Asensi lecturing on How to Define Clinical Excellence Today.