Geneva, Switzerland: World Oral Health Day (WOHD), which takes place annually on 20 March, inspired many national dental associations, dental students and other participants around the globe this year to organise a wide range of awareness-raising activities. According to the FDI World Dental Federation, reports are only just coming in from across the world and signs are that the event has exceeded expectations.

Over 300 students gathered in Amsterdam in the Netherlands for the second edition of the ToothCamp, a theatrical informational event that seeks to educate children and adolescents about dental issues. The participants were able to try out dental tools, as well as learn more about the benefits of eating healthily and about the importance of optimal oral health through exciting chemical experiments with acid and lime or porcelain and abrasives under the supervision of biology, chemistry and physics experts.

Hong Kong’s Department of Health organised an oral health carnival, which attracted an audience of about 2,300 local citizens. Through interactive games, exhibitions on oral health information and teeth-cleaning demonstrations, the public were reminded of the importance of taking care of one’s oral health from an early age by adopting good oral self-care habits and seeking regular professional oral care.

In Costa Rica, the second edition of Lavatón was organised by the Colegio de Cirujanos Dentistas de Costa Rica, the local dental association. Dental professionals participating in this initiative visited more than 35 schools to educate students on toothbrushing, disease prevention and important oral hygiene habits. On 20 March, thousands of students across the country brushed their teeth simultaneously as part of Lavatón.

In Vietnam, over 6,000 people participated in the Run for Life WOHD 2015 race, which was sponsored by the Vietnam Odonto-Stomatology Association, Unilever and the Vietnamese Ministry of Health.

Unilever Kenya’s Closeup toothpaste brand and the Kenya Dental Association kicked off a new partnership in the town of Naivasha to support the WOHD “Smile for life” campaign with free dental check-ups and toothbrushing lessons that they will be rolling out across the country.

The “Smile for life” message was also broadcast to the world via the giant NASDAQ screen in Times Square in New York. A collage was shown of pictures that were individually created by users of a poster application specially introduced by the FDI for WOHD.

As the official media partner of WOHD 2015, Dental Tribune International provided comprehensive coverage of the FDI’s message. Among other activities, the publisher helped promote WOHD through news articles, banners and advertisements in its various international print publications and on its website, www.dental-tribune.com, including a topic page solely dedicated to WOHD 2015.
Shape and colour – factors in sectional matrices as well?

By Prof. Claus-Peter Ernst

Direct composite restorations can now be considered a standard treatment method in the posterior region [1, 3]. However, treatment modifications should be regarded toward extension and stress, and this can have a definite influence on long-term survivability. There are many factors that determine the long-term success of a composite restoration: tightly sealed edges are primarily guaranteed by the adhesive technique [2]. For dental materials, besides low shrinkage stress [4, 11], the material also has a high flexural strength [6, 10] in order to minimise the risk of the restoration undergoing a cohesive-type failure. A fractured filling is clearly a more dramatic event for the patient than a discoloured edge. For the patient, the success of direct posterior tooth treatment with composites thus depends on its stability. Besides the adhesive technique and the selection of materials for the restoration, the crucial key function of correct light polymerisation also plays a decisive role [5]. It is completely possible to double the flexural strength of one’s own composite just by using the correct light curing and light curing technique. A further possible influence on the stability of the interproximal contact is the interproximal contact surface of the interproximal surface. If this is shaped like a natural tooth, the interproximal contact is at the height of the tooth equator and the marginal ridge is not too eccentric. This reduces the risk of ridge fractures – both purely cohesive-chipping fractures as well as more complex, mixed cohesive/adhesive failure pattern. Linhart et al. [8] were able to show that the stability of an interproximal composite restoration can be increased significantly by using an anatomically shaped matrix. The correct positioning of the interproximal contact also facilitates the achievement of sufficient contact strength – provided clasp rings are used correctly. Surprisingly, the interproximal contact strength is not the result of the pressure of a wooden wedge; it is primarily caused by the separation force of the sectional matrix ring [7, 9]. Autonomically – as a side effect – fewer interproximal food impactions occur as a result.

For this reason, sectional matrices are now the first choice when it comes to correctly designing interproximal contact surfaces. Circular matrices, even when they are anatomically shaped and used when it is not possible to fix sectional matrices in place. This is the case, for instance, for distal cavities on the last tooth in a row, as well as for teeth that are not phonetically correct in position as for example a rotated tooth. The general acceptance of sectional matrix systems is also shown by the extensive range of sectional matrices and rings, which are now available. In general, sectional matrices can be roughly divided into two groups: dead-mart matrices and stable steel versions. The supporters of dead-mart sectional matrices like their easy mouldability and adaptability to the tooth. However, critics dislike the lack of stability and coloration. The correct positioned and the contact area. One benefit of this matrix system is the almost black color, which has been achieved using a special dyeing process (no coating) for the metal carrier foil. This produces an outstanding contrast in the transition to the hard tooth tissue. This makes it much easier to inspect the cervical seal, as there is no ridge, a minor amount of abfraction can be visible. After explaining all possible treatment options to the patient, there was agreement that the best option might be the directly placed resin-in-composite restoration. Figure 11 shows the excavated mesio-occlusal cavity, isolated with rubberdam and also equipped with the LumiContrast separation ring. In contrast to case 1, the interproximal surfaces were far more evenly compared to case 1. For this reason, the triangular silicone sleeves were fitted to the LumiContrast separation ring. This made it possible to better adapt the composite filling to the sides of the preparation and thus consequently minimise the material amount used. In the finishing and polishing stage, the cylindrical sleeves can be fitted into the proximal cavity, isolated with rubberdam and equipped with the LumiContrast sectional matrix system under rubberdam. Due to the silicone sleeves that can be fitted immediately from case to case, e.g., only one ring foot may be needed to be filled with a sleeve, the other may remain free. This significantly increases flexibility in using the clamp rings and may simplify the preparation procedure in that there is no need to prepare the proximal contact. The removal of the silicone inlets has to be taken care of. Figure 9 shows the finished composite restoration (Optibond FL /Kerr, Venus Diamond A5/Heraeus Kulzer); figure 7 shows the filled proximal cavity with MHI. The excised, prepared cavity was fitted to the LumiContrast sectional matrix in combination with the associated separation ring under rubberdam isolation. The extremely stable and thus stress-resistant tri- angular silicone sleeves that enable improved interproximal sealing of the sides, as they help press the sectional matrix fills to the sides of the interproximal preparation surfaces. However, this was not necessary in the present case. Figure 5 shows the cavity filled with phosphoric acid gel, figure 4 shows the adhesive surface sealed with a traditional two-bottle adhesive (Optibond FL, Kerr). The resto- ration was built out of a nano hybrid composite (Venus Diamond A5, Heraeus Kulzer, Hanau, Germany) using an oblique lay- ing technique (Fig. 5). Figure 6 shows the same tooth at a fur- ther follow-up appointment one year later.

Clinical case 2: 2nd lower right molar

The 50-year-old patient presented with a cohesive-type fracture in the mesio-occlusal amalgam filling of his lower right 2nd molar – this offered the rare opportunity for a clinical-visual inspection of the interproximal surface of the 2nd molar created one year earlier.

Clinical case 3: 1st lower right molar

The 20-year-old patient exhibited an isolated mesial caries (MHI). His lower right 1st molar required restorative treatment. In the mesial-buccal surface (Fig. 11). For cost reasons, as well as from the viewpoint of minimal invasively curing treatments, it was agreed with the patient to initially undertake direct treat- ment in the form of a resin composite restoration. Figure 12 shows the excavated, prepared cavity equipped with the LumiContrast sectional matrix system under rubberdam. In the present case – similar to case 1 – it was again not necessary to fit the silicone sleeves to the LumiContrast clamping ring. Sufficient moulding and adaptation of the sectional matrix foil was possible there. The excellent contrast between the almost black color and the interproximal -cervical tooth enamel margin can once again be seen. After the direct composite restoration was again made out of the nano hybrid composite Venus A3 (Kerr), this time in the shade A2.5 using a traditional two-bottle adhesive system (Optibond FL, 199
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While anxiously waiting for the “Downtown Abbey” television series to start up again, I got my English history I by reading the history of Wentworth Castle. The book covered the trials and tribulations of an aristocratic family in a home three times the size of Buckingham Palace. I was taken by surprise when the author mentioned the cause of death of a high-ranking nobleman as “quinsy throat.”

In modern times, with the arrival of antibiotics, you wouldn’t hear of this – at least not in a developed nation. The more I thought about it, I don’t think I had heard the term “quinsy sore throat” for a very long time. Answered here, if your throat is starting to close off, you’ve probably gotten yourself to an emergency room “pronto.” It is an emergency, if your throat is starting to close off, you’ve probably had a cold. Our instructor pointed to the surveillance camera and said, “Your instructor, he works for Walgreen’s.” When I asked my local pharmacist about Walgreen’s policy, he pointed to the surveillance camera and said, “Your instructor, he works for Walgreen’s.”

By Patricia Walsh, RDH, USA

Reflecting on oral-health's good old iodine days

While Iodone cream is the form of choice for illegal drug labs, some smaller manufacturers are known to combine 1% iodine ethyl alcohol with some hydrogen peroxide. Some businesses have removed iodine from their cleansing agents, but they are simply restricting large quantity sales – i.e., more than $100 worth. When I asked my local pharmacist about Walgreen’s policy, he pointed to the surveillance camera and said, “Your instructor, he works for Walgreen’s.”

Mama don't take my Mecurochrome away

Mecurochrome and merthiolate were also very popular in my childhood. We proudly wore our knees like playground battle scars. When it was discovered that mercury was detrimental to one’s overall health, Mecurochrome was banned from general use. The U.S. Food and Drug Administration has only very strict limitations on the sale of Mercurochrome in 1998 and stated that it was no longer considered to be a GRAS (generally recognized as safe) over-the-counter product. Mecurochrome was another common form of choice for illegal drug labs, some smaller manufacturers are known to combine 1% iodine ethyl alcohol with some hydrogen peroxide. Some businesses have removed iodine from their cleansing agents, but they are simply restricting large quantity sales – i.e., more than $100 worth. When I asked my local pharmacist about Walgreen’s policy, he pointed to the surveillance camera and said, “Your instructor, he works for Walgreen’s.”

By Patricia Walsh, RDH, USA

Patricia Walsh, RDH, (Photo: Hygiene Tribune U.S. Edition)
The Ultimate Sonicare Power Toothbrush

New Philips Sonicare DiamondClean—the ultimate clean for ultimate results.

Help your patients experience the difference of Sonicare technology. It will be love at first brush.
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• Clinically proven to whiten teeth in just 1 week3

Infection control in an era of emerging infectious diseases

By Eve Cuny, USA

More than three decades have passed since the emergence of human immunodeficiency virus (HIV) as a global pandemic. More than any other infection, it is possible to single out HIV as the primary driving force changing infection control practices in dentistry. Prior to the mid-1980s, it was uncommon for dentists and allied professionals to wear gloves during routine dental procedures. Many dental clinicals did not use heat sterilisation, and disinfection of surfaces was limited to a cursory wipe with an alcohol-soaked gauze sponge.

This was despite our knowledge that HIV was known to spread in clusters in the offices and clinics of infected dentists and that dentists were clearly at occupational risk for acquiring HIV.

Today, many take safe dental care for granted, but there is still much to be done in ensuring an infection-free environment for providers and patients. HIV has fortunately proven to be easily controlled in a clinical environment using the same precautions as those effective for preventing the transmission of HBV and hepatitis C virus.[1] These standard precautions include the use of personal protective attire, such as gloves, surgical masks, gowns and protective eyewear, in combination with surface cleaning and disinfection, instrument sterilisation, hand hygiene, infection control and other basic infection control precautions. Sporadic reports of transmission of blood-borne diseases associated with dental care continue, but are most often linked to breaches in the practice of standard precautions.

Emerging and re-emerging infectious diseases present a real challenge to all health care providers. Three of the more than 50 emerging or re-emerging infectious diseases identified by the Centers for Disease Control and Prevention and the World Health Organization (WHO) include Ebola virus disease (EVD), pandemic influenza and severe acute respiratory syndrome. [2, 3] These previously rare or unidentified infectious diseases burst into the headlines in the past several years when they exhibited novel or uncharacteristic transmission patterns.

Concern about emerging infectious diseases arises for several reasons. When faced with a particularly deadly infectious disease such as EVD, which can be spread through contact with an ill patient's body fluids, healthcare workers are naturally concerned about how to protect themselves if an ill patient presents to the dental clinic. With diseases such as pandemic influenza and severe acute respiratory syndrome, which may be spread via inhalation of aerosolised respiratory fluids when a patient coughs or sneezes, the concern is whether standard precautions will be adequate.

In addition to standard precautions, treating patients with these diseases requires the use of transmission-based precautions. These encompass what are referred to as contact, droplet and airborne precautions for diseases with specific routes of transmission. Transmission-based precautions may include patient isolation, placing a surgical mask on the patient when he or she is around other people, additional protective attire for care providers, and in some cases, the use of respirators and negative air pressure in a treatment room. In most cases, patients who are contagious for infectious requiring droplet or airborne precautions should not be treated in a traditional dental clinic setting.

Updating a patient's medical history at each visit will assist dental health professionals in identifying patients who are symptomatic for infectious diseases. Patients with respiratory symptoms, including productive cough and fever, should have their dental treatment delayed until they are no longer symptomatic. Additionally, health care professionals who are symptomatic should refrain from coming to work until they have been fever-free for 24 hours and have not taken fever-reducing medication for 24 hours.

In most cases, a patient with symptoms as severe as those experienced with EVD will not present for dental care and therefore extraordinary screening and protection protocols are not recommended. If a patient is suspected of having a highly contagious disease, he or she should be referred to a physician, hospital or public health clinic.

Dental professionals should take action to remain healthy by being vaccinated according to accepted public health guidelines, understanding that the recommendations may differ according to the country of residence. Performing hand hygiene procedures at the beginning of the day, before placing and after removing gloves, changing gloves for each patient, wearing a clean gown and appropriate protective eyewear are all positive actions that help prevent occupational infections. In addition, cleaning and heat sterilisation of all instruments and disinfection of clinical surfaces ensure a safe environment for patients. There is solid evidence that dental care is safe for patients and providers when standard precautions are followed, but patients and dental health care workers are placed at risk when precautions are compromised and breaches occur.

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