DENTAL TRIBUNE

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News in Brief

Refs and schools warned on GAA mouthguard rule

Referees have been warned to be extra vigilant about underage players not wearing mouthguards after several college footballers were photographed playing without them in Munster and Leinster games. According to the Irish Examiner, from January 1, all underage players in Ireland from minor level down must wear the protection in football matches. Punishment for a player found not to be wearing one is a caution followed by an ordering off the field if he still does not wear one. The GAA have advised all clubs and schools to buy "bite and boil" gumshields in bulk to ensure no player runs the risk of not having one on the day of a game and being ordered off.

Dentists given second chance in Haiti

Three years after a devastating earthquake destroyed much of the infrastructure of Haiti's largest city, including its dental offices, nine dentists are rebuilding their practices and their lives with help from their American colleagues and the American Dental Association (ADA) fundraising effort Adopt-a-Practice: Rebuilding Dental Offices in Haiti. In response to the disaster, the ADA and Health Volunteers Overseas (HVO) launched a fundraising campaign in July 2010 to help Haitian dentists affected by the earthquake rebuild their practices. Adopt-a-Practice: Rebuilding Dental Offices in Haiti raised \$123,578.76 in donations from dentists and contributors worldwide. Seven dentists have already received new dental office equipment and two more dentists will receive equipment in the coming weeks.

Petition launched to save dental practice

Residents in Blacon, Chester have launched a petition in a bid to save a dental practice from closure. According to Chester First, the health clinic and dental surgery on Church Way is to be demolished as part of the £18 million redevelopment of the area. A new health centre will be built but health chiefs have confirmed the dental surgery will not be replaced. They insist the Church Way practice was only at the location while new premises – now open - was being developed in Volunteer Street. Residents, among them parents with a lack of transport and the elderly who have mobility problems, say they are unable to make the alternative journey and are angry and worried they will now face long waiting lists at other dental practices.

 $www. dental \hbox{-tribune.co.} uk$

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Rita ZamoraImpact of social media on your practice

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Work the World Students provide dental care in Nepal

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A philosophy of being Joanna Taylor discusses communication in the workplace

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Call to ban non-medics performing cosmetic surgery

Royal College of Surgeons calls for new professional standards



News

Soft drinks

New tooth decay warning

nly surgeons should provide cosmetic surgery and only doctors, dentists and nurses who have undertaken appropriate training should provide nonsurgical cosmetic treatments such as Botox, recommends new professional standards for cosmetic practice. Currently certain cosmetic treatments can be administered by anyone, anywhere with no medical training.

The guidelines state that as standard practice, practitioners should discuss relevant psychological issues (including any psychiatric history) with the patient to establish the nature of their body image concerns and their reasons for seeking treatment. They should not at any point imply that treatment will improve a patient's psychological wellbeing.

Aimed at all doctors, dentists and nurses involved in cosmetic practice, the document entitled Professional Standards for Cosmetic Practice focuses on the behaviour and competencies medical professionals should be expected to demonstrate when providing cosmet-

ic procedures.

The standards, issued by the Royal College of Surgeons (RCS), state that financial deals such as time limited discounts should be banned and stringent psychological assessment promoted. They lay out the professional duty practitioners have to their patients, including the need to ensure they have a clear understanding of the risks of the procedure, outlining consequent aftercare and being transparent about costs from the outset.

Developed by a working group of key professionals including surgeons, psychiatrists, psychologists and dermatologists, key points in the professional standards include:

- Practitioners should not imply that patients will feel 'better' or 'look nicer', and should instead use unambiguous language like 'bigger' or 'smaller' to describe what that patient is trying to change.
- All practitioners should consider whether they should refer a patient to a clinical psychologist before proceeding with further consultations or treatments. Pre-procedure discussions should include the disclosure of relevant psychiatric history such as eating disorders and the practitioner should document any signs or symptoms of Body Dysmorphic Disorder. Psychological factors contributing to the motiva-

tion to undergo the procedure and expectations of outcome should also be assessed.

- Marketing and advertising must be honest and responsible, using only real patient photographs that have not been air brushed or digitally enhanced.
- The RCS recommends that only licensed doctors, regis-

tered dentists and registered nurses who have undertaken appropriate training should provide any cosmetic treatment.

• Only those who have qualified as a medical doctor and undertaken post-graduate surgical training should carry out invasive procedures such as breast surgery or liposuction.



First Green Dentistry ConferenceTM held

he Eco-Dentistry Association® has an-. nounced that it will hold the industry's first dental conference devoted exclusively to high-tech, environmentally sound dental practices. The event will take place May 3 and 4, 2013, at the eco-friendly Robert Redford Conference Center in Sundance, Utah, part of the Sundance Resort. Attendance is limited to the first 100 registrants.

The 2013 Green Dentistry ConferenceTM will showcase the information and products dental professionals need to create and maintain state-ofthe-art green practices. "A" List dental speakers include

Gary Takacs of Takacs Learning Center, who will share the essentials of branding and marketing a green dental practice, as well as dental technology gurus Marty Jablow, DMD, Paul Feuerstein, DMD, and John Flucke, DDS who will talk about how dental technologies reduce waste and save energy, and boost the practice bottom line. Bill Roth, noted sustainability author and speaker, will lead a break out group called "Green Builds Business."

The conference will offer panel discussions on everything from building and financing a high-tech, green dental practice to creating a successful green hygiene program. Unique, small group, hands-on opportunities with dental technology such as lasers and CAD/CAM systems will also be available.

The 2013 Green Dentistry Conference™ will offer attendees something rarely found at dental conferences: promoting the overall health and wellbeing of the dental team. Optional morning yoga and meditation will be available for all attendees and t here will be presentations focusing on the importance of work-life balance to support personal and professional success.

On Sunday, May 5, attendees will have the option of hiking in the 6000 acres of pristine wilderness adjacent to the Sundance Resort, enjoying fly-fishing, golf or the spa.

sponsor-Customisable ship opportunities are available for companies offering green dental, green building,

or wellness products and ser-

Discounted early bird registration opens Tuesday, January 22nd, 2013 at www.ecodentistry.org/conference. Contact info@ecodentistry.org DT



Soft drinks should have tooth decay warning



esearchers from the University of Auctumessay any health warnings about soft drinks should include the risk of tooth decay, following a new study that looks at the consumption of sweet drinks and fluoridated water by Australian children.

"There is growing scrutiny on sweet drinks, especially soft drinks, because of a range of detrimental health effects on adults and children," says Dr Jason Armfield from the Australian Research Centre for Population Oral Health at the University of Adelaide's School of Dentistry.

"Tooth decay carries with it significant physical, social and health implications, and we believe the risk of tooth decay should be included in any warnings relating to sweet drinks," he says.

Dr Armfield is the lead author of a new study published this month in the American Journal of Public Health, which looks at the consumption of sweet drinks and fluoridated water by more than 16,800 Australian children.

The study found that the number of decayed, missing and filled deciduous (or baby)

teeth was 46 per cent higher among children who consumed three or more sweet drinks per day, compared with children who did not consume sweet drinks.

"Consistent evidence has shown that the high acidity of many sweetened drinks, particularly soft drinks and sports drinks, can be a factor in dental erosion, as well as the sugar itself contributing to tooth decay," Dr Armfield says.

"Our study also showed that greater exposure to fluoridated water significantly reduces the association between children's sweet drink consumption and tooth decay. This reconfirms the benefits of community water fluoridation for oral health.

"Essentially, we need to ensure that children are exposed less to sweet drinks and have greater access to drink fluoridated water, which will result in significantly improved dental outcomes for children," he says.

"If health authorities decide that warnings are needed for sweet drinks, the risk to dental health should be included." DT

Charity raises £40k

he Mouth Foundation £40,000 from its 7th annual Mouth Cancer 10KM Awareness Walk, which took place in London's Hyde Park on Saturday 22nd September 2012.

The Mouth Cancer 10 KM Awareness Walk has been designed to increase awareness and generate much needed funds to allow the charity to provide support for mouth cancer patients and carers.

Last September almost 800 people travelled to the capital to walk 15,000 steps it took to complete a 10 KM course. Together they celebrated survivorship, remembered lost dear ones and had fun. There were medals, T-shirts and goodie bags for everyone who took part.

The Founder of the Mouth Cancer Foundation Dr Vinod Joshi says "The Mouth Cancer 10KM Awareness Walk proved to be the most successful ever in 2012. The profit from the walk, after costs, will be ploughed into our latest initiative the Mouth Cancer Screening Accreditation Scheme which will launch in April this year. This is brand new and will accredit dental practices who actively prove they regularly carry out thorough head and neck cancer screenings and operate clearly documented referral pathways with a local specialist department." DT



Are berries beneficial to our health?

esearch has suggested that compounds unat give ourful fruits their rich hues, especially berries, promote health and might even prevent cancer. But for the first time, scientists have exposed extracts from numerous berries high in those pigments to human saliva to see just what kinds of health-promoting substances are likely to survive and be produced in the mouth.

The researchers have discovered that two families of pigments that provide berries with their colours, called anthocyanins, are more susceptible to degradation in the mouth than are the other four classes of these pigments.

The Ohio State University study also showed that bacteria living in the mouth are responsible for most of the breakdown of these compounds that occurs in saliva. Researchers are investigating whether it's the berry pigments themselves, or instead the

products of their degradation, that actually promote health.

The researchers exposed extracts of anthocyanin pigments from blueberries, chokeberries, black raspberries, red grapes and strawberries to the saliva collected from 14 people. The five fruits selected for study allowed the scientists to test the six distinct families of the anthocyanin pigments. Researchers purified the anthocyanins from each berry type and added the extracts to saliva.

"Our observations suggest that the bacteria within one's oral cavity are a primary mediator of pigment metabolism. The bacteria are converting compounds that are present in the foods into metabolites," Failla said. "One area of great interest is whether the health-promoting benefits associated with eating anthocyanin-rich fruits like berries are provided by the pigment itself, the natural combinations of the pigments in the fruit, or the metabolites produced by bacteria in the mouth and other regions of the gastrointestinal tract."

There is context for this study that further complicates the understanding of anthocyanins' benefits. Multiple studies have led to the conclusion that anthocyanins themselves are very poorly absorbed by the body.

"If anthocyanins are the actual health-promoting compound, you would want to design food products, confectionaries and gels containing mixtures of anthocyanins that are stable in the mouth. If, on the other hand, the metabolites produced by the metabolism of anthocyanins are the actual health-promoting compounds, there will be greater interest in fruits that contain anthocyanins that are less stable in the oral cavity," Failla said. "We lack such insights at this time."

Editorial comment

fascinating webinar by Louis Mac-Kenzie on Minimally Invasive dentistry. The second in Healthcare Learning: Smile-on's 2013 webinar series, Louis' webinar looked at the minimally invasive management of restored teeth.

I must admit, I am a big fan of webinars. They are a great way of gaining knowledge without the hassle of travel. Many of the ones I watch that are related to publishing etc are produced in America, an expensive pastime if I was to go see them in person!

I also love the fact that I can curl up on my sofa or cook dinner whilst watching. There's a lot to be said for the comforts of home when understanding the intricacies of perio disease or matrix

So, if you've never experienced a webinar, take a look at www.dentalwebinars.co.uk register and take a look at the archive. Here you will be able to watch the format and get a feel for how they work before embarking on your first live experience!

Upcoming webinars include: Feb 21 Anthony Roberts The clinician's role and patient's responsibilities in the management of periodontal disease; Feb 26 Anoop Maini Short Term Orthodontics for the GDP; March 5 Colin Campbell Getting Serious about Implantology with the ITI. See you at the webinar! m

Do you have an opinion or something to say on any Dental Tribune UK article? Or would you like to write your own opinion for our guest comment page?

If so don't hesitate to write to: The Editor. Dental Tribune UK Ltd, 4th Floor, Treasure House, 19-21 Hatton Garden. London, EC1 8BA

Or email: lisa@healthcare-learning.com

Acupuncture can relieve dry mouth

study published in Annals of Oncology has revealed _that acupuncture can relieve symptoms of xerostomia.

Dry mouth is a common side effect of radiotherapy, and as many as 41 per cent can still be suffering from it five years after treatment.

Doctors at seven cancer centres in the UK recruited 145 people suffering from radiationinduced xerostomia.

The researchers found there were no significant changes in saliva production; however individual symptoms were significantly improved among the group receiving acupuncture.

Dr Richard Simcock, one of the authors of the study, said: "The amount of saliva produced does not necessarily influence the experience of a dry mouth. Xerostomia is therefore an entirely subjective symptom - it is what the patient says it is, regardless of salivary measurement."

The researchers say that further studies are needed to refine the acupuncture technique, but they believe that it could be easily incorporated into the care of patients with xerostomia.





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Antibacterial agent found in freshwater lakes

new study conducted by researchers at the University of Minnesota, has shown that the common antibacterial agent triclosan, used in soaps and many other products is found in increasing amounts in several Minnesota freshwater lakes.

In addition, the researchers found an increasing amount of other chemical compounds, called chlorinated triclosan derivatives that form when triclosan is exposed to chlorine during the wastewater disinfection process. When exposed to sunlight, triclosan and its chlorinated derivatives form dioxins that have potential toxic effects in the environment. These dioxins were also found in the lakes.

Triclosan was patented in 1964 and introduced into the market in the early 1970s. Since then it has been added to many consumer products including soaps and body washes, toothpastes, cosmetics, clothing, washing up liquid, and kitchenware. Beyond its use in toothpaste to prevent gingivitis, the U.S. Food and Drug Administration has found no evidence that triclosan in antibacterial soaps and body washes provide any benefit over washing with regular soap and water.

The researchers studied the sediment of eight lakes of various sizes throughout Minnesota with varying amounts of treated wastewater input.

Sediment collected from large lakes with many wastewater sources had increased concentrations of triclosan, chlorinated triclosan derivatives, and triclosan-derived dioxins since the patent of triclosan in 1964. In small-scale lakes with a single wastewater source, the trends were directly attributed to increased triclosan use, local improvements in treatment, and changes in wastewater disinfection since the 1960s. When UV disinfection technology replaced chlorine in one of the wastewater treatment plants, the presence of chlorinated triclosan derivatives in the sediments decreased.

In the lake with no wastewater input, no triclosan or chlorinated triclosan derivatives were detected. Overall, concentrations of triclosan, chlorinated triclosan derivatives, and their dioxins were higher in small lakes, reflecting a greater degree of wastewater impact. DT

Denplan Launch NHS **Viewpoint Seminars**



enplan has launched the UK's biggest debate to discuss the new NHS contract with both UK-wide seminars and a discussion forum to encourage dental professionals to have their say.

Denplan's Viewpoint Seminars have been arranged around the country so that dental professionals can receive some much needed clarity on how the new contract may effect practice life and get involved with the debate.

Not only this, but for those who cannot attend the Seminars, Denplan has also set up an NHS Viewpoint discussion forum at www.denplanviewpoint. co.uk, with the latest expert updates and information from the

Roger Matthews, Denplan's Chief Dental Officer, said: "Many dentists have been left in the dark when it comes to the new NHS dental contract. These Viewpoint Seminars have been designed so that dental profes-

sionals can find out exactly what the proposed changes to the contract will mean for them and their practices and have their say in the matter, so I would urge everyone to get involved".

Dates for the Seminars are as

Wednesday 20th March - Hilton Dartford Bridge, Dartford Monday 25th March - Thorpe Park Hotel, Leeds Tuesday 26th March - Kilworth

House Hotel, Leicestershire Tuesday 16th April - Village Hotel, Cardiff Wednesday 17th April - Holiday

Inn (Grove Road), Basingstoke Tuesday 30th April - Copthorne Hotel, Manchester

Wednesday 1st May - Newcastle Marriott Metrocentre, Gateshead

For more information about the Denplan Viewpoint Seminars, please call 0800 169 5697 or email eventsandtraining@denplan. co.uk, or to join in the debate, please visit www.denplanviewpoint.co.uk **DT**

Fraudulent dentist struck off



dentist has been struck off by the General Dental LCouncil (GDC) following a public hearing into allegations he made false claims to the NHS about treatment he had given to 43 different patients.

The allegations heard by the GDC's Professional Conduct Committee are in connection with incidents that happened between 2009 and 2011 when Edward Mills (Registration No.69243) was working at Truro Dental Care, 37 Lemon Street, Truro, TR1 2NR.

The Committee found that Mr Mills made a number of dishonest claims to the NHS for remuneration. He claimed for posting out oral hygiene leaflets to patients, along with oral health "passports" and prescriptions for fluoride products. The Committee found $that Mr Mills \, must have \, known \, that \,$ he was not entitled to make claims to the NHS for these activities.

In considering this case, the Committee noted: "Mr Mills' dishonesty was not an isolated incident. He made a series of dishonest claims over a period of many months. Although the amount of money he gained was relatively small (£4,000), that money was wrongly diverted from the public purse and was not used to provide NHS treatment to patients as it should have been, thus depriving patients of NHS dental care."

In the circumstances the Committee determined that the only appropriate and proportionate sanction, to maintain the standards of the dental profession and public confidence in it, was that of erasure.

Unless Mr Mills exercises his right of appeal, his name will be erased from the register in 28

More details can be found on the GDC's website.

Join the AOG for 2013 Trip to Chitrakoot



oin the AOG in Delhi, Northern India, for a trip of a life-U time and contribute 'Towards the Greater Good'. After attending the Clinical Innovations Conference in Delhi and helping with the charity work the AOG provides, you will have the opportunity to choose between two additional trips.

• Temples in Khajurado, the earthen lamps of the Aarti (prayer) Ceremony at the Ganges, the Dutch Palace, the Santa Cruz Bastilica, and the tea plantations in Munnar.

• One of the extensions also in-

cludes an experience of Kumarakom's renowned houseboats, cruising through the complex network of the spellbinding backwaters of Kerala.

The AOG is dedicated to helping less fortunate people around the world, and already provides invaluable support, educational and medical centres in India, Sri Lanka and Tanzania. If you want to get involved and really experience how different communities live, contact the AOG today.

For more information about the AOG, or on any of the upcoming charity tours, please visit www.aoguk.org

VLA Healthcare withdraws Sharps Terminator®

7LA Healthcare has announced that is has removed the Sharps Terminator® from sale in both the UK and Germany. The decision to remove the product from sale and to cease all promotional activity, was taken due to concerns over reliability and performance issues pertaining to the product, which were uncovered during NHS testing and evaluation.

The company is committed to supplying high quality products and services and is working with other manufacturers to develop alternative solutions to Sharps Terminator®. "Feedback from customers we spoke to about Sharps Terminator has been extremely positive, but it could only destroy a certain type of needles. Dentists were particularly disappointed that needles they routinely use could not be destroyed," explains Daniel Hughes, Director at VLA Healthcare. "This coupled with the issues regarding reliability and performances lead us to the decision to withdraw Sharps Terminator from the market and look for an alternative solution, which we hope to be available later in the year." **D**



Aspire Academy - for tomorrow's leaders Friday 1st March at the Dentistry Show

Free to attend

www.thedentistryshow.co.uk/leaders

Offering newly qualified dentists a clinical and professional insight into being a modern dentist and a future practice owner. If you qualified between 2007 and 2011 then this is for you - it's what you don't get taught at dental school.

- Free to attend
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- A mini-ipad up for grabs in each of the 5 sessions
- A host of online content and special offers from Smile-on
- Networking drinks after the Show
- Discounted party ticket for the Heart Your Smile Ball

Hosted by Raj Rattan with presentations from Nilesh Parmar & Prem-Pal Sehmi, Kevin Lewis, Elaine Halley and Daz Singh





Drill-less technique a hit in New Zealand



New Zealand dentist has found that children prefer the 'Hall technique'.

Dr Lyndie Foster Page, head of preventive and restorative dentistry at the University of Otago Dental School, and colleague Ms Dorothy Boyd, a

specialist paediatric dentist, trained 10 Hawke's Bay dental therapists to use the new Hall technique as part of a feasibility study funded by the Health Research Council of New Zea-

The Hall technique, developed by Scottish dentist Dr Norna Hall, involves placing a stainless steel crown over a baby molar tooth to seal the decay in, rather than the conventional method of removing the decay with a drill and then placing a filling. Starved of nutrients, the decay then stops or slows down. The crown stays in place until it falls out naturally with the tooth at about age 10.

Of the nearly 190 children between five and eight years old who took part in the Hawke's Bay study, just over half were Mori. Nearly 100 children received treatment for their decayed teeth using the Hall technique, while the remainder were treated using conventional methods. Many of the children already had six or seven fillings in their mouth, and two-thirds came from low socio-economic status areas.

Dr Foster Page said the study showed that children treated in the new way (which doesn't require anaesthetic) reported less dental anxiety than those who had received conventional care. Interestingly, almost all (90 per cent) of those treated with the Hall technique reported enjoying their clinic visit; among those conventionally treated, the figure was 52 per cent.

"After six months, children who had conventional treatment had twice as many dental abscesses and nearly three times as many replacement fillings as those who were treated with the Hall technique," says Dr Foster Page.

"At first, some parents were concerned that people might judge children who had these crowns because of the way the crowns look. Many people today want white fillings. However, after the treatment, we found that the overall positive response of children to the treatment, and the fact that children didn't need an injection or to go back for replacement restoration work, seemed to far outweigh this concern." DT

Banking group launches online banking technology



loyds Banking Group has launched a new free internet banking facility for business customers. The service allows companies such as healthcare practices that were previously unable to bank online because they needed two signatories, to process payments using internet banking.

The technology gives organisations greater control of their banking as two or three users can now authorise payment. This means that internet banking is now a viable option for businesses that require two or three signatories to sign a cheque, to set up and make payments online, or set individual payment limits for each transaction.

The facility is available through a simple online registration process once internet banking has been established for the company, and is ideally suited to GPs, dentists and pharmacists.

Businesses can apply payment limits to delegated users and the system provides easier management of their finances. The reduction of paper-based transactions also makes it easier to keep track of a payments' status.

The function supports the 'Go On UK' campaign, championed by Lloyds Banking Group, which encourages companies to move some of its services online and harness the potential of the internet to expand and help to them to expand.

Dr Charles Harris, director at Barbourne Health Centre and a customer of Lloyds TSB Commercial, said: "Our payment structure requires two authorised people to sign costs off, and normal online banking facilities don't allow for this. The accessibility of this technology will offer us greater control over our finances and it is a much welcomed move." DT

Research shows promise for Parkinson's disease



Mayo Clinic in Arizona and Banner Sun Health Research Institute suggests that testing a portion of a person's saliva gland may be a way to diagnose Parkinson's disease.

"There is currently no diagnostic test for Parkinson's disease," says study author Charles Adler, M.D., Ph.D., a neurologist with Mayo Clinic in Arizona. "We have previously shown in autopsies of Parkinson's patients that the abnormal proteins associated with Parkinson's are consistently found in the submandibular saliva glands, found

under the lower jaw. This is the first study demonstrating the value of testing a portion of the saliva gland to diagnose a living person with Parkinson's disease. Making a diagnosis in living patients is a big step forward in our effort to understand and better treat patients."

The study involved 15 people with an average age of 68 who had Parkinson's disease for an average of 12 years, responded to Parkinson's medication and did not have known saliva gland disorders. Biopsies were taken of two different saliva glands: the submandibular gland and the minor saliva glands in the lower lip.

The abnormal Parkinson's protein was detected in nine of the 11 patients who had enough tissue to study. While still being analysed, the rate of positive findings in the biopsies of the lower lip glands appears much lower than for the lower jaw gland.

"This study provides the first direct evidence for the use of submandibular gland biopsies as a diagnostic test for living patients with Parkinson's disease," Dr. Adler. "This finding may be of great use when needing definitive proof of Parkinson's disease, especially when considering performing invasive procedures such as deep brain stimulation surgery or gene therapy."

Currently, diagnosis is made based on medical history, a review of signs and symptoms, a neurological and physical examination, and by ruling out other conditions. Up to 30 per cent of patients may be misdiagnosed early in the disease.

Study identifies vital protein

-catenin is required for froot formation, a new study has found. The paper, titled "ß-catenin is Required in Odontoblasts for Tooth Root Formation", was written by lead authors Tak-Heun Kim and Cheol-Hyeon Bae, Chonbuk National University Korea School of Dentistry, Laboratory for Craniofacial Biology, is published in the IADR/AADR Journal of Dental Research.

The tooth root, together with the surrounding periodontium, maintains the tooth in the jaw. The root develops after the crown forms, a process called morphogenesis. While the molecular and cellular mechanisms of early tooth development and crown morphogenesis have been extensively studied, little is known about the molecular mechanisms controlling tooth root formation.

In this study, Kim and Bae et al show that a protein called ß-catenin is strongly expressed in odontoblasts - the cells that develop the tooth dentin, and is required for root formation. Tissue-specific inactivation of ß-catenin in developing odontoblasts produced molars lacking roots and aberrantly thin inci-

At the beginning of root formation in the mutant molars, the cervical loop epithelium extended apically to form Hertwig's epithelial root sheath (HERS), but root odontoblast differentiation was disrupted and followed by the loss of a subset of HERS inner layer cells. However, outer layer of HERS extended without the root, and the mutant molars finally erupted. The periodontal tissues invaded extensively into the dental pulp. These results indicate that there is a cellautonomous requirement for Wnt/\(\beta\)-catenin signaling in the dental mesenchyme for root formation.

"The striking tooth phenotypes in this study shed light on how Wnt signaling regulates odontoblast fate and root development," said JDR Associa te Editor Joy Richman. DT

The lasting impact of eating disorders

DT's Angharad Jones looks at eating disorders and how dental professionals can help



igures from the National Institute of Health and Clinical Excellence suggest that 1.6 million people are affected by an eating disorder in the UK. With Eating Disorders Awareness Week taking place this week (11-17 February), charity Beat are encouraging people to 'sock it to eating disorders', by organising 'silly socks' events and fundraising to help support those with these illnesses.

One of the biggest impacts eating disorders can have is on the teeth. Eating disorders cause tooth wear, which occurs when the outer tooth surface is lost as a result of chemical or mechanical activity in the mouth. All sorts of dental problems can arise as a result, such as teeth becoming short and unattractive as well as rough or sensitive. Speaking or chewing can become a problem and some people will end up with numerous restorations or having teeth removed.

Results from the Adult Psychiatric Morbidity Survey show that bulimia is the most prevalent eating disorder, making up 40 per cent of those with an eating disorder, compared to 10 per cent of sufferers having anorexia. Bulimia causes tooth erosion due to repeated acid regurgitation, and diet choices among those who are bulimic

may be acidic, with sugar free and carbonated soft drinks, sports drinks and alcohol being frequently consumed, adding to erosion.

Stress is a common aspect in all eating disorders, which can also lead to other types of tooth wear. Emma Pacey, Clinical Coordinator at the London Tooth Wear Centre® says: "The associated psychological complications of an eating disorder mean the patient may be susceptible to other types

'Dentist should not shy away from talking to their patients who present with high acid erosion on their teeth that could be attributed to an eating disorder.'

of tooth wear often caused by grinding or clenching habits, whilst obsessive behaviour can translate to tooth brushing, resulting in abrasion."

Those with bulimia also

become overly concerned with the prospect of bad breath, causing them to excessively brush their teeth. Terence, a bulimia sufferer for 11 years says bad breath took great importance for him during his illness. "After vomiting the first thing I did was clean my teeth, as I thought this would help keep my teeth strong and prevent bad breath. I was more bothered about bad breath [than oral health] and I didn't realise what I was doing [to my teeth]."

Unfortunately, oral care can often take a back seat when people are going through their illness. As with other psychological disorders, judgement may be affected, and one of the concerns likely to be at the bottom of the list is the impact their lifestyle is taking on their teeth.

Sam, who suffered from anorexia and bulimia for 15 years, has had tooth decay, intensive root canal treatment, numerous fillings and three missing teeth as a result, says: "[Oral health] wasn't high on my list of priorities, being thin was. When you have such a low opinion of vourself vour teeth...is just one thing in a long list of things that you hate about yourself."

Causative factors

Although a difficult and sensitive subject to broach, tooth wear which is deemed to be the result of an eating disorder should be acknowledged. Emma says: "Denial and shame often feature and so discussion must be without judgement, with sympathy and time. Acknowledgment and rectification of the causative factors need to be realised, otherwise treatment will be compromised.

"It is important to communicate effectively and with consideration, and provide clear explanation in an open and supportive environment."

Sam agrees: "My dentist reacted with what I perceive to be disgust and a total lack of sympathy. She was very dismissive and offered very little support and advice...it made me feel really bad about myself and like I had no one to turn to. I saw the hygienist and broke down about my problems and told her how I felt about my teeth. She was very supportive and told me there are lots of things that can be done but I would need to be referred to a private clinic."

Advice

It is also important to note that people with eating disorders may not want to listen to any advice given. Rhian, an eating disorder sufferer for 15 years, says: "I received very little advice [from my dentist]. I didn't seek any and I wouldn't have been willing to accept any ei-

Allison, who has suffered from both anorexia and bulimia, reiterates this. "Any advice you give may usually fall on deaf ears."

Nonetheless, dentists should not be disheartened when it comes to treating patients, and still need to look out for tooth wear as a result of eating disorders. Allison encourages "every dentist not to shy away from talking to their patients who present with high acid erosion on their teeth that could be attributed to an eating disorder."

Sam's advice to dentists is: "Don't be judgemental, eating disorders are not a lifestyle choice, they are serious illnesses. Educate yourself about eating disorders, the effects they can have on teeth and the signs to look out for."

Signs to look out for include increased levels of sensitivity, and sharp or chipped front teeth. Acid erosion presents on the palatal and occlusal surfaces of the teeth mostly, where acidic fluid pools in the mouth, and back teeth become rounded and lose some of their surface characteristics, while front teeth may become translucent at the biting edges. If abrasion is also present, grooves may develop in the teeth near to where they meet the gums.

One of the biggest impacts that come with dental problems attributed to eating disorders is a lack of confidence and regret that oral health was neglected during their illness.

Sara, an anorexia sufferer, says: "Following recovery, the impact my eating disorder had upon my teeth has affected my confidence. I was, and am, aware of the appearance of my dentition, my missing tooth, and am self-conscious at times when speaking."

Rhian says: "It upsets me that this is the lasting legacy of my eating disorder that I will have to live with for the rest of my life. I get annoyed at the amount I have and will continue to have to pay out because of the damage years of an eating disorder has done to my teeth."

While dentists may not be able to stop an eating disorder, they may be able to prevent severe tooth wear which has occurred as a result, and make a big difference to that patient's life. m

Contact information

For more information regarding eating disorders and tooth wear, visit www.b-eat.co.uk and www.toothwear.co.uk

Would you like to increase your practice profits in 2013?



Massive 50% off all your everyday disposable products

Including all dental disposables, face masks, paper products and powder free gloves Our premium products conform to all high standards including: CE, EN14683, EN455 High quality products with lowest prices guaranteed in the UK with this special offer Online exclusive 50% off flash sale starts 7th February at www.scrub-up.com





During 2012, 834 Dental Practices made a choice...

With the dental profession facing ever-increasing regulatory and running costs, getting the right deal from your dental supplier has never been more important. That's exactly what 834 dental practices did in 2012 by opening a new account with The Dental Directory.

The Dental Directory recognises this and wants to assist every dental practitioner in the country by continuing to cut the prices on everyday, essential dental products.

Despite considerable price increases from dental product manufacturers, The Dental Directory is the ONLY dental dealer who did not increase the vast majority of its prices during 2012.

Independently Verified Best Priced Dealer

The Dental Directory, along with all other major dental dealers, submits their sales out data every quarter to an independent research company, Strategic Data Marketing LLC. They then analyse all of the data on behalf of the large dental product manufacturers.

SDM compared the final selling out prices of 25 top-selling branded products from the categories shown below. These are the final prices charged to customers, after all discounts and promotions have been applied, and they found that The Dental Directory were an average of 5.4%[†] cheaper than our competitors during 2012!



Dare to Compare

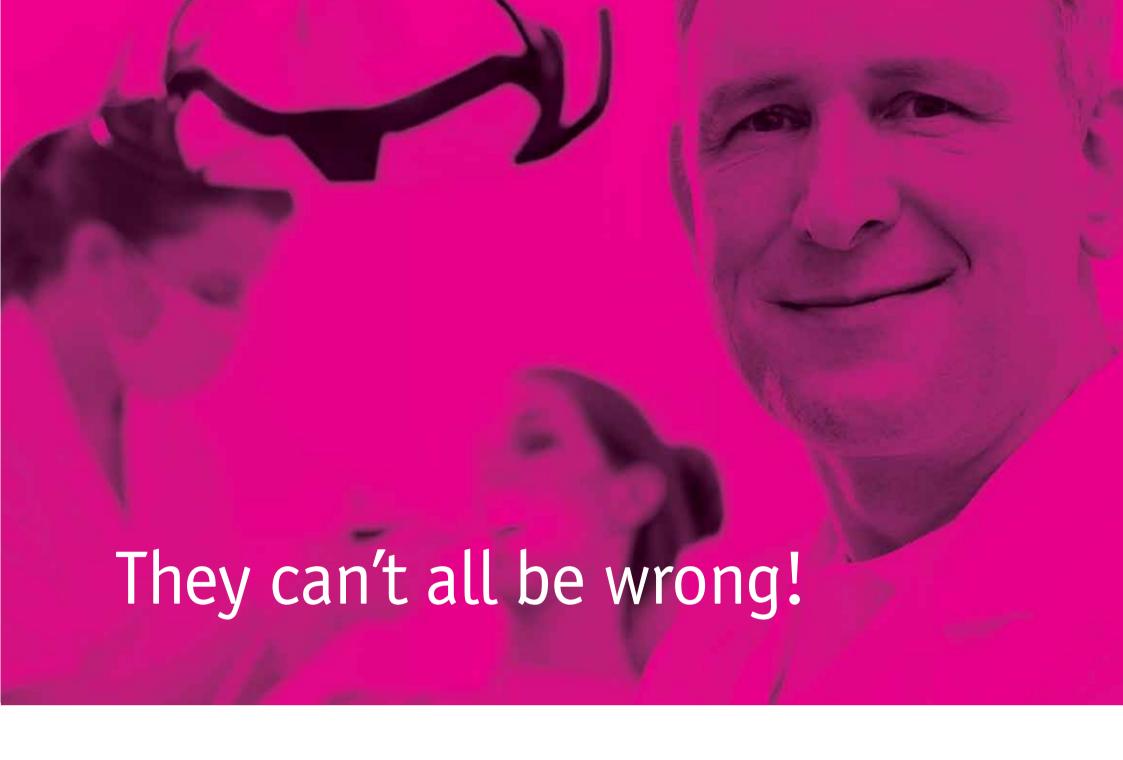
We continuously compare our prices with our largest competitor – the American-owned, \$7billion turnover, multi-national dental dealer, Henry Schein Minerva.

In a recent comparison of 100 like-for-like products featured in the Henry Schein Minerva Essentials Mini Catalogue and Dental Directory manufacturer dedicated flyers, our prices were found to be an average of 7.21% cheaper.*





† SDM DPMSS Q1, Q2 & Q3 2012. Product categories: Anaesthetics Injectable/Cartridges, Endodontics Files & Reamers Nickel/Titanium Files, Alloys & Accessories Amalgam Capsules, X-Ray Film Intraoral, Evacuation Cleaners, Endodontics Files & Reamers Files, Hand Instruments Surgical Instruments Suture Material, Infection Control Sterilants/Disinfectants Surface Towelettes, Impression Trays Disposable Single, Infection Control Sterilising Supplies Pouches, Endodontics Filling Materials & Accessories Heated Gutta Percha Refills, Infection Control Barriers Glasses/Goggles, Small Equipment Prophy Units Inserts, Anaesthetics Needles, Pins Latch & Hand Driven, Hand Instruments Hygiene Instruments Curettes/Scalers Posts Prefabricated Refill, Oral Hygiene Fluoride Rinse, Endodontics Filling Materials & Accessories Gutta Percha Points.



Service, Service & More Service

At The Dental Directory, we understand the importance of good service. Massive stock holdings that virtually eliminate back orders, and an average daily order fulfilment rate in 2012 of 99.2% enable us to give our customers the products they need, when they need them.

Every order received before 5pm is dispatched for free next day delivery – because unlike some competitors, we do not have a minimum order value.

Our nationwide team of highly experienced Business
Consultants is available to offer unbiased help and advice –
including a range of cost reduction programmes designed
to save your practice time and money and management
reports to identify areas of spend.

Every Consultant is regularly manufacturer-trained on the latest products, but, as all our sales staff are salaried and NOT commission-based, you can be reassured that they have no personal financial motivation to sell unnecessary products to your practice.

We firmly believe that The Dental Directory offers the best combination of value and service: working with the dental profession to give every dentist the pricing and added-value services that are needed in these difficult times.

So if your current dental dealer doesn't offer the same, join the 834 dental practices who opened a new account with The Dental Directory in the last 12 months.

To find out more about The Dental Directory, or to arrange for your local Business Consultant to visit your practice, please call us FREE on 0800 585 586

Trust...

