Editorial report on the Dental Hygiene Day
at the 9th CAD/CAM & Digital Dentistry International Conference
09-10 May 2014 Dubai

By Victoria Wilson,
Dental Hygiene Therapist, UK

Dubai, UAE: A truly remarkable day for Hygienists in the MENA, over 100 Hygiene delegates attended the first Dental Hygiene Day on Saturday May 10th, 2014 which was a continuation of the 9th CAD/CAM & Digital Dentistry Int’l Conference, May 09-10, 2014 at the Jumeirah Beach Hotel, Dubai, UAE. Hygienists practicing in the UAE and from other countries in the MENA attended the first of its kind in the Middle East.

The timetable included a variety of relevant topics tailored specifically to the Hygiene profession.

The exceptional speakers made it worthwhile for any hygienist to attend.

Prof. Crawford Bain delivered an interesting informative lecture on the maintenance of the dental implant patients, an extremely relevant topic for all Hygienist in light of the growing number of implants being placed and the crucial role of the Hygienist in the necessary maintenance.

Dr. Matthieu Gabriele gave a lecture on Oral Hygiene protocols and complications with various fields of dental treatment, a must know-how for every Hygienist.

Dr. Rasha Ahmed presented the important topic on dentine hypersensitivity management. Hygienists face patients common complaints of hypersensitivity on a daily basis, and the well presented topic by Dr. Rasha was much appreciated by the audience.

Victoria Wilson’s Lecture, the Editor of Hygiene Tribune, focused on communication within Dentistry, a topic essential for the delivery of oral health education and achieving long term compliance and maintenance of oral health.

The afternoon consisted of a hands on course on periodontal instrumentation, with the renowned Prof. Mary Rose Pincelli Boglione from Italy and the International Federation of Dental Hygienist IFDH. Due to the popularity and demand the course was extended to 2 days. We were honored to have such an expert in the profession join us on a revision of the essential skills of scaling and instrumentation. Hygienists are trained extensively on scaling and instrumentation in their education, however it is easy to fall into bad habits. This was an invaluable refresher course for Hygienists and we hope that Mary will join us in the future for more courses. Dr. Rasha Ahmed also delivered a very informative hands on continuing course in the afternoon on the practical application of the management of dentine hypersensitivity.

In the 7 years I have been living and working in the UAE I have never known for there to be such an extensive program for the profession on one day and for so many Hygienists to be in one room at one time.

The year 2014 is an exceptionally exciting time for the profession of Dental Hygiene in the MENA. Four months ago the Dental Tribune Middle East opened the Dental Hygiene Tribune section dedicated entirely to the Dental Hygiene profession. More and more dental and medical professionals are requesting to have a Hygienist on board. Following on from the Dental Hygiene Day we look forward to more Hygienists days by CAD/CAM with more hands on courses, and lectures tailored to the needs of hygienists professionals.

What we all have to keep in our mind is that a healthy periodontium is the backbone to all good restorative dentistry and medical treatment – not in the whole process an essential part in over all health and wellbeing.
Reveal your patients’ most healthy, radiant smile with Philips Zoom WhiteSpeed

New Philips Zoom WhiteSpeed Light-Activated Whitening System.
A better experience for your patients and your practice.

**Philips Zoom In-Office Whitening kit makes treatments easier**
Packed in procedural order; you get everything you need for each treatment, including Philips Zoom at-home whitening gel for follow up and maintenance complete in a single package. The Philips Zoom Kit also includes simplified visual instructions.

**Unique products for your sensitive patients**
Each treatment comes with a Patient Post Care and Maintenance kit that includes the Relief ACP Oral Care Gel. This unique formula combines potassium nitrate for sensitivity relief along with Amorphous Calcium Phosphate (ACP) that helps create healthier smiles through advanced enamel protection. To ensure a more comfortable experience all around, instruct patients to use it for 10-30 minutes after treatment.

**New Philips Zoom WhiteSpeed Whitening LED Accelerator**
The advanced Philips blue LED technology provides approximately 50,000 hours of use—reducing operating costs, downtime and is 40% more energy efficient. The light also emits 100% greater light intensity* with no compromise to safety. Redesigned to be easier to position and more ergonomic, your patients and your treatment will be better than ever.

**New support for your practice**
Philips Zoom is funding a worldwide public relations campaign to drive patients to dental professionals, and new programs to help you quickly and easily integrate Zoom into your practice.

“With this new light the patient’s sensitivity is minimal, making the procedure much more pleasurable.”
– Juban Dental Care - Baton Rouge, LA

Reveal your patients’ most healthy, radiant smile with Philips Zoom WhiteSpeed

Give your patients the immediate white smile they want and the healthy white teeth they need, with the new Philips Zoom WhiteSpeed. The number one patient-requested professional teeth whitening brand* is clinically proven to deliver superior whitening results in just one office visit; WhiteSpeed is shown to whiten teeth up to 8 shades in 45 minutes; that’s 40% better than a comparable non-light activated system.†

The new Whitening LED Accelerator’s variable intensity settings allow you to customize the output to ensure each patient receives a more comfortable treatment. 91% of patients experienced little to no sensitivity with Zoom WhiteSpeed.‡

Now better than ever — Philips Zoom WhiteSpeed.

---

* In the U.S.
† Compared to Philips Dash
‡ Results based on 500-person study Data on file.
Philips introduces its best brush yet, Sonicare DiamondClean, helping users achieve brushing brilliance every time

By Philips

Dubai, U.A.E. - Philips is proud to present the new Sonicare DiamondClean - a brush that creates a new level of tooth brushing to its most sophisticated level and which delivers Sonicare's best clean yet removing up to 100% more plaque in hard to reach places than a manual toothbrush.

Sonicare DiamondClean harnesses Philips Sonicare's patented sonic technology to produce a powerful dynamic cleaning action for a difference that takes sonic tooth brushing to its most sophisticated level that takes sonic tooth brushing to its most sophisticated level. Now is the perfect time to give your teeth the celebrity treatment and switch to Sonicare to really experience the difference.

The brush is able to deliver a unique whole mouth clean feeling thanks to its five brush modes that allow you to tailor your brushing according to your needs as well as your dental professional's advice. The brush modes range from:

- Clean – the standard mode for a whole mouth clean
- White – removes surface stains to white teeth
- Polish – brightens and polishes teeth to bring out their natural brilliance
- Gum Care – gently stimulates and massages gums
- Sensitive – an extra-gentle mode for sensitive teeth

Highly charged

DiamondClean's chrome base also features a unique charging technology that fully charges the toothbrush as it rests in the glass – making it stylish enough to display in the most fashion-forward bathroom. Not only is Sonicare DiamondClean Philips' most advanced brush yet, it's also our most easy to use and stylish. DiamondClean's power handle has a ceramic finish and a chrome accent ring highlights the elegant neck of the brush. The technology in the handle is hidden so that the sleek matte white finish of the brush is uncluttered by electronic visual displays. Only when the on button is pressed will the modes illuminated to reveal the array of options.

Dentists and hygienists have treated and continue to treat patients with Carpal Tunnel Syndrome CTS, a condition often brought about by repetitive wrist movements. Now is the perfect time to upgrade to the unique design of the Sonicare DiamondClean's power handle to have a brush that performs like no other, enabling you to keep your brush charged and ready for more efficient brushing experience.

How Much Do You Care for Your Hands?

By Beverley Watson RDH, Kings College, London

LONDON, UK: It is understood that out of many professions, Dental Hygienists are in the high risk category of suffering from Repetitive Strain Injury RSI or Carpal Tunnel Syndrome CTS. This article aims to evaluate ways to reduce this strain by using the Ultra Sonic Scaler USS as much as possible and by choosing the most beneficial hand instrument on the market today to reduce this risk.

Two widely used brands of Hand instruments are to be evaluated as a comparison, LM DuragradeMax and American Eagle XP Technology.

Method: Online research publications.

Conclusion: After reviewing the information from both LM and American Eagle instruments, it was found that some parts of the LM information in Figure 5 was not able to clearly state what it was trying to prove. Yet with electron microscopy photographs and the Rockwell hardness test proves the hardness of the cutting edge of American Eagle instruments.

Objectives: To determine the best ways a Dental Hygienist can avoid RSI or CTS through the information from both LM DuragradeMax and American Eagle XP Technology.

Results: Brush heads also sport a new diamond-cut tuft formation which delivers Sonicare's standard sized ProResults brush heads, providing you with both superior plaque removal and whiter teeth. The heads come in two sizes – Standard and Compact – for focused cleaning in areas of special need, for orthodontic patients and those with smaller mouths.

Contact Information

For more information about Philips Sonicare DiamondClean or the Philips Sonicare range, including copies of clinical studies, visit www.mea.philips.com/e/ oralhealthcare/area/
Are your patients’ dentures truly clean?

Dentures contain surface pores in which microorganisms can colonise.1

Corega® cleanser is proven to penetrate the biofilm* and kill microorganisms within hard-to-reach surface pores.2

SEM images of denture surface.

*In vitro single species biofilm after 5 minutes soak


Date of preparation: June 2014.
Ref: CHSAU/CHPLD/0008/14c.

Help your patients eat, speak and smile with confidence with the Corega® denture care regime.
In ‘bleeding on probing’ trials over 4 weeks, parodontax® demonstrated significant effects in reducing bleeding gums by 22% (p<0.01)

Bleeding on probing increased after 4 weeks of brushing with the fluoride control toothpaste

Adapted from Saxer et al 1994. All interdental spaces from 6+ to +6 were tested at baseline and 4 weeks for bleeding on probing on the right side (buccal) and left side (lingual). Findings were recorded as 0= no bleeding; 1= slight/isolated bleeding; 2= marked bleeding. Mean scores were determined. N=22.

Baseline values [Mean SD]: Control (fluoride-containing toothpaste) group 24.75 (6.34); parodontax® group 25.40 (6.80). After 4 weeks: Control (fluoride-containing toothpaste) group 26.00 (9.14); parodontax® group 19.80 (7.38). *parodontax® vs control p<0.05.
Prevention: Take regular hand breaks to stretch and exercises the muscles, tendons and ligaments. See Figure 2 for some possible exercises.

Breaks don’t only include time away from scaling, but also time away from the computer and writing notes. Typing can also compress the nerves in the Carpal Tunnel.

Treatment: If it is not possible to take long term time out from the activity causing the repetitive strain on the small muscle groups, then it is necessary to take regular short breaks and stretch (Figure 2, 3).

A hand splint, the hand is held in a relaxed position to take pressure of the Median nerve running through the Carpal Tunnel and as a final resort surgery.

A brief history of Hygiene

The earliest recorded text associated with teeth cleaning dated 5000 BCE where tooth picks were used in Mesopotamia (earliest Iraq) according to the Medicine Time line of Dental Hygiene, but it was not until 1915 in USA, Connecticut that Alfred C. Fones trained 97 Dental Hygienists and the Dental Act set regulations stating their duties. Then in UK 1943 saw the 1st Dental Hygienists trained in the Women’s auxiliary Army WAFF Instruments: The 1st Dental hand instruments were very thin and heavy with smooth metal handles requiring a very tight grip. Later a cross hatch was scored into the metal handles for easier grip but were still very thin, wider lighter steel gripped handles were introduced and in the last 10 years a wider ergonomic soft silicone was used around a metal inner part then came into production, a very light completely resin handle with a grip for less wear on the muscles and tendons. Ultra Sonic Scalers have dramatically improved the Dental Hygienists ability to remove hard deposits from the tooth surface by either working in a Magnetoconductive or Piezo electric capacity. This reduces the need for excessive forces applied by the hand over an extended period of time increasing the risk of strain and inflammation of the wrist muscles and tendons resulting in RSI or CTS (Figure 4).

Sharpening: Numerous articles state the different methods of sharpening instruments. Arkestone different shapes round, flat, long, short, Different sizes, angles, grades course, medium, fine. Machines: The Hu-Freidy instrument sharpener, the LM Rondo- plus electrical disc sharpener

The Nelvart Whittler to name a few.

The consistency of the angulation is unpredictable and operator error possible. It is possible to affect the cutting edge, causing more strain on the fingers hand and wrist. It is human nature not to sharpen immediately when required. Figure 5 shows the different types of next generation hardened steel.

Results: LM handles present to be ergonomically superior with a wider silicone grip to help keep the Carpal Tunnel open, however they do still contain an inner part of steel. This runs the entire length of the handle increasing the overall weight compared to the completely resin handle of the American Eagle.

The XP Technology instruments requires no sharpening at all, and will allow more repetitive strokes with minimal pressure on the tendons and wrist. The LM DuraGradeMax states a hardened steel alloy more durable than the XP Technology. It is advised to send the instruments back to the LM company for factory sharpening, requiring double the amount of instruments in order to continue a full working schedule, resulting in LM being more cost effective. Once the XP technology tips becomes dulled it is feasible to use their Quick tip to replace the tip at less cost than the full instrument.

The statistics in Figure 7 do not clearly state how the results were determined for LM instruments, it is not clear what numbers 9, 7, 5 and 3 represent, minutes, hours, Days, Strokes? It is possible however to see in photographic evidence 15000 strokes to 1500 from American Eagle instruments.

Regarding the hardness of the Steel alloy of the LM instruments there is no evidence to support this but the American Eagle XP instruments have the Rockwell hardness test to prove their claim.

Conclusion: In conclusion the Ultra Sonic Sealer should be used as much as possible to avoid excessive strain on the transverse carpal ligament and median nerve. It is clear that some calculus deposits remain interdentally after Ultra Sonic Scaling alone. Ultra Sonic Scaling alone is not sufficient and hand instrumentation is necessary in conjunction with Ultra Sonic Scaling.

The correct choice of hand instrument is essential for a Dental Hygienists to help avoid RSI. It seems the American Eagle lightweight resin handle with the XP Technology blade will be of most benefit long term. Due to its superior strokes carried out 15000 to 1,500 before starting to dull.

For this reason it seems the American Eagle XP technology would be in the instrument of choice compared to the LM DuraGradeMax. The American Eagle XP will ensure less pressure is exerted on the median nerve, the transverse ligaments and the carpal tendons reducing the risk of RSI or CTS.

References:
1. NHS UK choices website May 2014
2. May 2012, RDI Feature, No more dull instruments, Diane Glasscoe Watterman RDH, BS, MBA
4. Figure 1: http://en.wikipedia.org/wiki/File:Carpal_Tunnel_Syndrome.png
5. Figure 2/3/4: Google images
6. Figure 5: DG Double Graceys XP technology next generation http://www.lm-dental.com/sites/Instruments/files/materials/duragrademax_en_flat.pdf
7. Figure 6: DG Double Graceys XP technology next generation
8. Figure 7: http://www.lm-dental.com/sites/Instruments/files/materials/duragrademax_en_flat.pdf