Volume 54 Number 3 June/July 2008



# Journal of the Irish Dental Association

Iris Cumainn Déadach na hÉireann

Data protection in dentistry – your responsibilities



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Gingivitis, if left unchecked, may lead to periodontitis. Emerging scientific research is associating periodontitis with other diseases, such as cardiovascular disease, diabetes and stroke1,2

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Dye BA et al. J Clin Periodontol. 2005; 32: 1189-1199.

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References: 1. Scannapieco FA. Compendium. 2004; 7(Suppl 1): 16–25. 2. Dave S et al. Compend Contin Educ Dent. 2004; 25(7 Suppl 1): 26–37. 3. Amornchat C et al. Dent J. 2004; 24: 103–111. 4. Lindhe J et al. J Clin Periodontol. 1993; 20: 327–334, supplemental report on file. 5. Garcia-Godoy F et al. Am J Dent. 1990; 3 Spec No: S15–26. Erratum in: Am J Dent. 1991; 4: 102. \*vs ordinary fluoride toothpaste.

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sation Holder: Co urrey GU2 8JZ. Rec Colgate-Pair

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1. Charles CH et al. J Am Dent Assoc. 2001; 132; 94-98 2. Morris AJ et al. British Dental Journal 2001; 231-237

### EDITORIAL

## Wexford success and progress in Europe

Summertime has arrived and holidays beckon. Operation Wexford has passed and what a success, a credit to Dr Ena Brennan, the first female President of the IDA. We learned a huge amount about 'how to take photographs', 'psychology of life', and 'holistic dentistry'. There were very few topics not covered. It certainly was a worthwhile experience. Many of the presenters have been asked to write a synopsis of their talk for the *Journal*.

The Editorial Board met recently and reviewed our next two issues, and some excellent ideas are being progressed. It is hard but rewarding work. We hope that readers appreciate the increased number of issues that we are now publishing. Again, we are always open to ideas.

This June/July issue of the *Journal* reflects 'Operation Wexford' with many photographs (p.113–116) and memories. We have a large number of letters and more for publication and this brings the *Journal* to life. Thank you to those who keep us on our toes. The safety of formocresol (p.108) and other such medicaments used in dentistry needs to be considered and Bradley Lewis highlights our reluctance to change and move on. Dr Ni Chaollai (p.109) highlights 'targeted fluoride delivery' in English and 'as Gaeilge', informing us of a new development.

IDA news (p.111) highlights the issue of dental anxiety, which is present in 20-30% of children, and suggests means of addressing this. Research indicates that about 50% of adults do not have a dental practitioner because of fear/cost, and this is something that the 'oral health strategy group' recently set up by the Dept. of Health and Children needs to address. It is hoped that the Diploma in Conscious Sedation introduced in the Dublin Dental School will help to address this problem over the next few years. Dentistry in sports medicine is highlighted (p.112) and the need for dental protection in all sports in a country like Ireland, where sport is part of our culture, is essential. Periodontics linked with increased risks of general disease (p.118) is an important topic and is another reminder of the need for regular dental attendance, oral screening, oral hygiene measures and dental care.

The scientific section highlights orthodontic evolution by Dr Niall McGuinness and, in particular, the issue of malocclusion and TMJ problems. Orthodontics and orthognathic surgery are important facets of our present armamentarium to improve patient outcomes. All we

need are some more maxillofacial surgeons. It is presumed that, with consultant contract negotiations almost completed, the HSE can progress these long-awaited positions and enable OMFS training to recommence in Ireland. Prof Nunn's paper on audit is timely, particularly with the need to progress this in practice. "... research is concerned with discovering the right thing to do; audit with ensuring that it is done right" (Smith, R. BMJ 1992). It is in our interest. Our last article highlights the common problem of pericoronitis and tries to determine an association between the microbiology and the condition. Unfortunately extensive studies have failed to identify a causative organism and it seems likely that the anaerobic load combines to provoke a pericoronitis host response. The authors plan to progress this paper to advise on the management of the 'pericoronitis' lesion.

The practice management section draws our attention to the importance of data protection and dental negligence. Data protection is highly topical, with recent stories of lost 'laptops' and 'data'. Confidentiality is a right of our patients. This article discusses what to do and further information is available on www.dataprotection.ie.

Dr Tom Feeney's report from Europe (p.121-122) boldly confirms that amalgam is effective and safe: "environmental risks and indirect exposure of humans to methylmercury (from emissions due to use of dental amalgam) are much lower than tolerable limits, indicating a low risk of serious health effects". At last, too, some real progress on tooth whitening. It is interesting to read on p.110 about the importance of 'white' teeth to our younger patients, as investigated by three students for the Young Scientist Exhibition.

A nice way to end is to look to the future and I am looking forward to a review of the guidelines for antibiotic prophylaxis for dental procedures in patients at risk of infective endocarditis.



(r. A. Stassen.

**Prof. Leo F. A. Stassen** Honorary Editor

### PRESIDENT'S NEWS

# 'Operation Wexford' hailed as a major success

New IDA President ENA BRENNAN offers her first overview of IDA events.

### Annual Conference – 'Operation Wexford'

The recent Annual Conference in Wexford was a great success, attracting just under 500 members to the sunny south east. A wideranging lecture programme aimed at the entire dental team was complemented by an extensive trade show of 40 exhibitors and a host of social activities. Highlights included the very well received preconference courses, the speakers' dinner, at which we enjoyed the dulcet tones of tenor Anthony Kearns, the trade show party and, of course, the annual dinner. My sincere thanks to the organising committee, chaired by Dr Pat Cleary with the assistance of Billy Davis, Declan Corcoran, Ed Cotter and Elaine Hughes, whose hard work ensured the success of the conference. Next year's conference, 'Skillkenny', looks set to be yet another enjoyable event, and I look forward to seeing you all there.

### **Annual General Meeting**

A historic occasion during the Annual Conference was the holding of the Annual General Meeting, the first time it has ever been incorporated into the conference. This ensured a good attendance and lively debate. IDA bade thanks and farewell to outgoing directors Drs Gerry Cleary, Des Kennedy and Gerry McCarthy, and welcomed new directors Drs Bridget Harrington-Barry, Donal Blackwell and Garret McGann. It was with great honour that I was inaugurated as President of the Association, following in the footsteps of Dr John Barry, who no doubt will be a hard act to follow. I look forward to serving the IDA, and to meeting many members of the dental profession throughout the coming year.

### **British Dental Association Conference**

It was a great honour to represent the IDA at the British Dental

Association Conference in Manchester at the beginning of May. I congratulate the BDA on organising such a spectacular and large scale event, which was thoroughly enjoyable. The IDA values our excellent relationship with the BDA, which I hope to foster during my year as President.



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### LETTERS

### **Request for dental volunteers**

### Dear Editor,

Adi Roche's Chernobyl Children's Project is looking for volunteer dentists, hygienists and dental nurses who would like to work for a week in a children's orphanage in Belarus. If any of your readers are interested in "offering hope to live" to these children, aged between three and 18, please contact:

 Marcas MacDomhnaill
 Tel: 087 755 2044, or

 Mary Sugrue
 Tel: 066 712 4505

Go raibh maith agaibh, Marcas MacDomhnaill Chernobyl Children's Project Tralee Outreach "Grange House" Camp Ballyseedy Tralee Co. Kerry



Marcas MacDomhnaill and Mary Sugrue in the day room of Vesnova Orphanage in Belarus with Victor, one of the children who receive treatment from the Project.

### QUIZ

This is the orthopantomogram of a 35-year-old woman who presented to her dental practitioner with a two-week history of a painful swollen jaw. She was feeling unwell and complained of a numb lip and chin on the left hand side.



There was no medical history other than the fact that she smoked 30 cigarettes per day.

- 1. What was the likely diagnosis?
- 2. How was she treated?

Answers on page 120

### 'Safety' of formocresol

### Dear Editor,

I am responding to recent articles around the world on the 'safety' of formocresol in dentistry. Having started the debate in 1981, I have had the benefit of reviewing the literature as it has developed, without bias and with consistent regard for scientific principles and protocols. My concern is for your readership, well-meaning clinicians who might be confused by position papers that distort the overwhelming body of evidence citing the genotoxicity, mutagenicity, carcinogenicity and toxicity of formaldehyde.

It is ludicrous to suggest that because other medicaments and prescribed medications in dentistry might also have deleterious effects, it is therefore 'safe' to use formocresol. It is a 'tad' unscientific to further tell dentists that it is okay to add formaldehyde to their patients' systems since its ingestion/inhalation is a part of life. Repeating the nearly 100-yearold archaic notion of how to deliver a safe dose by squeezing a soaked cotton pellet is surprising in today's sophisticated technobased world. Hand picking studies that have aberrant or inconclusive results when weighed against the accepted evidence becomes self-serving, while simultaneously destructive to clinicians seeking the best for their patients.

Much of the research about formaldehyde was firmly established as far back as 30 years ago. Alternative medicaments have been proposed for many years with mixed results. Equal or better clinical outcomes have been demonstrated with some non-aldehyde compounds: ferric sulfate; white mineral trioxide aggregate; white Portland cement; and, beta-tricalcium phosphate. Systemic distribution after formocresol polpotomy is irrefutable. Formocresol interferes with healing. As recently as March 2008 research has shown that formocresol causes genetic damage.

I urge dentists to rethink their use of formocresol. In 1981 (*JADA*) and again in 1998 (*Journal of Clinical Pediatric Dentistry*) I concluded: "If a medicament like formaldehyde is clearly not a necessary adjunct, then it may be wondered why it is used at all". Children should not be exposed to formocresol since there is no conclusive evidence warranting its use.

Yours sincerely, Bradley B. Lewis DDS 934 N. Foothill Road, Beverly Hills, CA 90210, USA Phone/Fax: 310 275-9968 bbllewis@sbcglobal.net

### Slow-release fluoride devices

### A Eagarthóir,

Fluoride has long been known to provide considerable protection against tooth decay. Water fluoridation is an ideal method of achieving this continuous level of fluoride. However, although our public water supplies are fluoridated in Ireland, a high level of dental caries is still seen in a relatively small, but significant, cohort of patients. Targeted delivery of fluoride to these high-risk groups may help reduce their caries experience. Unfortunately, the patients who experience the highest levels of dental decay are often poor attenders and may have poor motivation. A system of targeted fluoride delivery, which would be almost independent of patient compliance, would be ideal.

The slow-release fluoride device is an interesting development, currently under research at the Leeds Dental Institute in England. A slow-release glass device consists of a device formulated to slowly dissolve in body fluids, releasing inorganic components - in this case providing sustained fluoride release. The Leeds model is a non-silica glass bead, 4mm in diameter, and is attached to the buccal surface of the maxillary first permanent molars. A two-year study, using fluoride slow-release devices in eight-year old children living in an inner city area of Leeds has been undertaken (Toumba and Curzon, 2005). A dramatic 76% reduction in the development of new carious surfaces was noted compared to children who did not have such devices. As the device only needs twoyearly replacement, patient compliance is not as crucial to the success of this particular caries preventive measure as in other traditional measures. This is an interesting and relatively new concept in oral health. The device is not yet commercially produced but hopefully this can be anticipated in the future.

Is mise le meas, Aifric Ní Chaollaí Division of Child Dental Health Leeds Dental Institute, Clarendon Way Leeds LS2 9LU, England

### Reference

Toumba, K.J., Curzon, M.E. A clinical trial of a slow-releasing fluoride device in children. *Caries Res* 2005; 39 (3): 195-200.

### A Eagarthóir,

Le fada an lá, tá fiannaise againn go gcosnaíonn fluairid na fiacla i gcoinne lobhadh. Tá fluairidiú an tsoláthair uisce thar cinn mar bhealach chun an leibhéal leanúnach atá riachtanach a bhaint amach. Mar sin féin, cé go bhfuil fluairid sa soláthar uisce poiblí in Éirinn, feictear dream beag, ach tábhachtach, othar a mbíonn ardleibhéal lobhadh fiacla acu. Seans maith go laghdódh sprioc-sheachadadh fluairid chuig an dream áirithe seo an fhadhb, os rud é gurb iad an gasra seo is lú a thugann cuairt thráthrialta ar an bhfiaclóir. Bheadh córas sprioc-sheachadadh fluairide a bheadh neamhspleách ar chomhoibriú an othair feiliúnach don dream áirithe seo.

Forbairt réasúnta nua is ea gaireas a scaoileann fluairid thar tréimhse fada agus tá taighde ar an ngaireas úd idir láimhe faoi lathair san Leeds Dental Institute i Sasana. Bíonn an gaireas fluairide seo déanta de ghloine neamh-shilice a thuaslagann go mall sna sreabháin coirp ag scaoileadh comhbhaill inorgánacha, sa chás seo, fluairid. Is coirnín gloine é an tairge i Leeds, 4mm de thrastomhas ann agus greamaítear de dhromchla leicineach na gcúlfhiacla uachtaracha é. Déanadh staidéar a mhair dhá bhliain ar usáid an ghairis fluairide i bpáisti as ceantar bocht i lár Leeds a raibh aois ocht mbliana bainte amach acu (Toumba and Curzon, 2005). Chonacthas ísliú ollmhór, 76%, i líon na ndromchlaí lofa nua i bpáistí ag a raibh na gairis fluairide á gcaitheamh acu i gcompráid leo siúd nach raibh. Tá sé léirithe freisin go ndáiltear fluairid ar fud an bhéil agus nach mbailíonn sé i dtimpeallacht an ghairis amháin.

Ó thárla nach gá gaireas nua a chur ar fáil ach chuile dara bliain, níl comhoibriú leanúnach an othair chomh riachtanach céanna is a bhíonn nuair a bhaintear usáid as modhanna eile le lobhadh fiacla a sheachaint. Coincheap spéisiuil agus réasunta nua is ea an gaireas fluairide in iarrachtaí leis na fiacla a choinneál folláin. Níl an gaireas ar an margadh go fóill ach táthar ag súil go mbeidh amach anseo. Is mise le meas,

Aifric Ní Chaollaí Division of Child Dental Health Leeds Dental Institute, Clarendon Way Leeds LS2 9LU, England



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# Young scientists investigate 'How white is right?'



Rebecca Conroy, Jane Drew and Hannah Glass carry out research for their Young Scientist project.

Three second-year students from Loreto College, St Stephen's Green in Dublin, chose a dental theme for their entry to this year's Young Scientist Exhibition and, in the process, made some fascinating discoveries about social attitudes to tooth colour. Inspired by the number of tooth whitening products on the market, and the perceived association of white teeth with attractiveness, Hannah Glass, Jane Drew and Rebecca Conroy's project, entitled 'Tooth Bleaching – How White is Right?' compared a number of over-the-counter products under scientific conditions. They then carried out research, using a questionnaire, into attitudes towards tooth whiteness among different age groups.

The girls spent time at the Department of Restorative Dentistry and Periodontology at the Dublin Dental School and Hospital, where they were supplied with extracted teeth on which to carry out their

### Metro Branch September meeting

The Metropolitan Branch of the Irish Dental Association will hold a scientific meeting on September 18, 2008, in the Hilton Hotel, Charlemont Place, Dublin 2.

The speakers are Dr Mary Freda Howley, on 'The traumatised tooth', and Dr John Lordan on 'Single visit molar endo – when, why, how?'

### PDS Seminar 2008

The annual Public Dental Surgeons Seminar will take place at the Knightsbrook Hotel, Trim, Co. Meath from October 1–3 next.

An interesting line-up of national and international speakers has been organised, including Dr Trevor Burke, Birmingham School of Dentistry, Dr Monty Duggal, Consultant and Head of Paediatric Dentistry, Leeds Dental Institute, Dr Pat McSharry, Orthodontist, HSE, Dr Richard Watt, University of Edinburgh, and Dr Dan Ericson, Malmo University Sweden. We are delighted to continue with the team-based approach to the event this year and we look forward to welcoming our dental nurse and hygienist colleagues to the event.

The seminar will also include a full trade show, which will include the leading products and services on the dental market. Our ever popular annual dinner will be the social highlight of the seminar and will take place on Thursday evening, October 2.

comparative tests, and were given advice on setting the teeth in plaster and on photographing their results. They also received advice on shading and scoring systems.

Staff at the Dental School were delighted to help, and were very impressed with the girls' initiative, saying that the three girls put the project together themselves, and worked very hard to complete it, even taking time during their Christmas holiday to work on the questionnaire – they were extremely organised.

The girls found that professional bleach was the most effective in terms of whitening teeth, although most of the products tested had some effect. Their whiteness questionnaire found that younger (under 18 years) age groups considered very bleached teeth to be more attractive. Slightly bleached and natural tooth shades were increasingly selected as the respondents' age group increased. The girls confessed to being surprised at this result, but found the project very rewarding and enjoyable.

"We learned to work as a group, developed organisational skills and enjoyed working with our teachers, who were very supportive. It was great to visit the Dublin Dental School and Hospital, where we were made very welcome, and the results of our survey were interesting – we never thought that people of our age were so brainwashed by the media about the colour of their teeth. We enjoyed meeting people at the Young Scientist Exhibition where we made lots of friends. We also got time off school, but we made up for that by having to work on the tooth shades during the Christmas holidays. Overall, we really enjoyed the experience and hope to do it again in Transition Year."

# Doctors and dentists urged to skill up on the net

An innovative video-based, e-learning website for healthcare professionals was launched on March 11, 2008. www.edcastmedical.com is the brainchild of Belfast web company StreamOn and allows dentists, doctors and pharmacists to polish up on their skills online whenever and wherever they want. According to the company, the site provides expert training from leading medical professional bodies, including the Northern Ireland Medical and Dental Training Agency. Courses in dentistry are available direct to the user's PC from  $\pounds 20$ , which the company says represents a significant time and cost saving on attendance at lectures and seminars.

Edcast Medical is one of six broadband content initiatives showcasing Northern Ireland's digital creative talent to the world under the www.crea8ivity.com banner, and has received financial backing under the NI Department of Enterprise & Trade's Broadband Content Initiative.

### Captain's Prize Golf Competition

The IDA Captain's (Dr Billy Davis) Prize golf outing will take place on Saturday September 6, 2008, in Carlow Golf Club. Further details will follow when available.

**IDA NEWS** 

# Dental anxiety present in 20-30% of children

The IDA has advised parents that they play a pivotal role in dispelling dental anxiety by taking steps to ensure that their children do not suffer from a fear of going to the dentist.

The Association revealed anecdotal evidence from members suggesting that 20-30% of children suffer some level of fear or anxiety associated with going to the dentist, with one in ten children suffering from extreme levels of dental anxiety. Dr Gerry Buckley, IDA, said: "There are various, often complex, causes of dental anxiety in which environmental and genetic factors play a role. With the best will in the world, parents often unwittingly transfer their own dental anxiety to their children".

Dr Buckley continued: "We encourage parents not to mention their own dental experiences or anxieties in front of their child. Parents can help the child by adopting a positive attitude to the child's visit to the dentist, especially when they are in the dental surgery. Praising the child and positive reinforcement of good behaviour will help to gain the child's trust and increase their confidence. However, comments such as 'You are very brave' or 'There is nothing to be afraid of', which many parents hope will reassure their child, can in fact trigger anxiety and result in the child failing to co-operate when in the dentist's chair. Normalising the



dental visit by explaining that children all over the world visit the dentist will help the child to be at ease with the dental examination".

Dr Buckley concluded: "Regular check-ups with the dentist will also ensure that good dietary habits are pursued and that preventive measures such as fissure sealants are provided. By following these simple steps, and re-addressing their own attitude to dentistry, parents can help to ensure that the age-old fear of going to the dentist becomes a thing of the past".



## One in three oral injuries are sports related

The IDA has warned that up to one-third of all adult dental injuries are sports related, as the majority of adults who play sports fail to take steps to protect their teeth from injury.

Dentists attending the IDA annual conference in Wexford heard that twice as many men suffer sports-related oral injury as women; however, the number of women receiving treatment for sportsrelated injuries is on the increase, and the IDA suggests that women who play hockey are most likely to present with injury.

The risk of oral injury is not exclusive to those engaging in full-contact sports such as rugby, Gaelic games or hockey, but is also an issue in sports with less physical contact such as soccer, basketball and volleyball. Most oral injuries occur during head-to-head contact, falling, and contact with elbows, hands, arms and sports equipment. The conference highlighted a need for greater oral health awareness among adults participating in sports.

International sports dentistry expert Dr Daniel Friedlander advised delegates of the latest treatment methods for those who experience sports-related oral injuries and the preventive steps that can be taken. Dr Friedlander warned that: "Oral injuries can have long-term effects on areas such as speech, appearance and, in more serious cases, selfconfidence. Injuries can be very severe and difficult to treat so the best advice anyone can receive is to take steps to prevent injury. We advise people not to risk their oral health and encourage anyone taking part in sports to go to their dentist to get advice on how best to protect their oral health and smile".

Dr Friedlander said: "Oral injuries occur very simply and very quickly. Even during non-contact sports there may be instances of accidental contact with another player or sports equipment, falling, or receiving a blow to the mouth or face. Such injury can easily result in the dislocation or fracture of teeth. Use of a gumshield, even when participating in non-contact sports, is vital to reduce the severity of injuries to lips, teeth, cheeks and the tongue".



# Wexford's successful operation

With a good turnout from around the country, excellent lectures, a strong trade exhibition and a thoroughly enjoyable social programme, this year's Annual Conference in Wexford was a major success.

### Presidents' Lunch



New President, Dr Ena Brennan, hosted the annual lunch for former Presidents of the Association. Back, from left: Drs Gerry Cleary, Norman Butler, Gerry McCarthy, Pat Cleary, Michael Galvin, Tom Feeney, Joe O'Byrne, Barry Harrington, Garry Heavey, Charles O'Malley, and Denis Reen. Sitting (from left) Drs Paddy King, Cathal Carr, Noel Power, the President, John Barry and Art McGann.

A record attendance of Past Presidents of the Association attended the annual Past Presidents' Lunch in Whites of Wexford. A total of 25 Past Presidents in all attended the lunch, which was hosted by current IDA President Dr Ena Brennan.

### Trade golf competition



Tommy Maguire of Kerr, popular winner of the President's Prize to the Trade, played at Rosslare G.C. on the Wednesday, received his prize from new President, Dr Ena Brennan.

The inaugural golf competition for members of the dental trade took place in Rosslare Golf Club on Wednesday April 23, as part of the Annual Conference. The somewhat Mediterranean conditions were ideal for golf, with some even getting a second round in on the day! The overall winner of the competition, which was sponsored by the Irish Dental Association, was Tommy Maguire from Kerr.

### **President's Prize**

The Annual President's Prize took place at the Annual Conference in the beautiful surroundings of Rosslare Golf Club on Saturday April 26 last. Dr Billy Davis was the overall winner, with Dr Karl Ganter coming in second. Dr Michael Galvin won best gross and Dr Vincent McDonagh was third.

The visitors' prizes were won by Dr Gerard Kilfeather, Dr John Sheridan in second and Dr Clodagh Davis in third.

With their prizes following the playing of the President's Prize at Rosslare Golf Club are: standing, from left: Dr Vincent McDonagh; Dr John Sheridan; Dr Karl Ganter; the Lady President of Rosslare Golf Club, Eavan Barnes presenting the President's Cup to Dr Billy Davis; Dr Clodagh Davis; and, Dr Michael Galvin. Sitting: Dr Patricia Kilfeather and Dr Ena Brennan.



### IDA CONFERENCE

### **Presidential handover**



Outgoing President, Dr John Barry of Cork, hands over the chain of office to incoming President, Dr Ena Brennan.

### **Pre-conference course**



Delegates on the pre-Conference composite layering course.

### **Costello Medal**



Joint winners of the Costello Medal, pictured with the President, were Mary McGeown (left) and Kirstie Killen.

### **Moloney Award**



The winner of the Moloney Award was Dr Karl Malone from Sandycove in Dublin, pictured with Dr Paddy Crotty (left) and Mrs Irene Moloney.

### Gala Dinner



At the Gala Dinner on Friday night were, from left: Jan O'Seachnasi, Dr Sean O'Seachnasi, and Dr Garrett McGann.



IDA staff at the Gala Dinner, from left: Elaine Hughes, Mary Graham, Sarah Adam, Shirley Coulter, and Mena Sherlock.

### **IDA CONFERENCE**

### **Exhibitors**



On the Nobel Biocare stand with the President were, from left: Lorna Spillane; Eamonn Farrell; and, Ciaran Likely.



On the Wrigley stand with the President were Georgie Fiskin and Claire Fisher.



On the Colgate stand with the President were Chris Ayers, Marketing Manager, and Aoife Moran, Professional Relations Manager.



On the GSK stand with the President were, from left: Sinéad Bailey, Medical Marketing Manager; Dave Barrett, Dental Business Manager; and, Amy Thomas, Dental Representative.



On the Straumann stand with the President were, from left: Alan Goldie, Ken O'Brien, Marianne Wyse, Danny Schofield, and Colin Hogg.



On the Dentsply Friadent stand with the President were Denis Kelly and Emma Gibney.

### Maximum efficiency with Kerr's Maxcem Elite



Maxcem Elite from Kerr.

According to its makers, Kerr, Maxcem Elite takes cementation to the next level of simplicity, being a self-etch, self-adhesive resin cement that is perfect for all indirect restorations. Kerr says that Maxcem Elite defines the standard for a new class of self-etch, self-adhering resin cements providing excellent bond and mechanical strengths, superb aesthetics and unmatched simplicity.

A company statement states: "Maxcem Elite's innovative system allows all the essential ingredients to etch, prime, bond and cement to be combined into one product, offering: high bond strengths 22-36 MPa; exceptional material stability; direct dispensing with automix syringe; highly efficient dark-cure mechanism; and, long-term colour stability."

### **Professional practice loans**

Bank of Scotland (Ireland) has launched a professional practice loan. According to the Bank, the loan aims to help highly skilled professionals such as doctors, vets, solicitors, architects and dentists who are buying into a practice, or who are looking to expand their current practice. The Professional Practice Loan can support professionals to:

- buy a share in an existing practice;
- acquire a practice outright;
- purchase business premises;
- expand the practice(s); and,
- fit out or refurbish the premises.

The Professional Practice Loan also offers customers:

- up to 100% finance;
- flexible repayment terms; and,
- terms of up to 20 years.

Commenting on the launch of the product, John Rohan, Divisional Director, Business Banking at Bank of Scotland (Ireland) said: "We designed this loan specifically to help professionals meet the challenges that they face when buying into or significantly expanding an existing practice. Expanding a business significantly is an exciting and important time for any professional, so using a lender that has experience with professional practice development is a real advantage".

# Excelling at implants: a year course in Dublin

Biomet 3i has announced a one-year theoretical and practical course that will encompass both surgical and restorative aspects of dental implants. Based at The Blackrock Clinic in Dublin, and beginning in October 2008 with a two-day introductory module, the course will continue with five two-day modules, ending in May 2009.

Presented by Dr David Harris and Dr Mark Condon, together with invited international guest speakers, this extended course will provide delegates with an in-depth foundation in treatment planning, surgical and restorative care, and maintenance for the dental implant patient. Upon successful completion of the course, participants will be competent to provide all aspects of implant treatment in simple to moderately difficult cases, and will be able to identify patients who need more advanced specialist care. The course will provide the information and skills necessary for all members of the team to introduce implants into an existing dental practice in an ethical, predictable and effective manner.

Dr David Harris is a specialist oral surgeon and Dr Mark Condon is a specialist in prosthodontics. Both doctors maintain private referral practices at the Blackrock Clinic in Dublin.

# Protecting against acid erosion in children's teeth



Acid erosion is a growing problem in children with up to 47% of five - year-olds exhibiting acid erosion (Harding, M., *et al. Community Dental Health* 2003; 20: 165-170). In order to combat the increasing problem of acid erosion in children, oral health company GlaxoSmithKline has launched Sensodyne Pronamel for Children, a new paediatric toothpaste which, according to the company, helps harden the softened enamel.

Following the very successful launch of Sensodyne Pronamel, GlaxoSmithKline received feedback from the professional dental community regarding the need to develop a solution to the growing problem of acid erosion in children. To this end, Sensodyne Pronamel for Children was developed, in conjunction with dentists, to protect children's teeth against the effects of acid erosion as well as caries. It contains an optimised fluoride formulation (1450 ppm F-) as well as gentle mint flavour. It will be available from the beginning of June from pharmacies nationwide and from supermarkets from the end of July.

# New fibre-reinforced composite endodontic posts

German company Voco says that dentists have confirmed that it has succeeded in combining the proven core build-up, Rebilda DC, with the new component-coordinated composite endodontic posts, Rebilda Post, to create a "perfect" core build-up system.

The company says it delivers an excellent supplement to Rebilda DC, the dual-curing core build-up and luting material, with Rebilda Post, the new fibre-reinforced composite endodontic post. The especially radio-opaque, translucent Rebilda Post, with dentine-like elasticity, yields a durable, highly aesthetic and metal-free restoration when used as part of the adhesive technique.

According to its statement: "The aim of the development of Rebilda Post was to closely align its physical properties to those of natural dentine. In contrast to metal and ceramic posts, the dentine-like elasticity simultaneously provides for even distribution of occurring loads and thus minimises the risk of endodontic fractures. In addition, the high transverse strength provides the post with excellent resistance to fatigue and fracture, which results in a longlasting restoration."

Rebilda Post is available in three sizes (1.2mm, 1.5mm, 2.0mm) -



each packaged in individual blisters – with the corresponding drills in both an endodontic post introductory set and also as a complete presentation for endodontic post treatment.

Meanwhile Voco is also celebrating the fact that its Grandio products, "a new generation of restorative products", are now five years on the market.



## Now oral care comes in fruity flavours

The Wrigley Company is adding two new flavours to its Orbit Complete range of sugarfree chewing gum with xylitol. The two products, Strawberry and Lemon & Lime, go on sale from April.

"We are very proud of our oral healthcare products and their benefits related to maintaining good oral health," says Alexandra MacHutchon, Communications Manager at The Wrigley Company. "Chewing Orbit Complete sugarfree gum with xylitol when it is not possible to brush is a great way for patients to look after their teeth when they are on the go. It is proven to help reduce plaque and help reduce the risk of tooth decay. We are really excited to be able to offer the same benefits in

sugarfree fruity flavours and hope that this will encourage more people to chew Orbit Complete to look after their oral healthcare."



Periodontitis linked with increased risks

A new expert report published in the journal Current Medical Research and Opinion examines the potential link between oral hygiene, associated gum disease and other systemic diseases involving inflammatory processes such as cardiovascular disease (CVD) and diabetes. The authors conclude that current evidence suggests periodontitis is associated with an increased risk for CVD and diabetes. Primary care practitioners are encouraged within the report to educate their patients about the importance of maintaining a healthy mouth for conferring potential public health benefits.

A multidisciplinary group of experts in the fields of cardiology, endocrinology and periodontology reviewed the latest clinical evidence to examine the emerging evidence for an association between periodontitis and systemic conditions. In addition to finding a potential link between periodontitis and increased likelihood of CVD, the group found that periodontitis is also often more severe in subjects with diabetes mellitus, a group already at increased risk for cardiovascular events.

The infectious and inflammatory burden of chronic periodontitis is thought to have an important systemic impact on overall health. The exact reasons are unknown, but Professor Noel Claffey, Dean of the Dental School and Hospital, Trinity College, Dublin and one of the report's authors commented: "Although causality is yet to be established, there seems little doubt that periodontal disease has strong associations with certain systemic diseases. A new paradigm will emerge comprising a holistic approach to the prevention and treatment of oral disease as an intrinsic element of general physical well-being".

The new report, 'The Potential Impact of Periodontal Disease on General Health' represents the first time that such a broad group of UK and Irish experts has convened to explore the growing body of research into this important area. The meeting was supported by an unconditional educational grant from Colgate-Palmolive.

To receive samples of the new fruity flavours, log onto www.BetterOralHealth.info/fruity.

### New dental implant from Nobel

Nobel Biocare has announced the worldwide launch of its new, innovative implant, NobelActive. According to Nobel, it was designed together with and tested by experienced clinicians, and will expand the possibility for implant treatment therapy to more dental patients.

With its unique tip and doublevariable thread design, NobelActive condenses bone during insertion, unlike conventional self-tapping Insertion of the NobelActive implants. This condensing capability delivers



bone- *implant*.

high initial implant stability, even in compromised bone situations, and can eliminate the need for time-consuming and unpleasant implant procedures for patients, such as bonegrafting.

The bone-condensing property and apical drilling blades also allow the experienced user to "actively" change direction during insertion to gain optimal orientation of the prosthetic connection, thereby facilitating the aesthetic restoration process. The unique dual-function conical prosthetic connection, with hexagonal interlocking, supports a wide range of prosthetic options, including individually designed Procera abutments and Procera implant bridges zirconia and titanium.

As with all Nobel Biocare products and solutions, NobelActive has undergone intensive mechanical and clinical testing.

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### Bone bonding implant surface

According to Biomet 3i, its line of NanoTite implants features a bone bonding surface. The implant surface combines the discrete crystalline deposition of nano-scale calcium phosphate particles with the osseotite surface to create a more complex microtopography at the nano-scale level. Evidence-based research shows that the microtopography of the osseotite implant, combined with the nanometer-scale architecture of the NanoTite implant surface treatment, renders the surface bone bonding by the interlocking of the newly formed cement line matrix of bone with the implant surface. Preclinical studies have shown that the NanoTite Implant surface treatment significantly improves the rate and extent of bone-toimplant contact, resulting in statistically enhanced integration as compared to osseotite implants.

Potential scenarios where such an implant might be beneficial to the patient and practice include immediate loading, placement in poor quality bone, immediate placement in extraction sockets, locations requiring short or wide implants, sinus lift augmentation and aesthetic areas. NanoTite implants may be used for immediate function on single tooth and/or multiple tooth applications when good primary stability is achieved.

### **GSK** appointments



GlaxoSmithKline (GSK) has recently made two new appointments. Patrick Reidy is the new Dental Representative covering Munster and Connacht, while Amy Thomas is the new Dental Representative covering Dublin and Leinster.

### Answers to quiz (from page 108)

- 1. Acute osteomyelitis
- 2. Removal of wisdom tooth:
  - debridement of bony sequestrae; and,
  - antibiotics for four weeks (amoxycillin 500mgs tds x 28 days).



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# Successful outcomes for CED on amalgam and tooth whitening opinions

DR TOM FEENEY, Honorary Treasurer of the Council of European Dentists, summarises important European issues.



The Grand Hotel Bernardin, venue for the recent CED meetings.

### Dental amalgam "effective and safe"

Following much hard work by the CED Working Group Amalgam in providing a range of scientific information to the Commission, two EU Scientific Committees have recently published their final reports on the safety of amalgam. The opinions are very positive from the CED's perspective, and are very much in line with the CED's policy that amalgam is an effective restorative material and should remain part of the dentist's armoury to best meet the needs of patients. This positive outcome owes much to the effectiveness of CED lobbying. The scientific committees conclude that: dental amalgams are effective and safe, both for patients and dental personnel.

### Safety of dental amalgams

The Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR) adopted a report on the safety of dental amalgams and alternative dental restoration materials for patients and users. SCENIHR concluded that dental amalgams are an effective restorative material and may be considered the material of choice for some restorations. While some local adverse effects are seen, the incidence is low and usually readily managed. The current use of dental amalgams does not pose a risk to health apart from allergic reactions. The main exposure to mercury in individuals with amalgam restorations occurs during the placement or removal of fillings. There is no clinical justification for removing clinically satisfactory amalgam restorations, except in patients allergic to amalgam constituents.

According to SCENIHR, alternative materials are not without clinical limitations and toxicological hazards. Allergies to some of these substances have been reported, both in patients and in dental personnel. Available scientific data concerning exposure to these substances are limited. The use of these substances has revealed little evidence of clinically significant adverse events.



The Irish team at the recent CED meetings in Portoroz, Slovenia (from left): Dr Tom Feeney; Ms Elaine Hughes; Dr Barney Murphy; and, Dr Robin Foyle.

### Environmental and indirect health effects

The Scientific Committee on Health and Environmental Risks (SCHER) adopted a report on the environmental risks and indirect health effects of mercury in dental amalgam.

SCHER concluded that environmental risks and indirect exposure of humans to methylmercury (from emissions due to use of dental amalgam) are much lower than tolerable limits, indicating a low risk of serious health effects. With regard to environmental risks of amalgam alternatives, the available information is too limited to conduct a proper comparative assessment.

### Dissemination to general public and professionals

The CED endorses these scientific opinions and will disseminate the reports to the 300,000 dentists it represents across 30 countries.

### Update: cross-border healthcare services

The idea for this new cross-border healthcare Directive was born when health services were excluded from the general Services Directive (Dir 2006/123) after determined lobbying by the health professions in 2006. At that time, the Commission committed itself to bringing forward a specific initiative on health services.

The new EU Health Commissioner, Androula Vassiliou, recently announced that the draft Directive on cross-border healthcare services would be published in June. The CED understands that the college of Commissioners will adopt the draft on June 24, 2008. This Directive will be very significant for the dental profession.

The CED body dealing with this topic is the Internal Market Task Force. It is closely monitoring developments and will organise a meeting and comments immediately after the publication of the new document.

### Internal market update

In addition to the important issue of the coming Directive on crossborder healthcare services, there have been a number of developments in the "internal market" dossier:

### Competition restricted in Ireland

A report was published by our own Competition Authority last October, which concluded that outdated regulation in dentistry restricted competition. The conclusions are of great interest to other countries.

### Dental advertising

The European Court of Justice (ECJ) ruled in March that a Belgian law prohibiting dental care providers from advertising their services was compatible with European competition law. The case, which was referred to the ECJ by a Belgian court, involved a Mr Doulamis, who had placed adverts for dental services in a telephone directory. He had been charged for breaching a Belgian law prohibiting advertising of any kind relating to dental treatment.

### Health professionals card

A project to develop a European card for health professionals won funding amounting to almost  $\in$  300,000 from the European Commission in recent weeks. The purpose of the card is to: simplify the free movement of health professionals; certify the professional skills of the holder; identify the appropriate authority in the country of origin; and, accelerate and improve the exchange of information between the competent authorities.

### **Patient safety**

Patient safety has become an important issue for the EU. In its Annual Policy Strategy 2008, the Commission emphasised "patient safety and quality of health services" as one of its four key action areas in health. The CED's Working Group Patient Safety has prepared a draft resolution on the issue of patient safety, which the recent general meeting in Slovenia adopted. The resolution seeks to be open and transparent about the existence of risks in healthcare and the need to minimise these risks in both a preventive way, e.g., continuing education and promotion of ethical codes, and through learning from experiences, e.g., establishing anonymous reporting systems or forming local dentist study groups. The resolution points to particular efforts already made in the dental profession to improve safety, and lists recommendations to CED member associations on how the profession at national level could seek to make further improvements.

# Commission strategy on tooth-whitening products published

The Scientific Committee on Consumer Products published its latest risk assessment of tooth-whitening products (TWPs) in January. Since then, the Commission has been considering how to turn this risk assessment opinion into policy.

Having learnt of the Commission's unacceptable plans for implementing the SCCP opinion, the CED Working Group raised the CED's strong concerns with the European Commissioner for Consumer Protection (Meglena Kuneva) and also wrote to several MEPs who had previously shown an interest in the issue of tooth whitening. Finally, on May 22 last, the Commission sent to the CED office its strategy for implementing the SCCP opinion. The CED is happy to report that the strategy this time is much more in line with CED policy than heretofore.

Member State representatives will discuss the strategy in a working group meeting on June 9, to which the CED has also been invited. After that, the Standing Committee on Cosmetics will enact the legal elements of the strategy into law (the Cosmetics Directive) in October 2008.

### Contents of Commission strategy

The consequence of what the Commission is proposing is that TWPs of all strengths will be considered as cosmetics, but different usage rules will apply to three different categories.

1. TWPs with up to 0.1%  $H_2O_2$ : no change in current law.

2. TWPs with 0.1-6% H<sub>2</sub>O<sub>2</sub>: Commission proposes to add to Cosmetics Directive the requirement: "first use by a dentist for each period of use"; also not to be used on under 18s.

Required labelling: "for each period of use, the first use must be done by a dentist".

3. TWPs with more than 6%  $H_2O_2$ : Add to Cosmetics Directive the requirement: "each use by a dentist; also not to be used on under-18s Required labelling: "for dentist use only".

In addition to these changes to the Cosmetics Directive:

- the Commission proposes to add a recital that will say that "TWPs above 0.1% should not be freely and directly available to the consumer";
- a recital in the Directive will say dentists have to consider risk factors the SCCP mentions; and,
- the COM wants to ask the profession again to monitor undesirable effects.

#### **Preliminary comments**

- This strategy is much more in line with CED policy than three years ago under the proposal, "dentist" (rather than just "professional") would be explicitly mentioned in the Directive and in the recital to the Directive; TWPs above 6% would be used exclusively by dentists; and, TWPs between 0.1-6% have to be used the first time by a dentist. The CED working group's firm stance that tooth whitening is essentially a clinical procedure and is the practice of dentistry has very clearly paid off.
- The form (Cosmetics Directive) is not exactly what the CED wanted.Further questions have to be put to the COM.

# Implementation of the Professional Qualifications Directive

The Professional Qualifications Directive (PQD) 2005/36/EC, which sets up the rules for professionals moving from one EU state to another, had to be enacted into national law by October 20, 2007. The Brussels office is currently circulating a questionnaire to all Member States to find out how the Directive is being implemented, and what its possible effects have been.

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### **INTERVIEW**

# Striking the right balance

The IDA's first female President, Dr Ena Brennan, spoke to ANN-MARIE HARDIMAN about her views on the issues affecting the Association, and dentistry, now and in the future.

When Ena Brennan was formally inaugurated as President of the IDA at the recent Annual Conference in Wexford, it was the culmination of a long period of involvement with and service to the Association. During 40 years of membership, Ena served on IDA Council for six-and-a-half years, representing the eastern region.

As President, Ena is keen that the tradition of the Association as a place where members can meet socially, as well as for educational purposes, should be maintained, especially these days, when people's lives are busier than ever, and there are few opportunities for interaction with colleagues and friends.

"Over the years, I have particularly enjoyed the Annual Conference, both for the continuing scientific education and also for meeting up with colleagues."

This is an aspect she would like to see extend more to branch meetings also.

"Years ago, the Association was much more social and I would like to see that return to some degree, perhaps by having a more cultural focus to meetings, inviting a speaker on a non-scientific topic, or having more meetings to which spouses and retired members are invited." She believes that, even with the advent of compulsory CPD, a balance can be struck where members can achieve the required amount of CPD, and also have the opportunity to interact socially with colleagues. She acknowledges that many single-handed practitioners work in "splendid isolation", and would like to make the Association as accessible as possible to all its members.

Increasingly, this also means making branch and Council meetings more family friendly. As Ena points out, this is an issue for male as well as female members.

"We may need to look at changing the times of some branch meetings, perhaps to Saturday nights, and certainly to try to finish meetings earlier in the evening. Members with young children are unlikely to be in a position to give up an entire Saturday to come to meetings."

These are issues that now affect all areas of Irish life, as more women have joined the workforce in all professions, and both men and women seek to balance their responsibilities in work and at home. But it wasn't always so. Ena compares the situation today with when she first began to practise.

"In the year graduating before mine there were two women, in my year there were four and in the year after mine there were none. This year, out of a class of over 40 at the Dublin Dental School and Hospital, some 25 women will graduate." This is a situation that is unlikely to change, so the onus is on professional associations to adapt to the needs of members.

### **Changes in practice**

These are not the only changes to dentistry over the course of Ena's career, and she mentions the reduction in the numbers of single-



Originally from Carrick-on-Shannon, Co. Leitrim, Ena graduated from UCD in 1966, having spent two years training with medical students in UCG before transferring to complete her dentistry training in Dublin ("It was possible to do that at that time"). Ena worked in England, Co. Mayo and Co. Kildare before settling in Wexford. A keen golfer, she has been Captain and President of the Ladies' Section of Rosslare Golf Club. Ena is married to Thomas J Brennan, who is also a dentist in Wexford.

handed practitioners, and the rise of the multiple practitioner practice – and the dental chain – as major developments that can have positive and negative ramifications for the profession.

"These clinics reduce overheads for dentists, and multiple practitioner practices can provide an excellent support system for colleagues, but I see dentistry still as very much a caring profession, and I think it is extremely important that we maintain this. If the profession becomes too business-like, we may lose that, and I fear that we risk turning the patient into a commodity."

She points out also that many of these practices are made up of groups of specialists, and are based in the larger towns and cities, whereas access to specialist dentistry in smaller rural areas is limited. In Wexford, where she is based, there is only one specialist (an orthodontist), and Ena herself has to refer patients to Kilkenny or

### **INTERVIEW**

Waterford for endodontic care, and to Dublin or Wicklow for periodontics. This is a situation that she would like to see change.

"People are looking for more specialist care, but there's a scarcity of specialists in country towns."

From a clinical perspective, Ena lists the advent of adhesive dentistry as a major change to dentistry in recent years, and of course computerisation in practices, which has revolutionised record keeping.

### **Ongoing IDA concerns**

Ena points out that many of the major issues of concern to dentists, which the IDA has been attempting to resolve, have been ongoing for some time, so as President she is taking office in the middle of a series of extremely important negotiations. While the proposed Pricing Review Body is welcome, the impasse in negotiation of the DTSS, and the knock-on effect this has had on reviewing the DTBS, are matters of major concern. The ongoing discussions regarding a National Oral Health Strategy, which the IDA is involved in drafting, is another major issue. Ena feels that further discussion of these issues has a limited value; they now need to be resolved. However, the ball is not in the IDA's court.

"These issues have been outstanding for some time, and everyone knows what they are. It's all to do with what the Government are prepared to do." As President of the Association, Ena will be working with Council and the team at the IDA to resolve them.

One area that Ena identifies as the "single most important issue" is the Government's failure to appoint a Chief Dental Officer for Ireland. "If we don't have a Chief Dental Officer, no one is speaking to the Government on our behalf – representing dentists and dentistry, and advising the Government on the issues. We have a Chief Medical Officer, and a Chief Scientific Advisor to the Government; we need a Chief Dental Officer."

### **Going forward**

Looking to the future, Ena believes that, for better or worse, the decline in single-handed practices and the rise in multiples and chains are inevitable developments. She also acknowledges that dental tourism is, and will continue to be, a major issue. While most of the people in her own catchment area are natives of the countries they travel to for treatment, and simply go home for holidays and have their treatment carried out while there, she knows that the issue is an important one around the country. "The trouble is that if something

As the first woman president, Ena is aware of the significance of her appointment: "It is a great privilege but also a big challenge – hopefully after this more women will be encouraged to take on the role in the future". She is aware that it can be difficult for female members and younger members to get involved, but she speaks very highly of the younger members who are currently working in the Association.

"To be involved in the IDA at Council level is very difficult for women, especially if they work and have children. At the moment, most Council members are young men – very fine young people – and it's a pity we never read about young people of their calibre in the press." goes wrong, they expect the local dentist to rectify it. I think people who travel for dental treatment are very brave, to take on the language issues alone!"

Attitudes to cosmetic dentistry have also changed, and this is going to be a large part of the dentist's work in the future. As Ena points out, there are obvious reasons for this. "People are retaining their teeth. Years ago a lot more people had dentures, but now they are in the habit of looking after their teeth and so how the teeth look becomes more important." She acknowledges the media's role in making people more conscious of the appearance of their teeth, in particular the colour, but she points out: "Nobody's ever complained about their teeth being too white!"

In concluding our conversation, Ena sums up her view of her role as President, and her hopes for the year.

"My role is to give leadership, and ensure a unified approach to the whole dental profession. To be an ambassador, keep everything in balance and possibly make small changes to IDA participation at Council level – to make it more family friendly, and to make it more attractive for women to become involved.

To that end, I would like to see the IDA at branch level become more attractive socially – perhaps with lectures of a non-scientific nature sometimes. On this point I would love to receive suggestions from members."

All in all, it is likely to be a busy year.



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# Orthodontic evolution: an update for the general dental practitioner

Part 2: psychosocial aspects of orthodontic treatment, stability of treatment, and the TMJ–orthodontic relationship

**Key words:** orthodontics, treatment developments, treatment need and demand, epidemiology, treatment outcomes

Journal of the Irish Dental Association 2008; 54 (3): 128-131.

### Introduction

The first paper in this series reviewed recent developments in orthodontics, treatment need and demand, and the benefits of treatment. This concluding paper will deal with the relationship between psychosocial status and orthodontic treatment, the stability of treatment results, and the relationship between temporomandibular joint dysfunction and orthodontics.

# Psychosocial status and orthodontic treatment

Traditionally, dentists and orthodontists generally consider that the psychological and social factors of malocclusion should be taken into account when treating patients. One of the most widely researched psychological traits is self-esteem. In common usage, self-esteem is 'a favourable estimation of one's self'. It has been further defined as a positive or negative orientation toward oneself, an overall evaluation of one's self-worth or value.<sup>1,2</sup> The term 'self-concept' is often used interchangeably with 'self-esteem'. Good selfesteem is seen as desirable because it is perceived as an asset; poor self-esteem has been implicated as one of the causes of juvenile delinquency, crime, teenage pregnancy, risky sexual behaviour, racial prejudice, educational underachievement, eating disorders, child maltreatment, and drug and alcohol abuse.<sup>3</sup> Given the range of social problems that are believed to flow from low levels of self-esteem, it is not surprising that numerous programmes have aimed to try and improve self-esteem as a cure for social ills. Many consider that self-esteem is a desirable attribute that they are entitled to by right, and as a result (in some countries) it becomes established on the political agenda.

Up to 1970, relatively little information was available in the dental or orthodontic literature on the relationship between psychosocial factors and malocclusion; in a review of the literature up to that date, Stricker<sup>4</sup> showed that the studies quoted suggested that while physical appearance was important, dentofacial appearance overall did not rate very highly.

In a review paper in 1984, Albino<sup>5</sup> stated that orthodontic treatment is most frequently carried out during adolescence, at a time of disturbed self-image and over-reaction to matters of personal appearance; in other studies, girls<sup>6</sup> recorded lower self-concept and body image scores than boys. O'Regan and colleagues<sup>7</sup> found that improvement in dental or facial aesthetics does not necessarily lead to improvement in self-esteem. Birkeland and coworkers<sup>8,9</sup> found that improvement in selfesteem between the ages of 11 and 15 was not related to orthodontic treatment, but there was an interaction with gender; they also found that those expressing more concern about their dental appearance, or those about to receive treatment, had higher self-esteem than those who were not about to receive treatment.

In a randomised, multi-centre, controlled clinical trial,<sup>10</sup> reduction of large overjets (mean 10.3mm) in a sample of 64 children aged eight to ten years using Twin-block appliances

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resulted in a significant increase in self-concept and treatment benefits that could be related to improved self-esteem, compared with an untreated control sample of 68 subjects. The question arises whether or not this was maintained into adolescence and beyond: in the most recent report from the longitudinal Cardiff study, which was initiated in the late 1980s, Kenealy and colleagues<sup>11</sup> showed in a follow-up study in 2007 that there were no psychological differences between those who had received orthodontic treatment in adolescence and those who had not, even when there was a demonstrable need for treatment in the untreated subjects.

With little support for orthodontic treatment having an effect on psychological status, and the knowledge that dental health gain from orthodontics is modest,<sup>12</sup> one returns to the topic of aesthetics. Good facial and dental aesthetics are highly desirable, especially in developed countries, and form part of the social intercourse of daily life. Increasingly, quality of life (QoL) measures are being used to evaluate treatment outcomes and have been applied to orthodontics: in a recent study, Johal *et al*<sup>13</sup> showed that increased overjet and spacing have a significant negative impact on patients' quality of life, as well as that of their parents. These types of evaluations directed specifically at the effects of malocclusions are still in their early stages of development, and more research is being carried out in this area.

Factors that influence desire for treatment include:

- gender females are more likely to seek treatment than males;<sup>14</sup>
- aesthetics the poorer the perceived aesthetics, the higher the demand for treatment,<sup>15</sup>
- age concern about appearance tends to peak during the adolescent years, declining in young adulthood and middle age;<sup>16</sup>
- attendance at the GDP regular attenders at the general dentist are more likely to be referred for an orthodontic opinion. This has been shown to be related to social class, frequency of dental attendance,<sup>17</sup> and the frequency of the mother's dental attendance;<sup>18</sup>
- social deprivation increased need and desire for orthodontic treatment was found in the more deprived socio-economic groups in a study in the north-west of the UK<sup>19</sup> but subjective need (demand) was the same in all social classes; in contrast, the 2003 Child Dental Health Survey in the UK<sup>20</sup> found that the distribution of treatment need was similar across all social classes;
- awareness of malocclusion this can vary widely; with greater awareness of orthodontics in general, media images and improving dental health, together with increased availability of services,<sup>21</sup> the demand for treatment gradually increases with time; and,
- availability of service probably the most significant factor influencing demand for treatment is the increased availability of orthodontic services, which has resulted in the most severe visible malocclusions being eliminated. Helm<sup>22</sup> stated that: "This has lowered the threshold of the population's acceptance with respect to aberrations in dentofacial appearance, further affecting the concept of clinical practice, which again, subsequently, influences the public's expectations of the orthodontic services".

The above discussion assumes that there is equity of access to orthodontic care in the population at large on the basis of professionally assessed severity of need. Private orthodontic patients



FIGURE 1: Removable upper ("Hawley") retainer.

will seek treatment for relatively minor malalignments; in the public healthcare sector, especially when resources are limited, some form of rationing will inevitably exist, and this is where indices of treatment need will be used to determine who will receive treatment on the basis of severity of the problem.

### Stability of orthodontic treatment

Research<sup>23</sup> has shown that orthodontic treatment is not necessarily stable in all cases. Follow-up studies of up to 30 years post treatment have shown varying degrees of relapse, especially in lower (and sometimes upper) labial segment alignment. No good evidence has shown that presence or absence of wisdom teeth<sup>24</sup> contributes to such relapse: the fact that third molars often erupt around the time that such late adolescent/early adult lower labial crowding occurs does not mean that one event causes the other.

Orthodontic treatment takes between 18 and 24 months to carry out; the message implicit in such treatment is that the outcome should be stable. Relapse is disappointing for the patient and the practitioner, but the only way to ensure satisfactory alignment is to retain finished treatment results over many years. Such retaining devices include removable appliances (Figures 1 and 2) or bonded retainers (Figure 3). Such retainers do not last indefinitely, and may have to be replaced occasionally: plaque retention and general oral health will have to be taken into consideration if such long-term appliance wear is contemplated.

# Temporomandibular joint dysfunction and orthodontics

The relationship between malocclusion and temporomandibular joint dysfunction (TMD) came to prominence in 1987 when a patient in the USA sued the treating orthodontist for temporomandibular joint pain, which was alleged to be the result of faulty orthodontic treatment. This case was notable not just for the damages awarded to the patient, but also for the fact that a number of 'expert witnesses' for the prosecution were not specialty-trained in orthodontics.<sup>25</sup>

Part of the weakness of the defence lay in the fact that so little good scientific evidence existed at the time that could be used to support the



FIGURE 2: Essix removable retainer.

orthodontist who had carried out the treatment. In a paper in 1990, Reynders<sup>26</sup> reviewed the then available literature. His findings were that, of 91 published papers, there were an excessive number of case reports and "viewpoint opinions", with only six studies that analysed the relationship between TMD and orthodontics statistically; no relationship was found in these six studies. Following on the aforementioned lawsuit, the American Association of Orthodontists instituted a research programme that culminated in the entire January 1992 issue of the *American Journal of Orthodontics and Dentofacial Orthopedics* being devoted to the results. Since then, numerous articles have been published, culminating in a meta-analysis by Kim and colleagues in 2002.<sup>27</sup> The consensus of opinion on the relationship between TMD and orthodontics may be summarised as follows:

- there is no difference in TMD incidence between orthodontic patients treated with or without extractions;<sup>28</sup>
- retraction of the upper incisors to reduce overjets does not force the lower incisors distally, resulting in the condyles being forced backwards in the fossa – rather, the majority of such cases showed net forward displacement of the mandible as a result of treatment;<sup>29</sup>
- vertical dimension of the face does not collapse as a result of premolar extractions – rather it increases slightly;<sup>29</sup>
- in a survey of 1,018 12-year-olds, Mohlin and colleagues<sup>30</sup> found that 46% had some signs or symptoms of TMD, but treatment need was considered to be low;
- orthodontically-treated subjects are not at higher risk of TMD;<sup>31</sup> and,
- the only temporomandibular symptom reported by Thilander and colleagues<sup>32</sup> was mild headache in those who had posterior crossbite, displacements on closure, anterior open bite, or extreme overjets; this was a cross-sectional study, and the correlations do not imply causation. Of a total of 8,344 subjects, 72% had no signs or symptoms, 24.8% had mild symptoms, 3% had moderate symptoms, and only 0.2% had severe symptoms.

### Summary

As a result of recent innovations and improvements, orthodontic treatment has become easier and more efficient to carry out, allowing greater numbers of patients to receive treatment. The main result of



FIGURE 3: Fixed bonded wire retainer.

orthodontic treatment is improved dental alignment and aesthetics. Treatment has no effect on caries or periodontal disease, and the dental health gain is modest, apart from a very small percentage of destructive malocclusions. Psychological improvements using different psychological parameters show differing results and it is not clear that any psychological gains are long lasting.

Social gain (greater willingness to smile, feeling good about oneself, satisfaction with dental appearance, etc.), and reported improved quality of life (QoL measures), are now becoming more important as consumerrelated outcomes and may, ultimately, contribute to psychosocial and psychological status. Stability of orthodontic treatment results cannot be guaranteed and all patients need to be informed of this, and of the need for long-term retention.

Malocclusion has little or no relationship to temporo-mandibular joint dysfunction and orthodontic treatment neither causes nor cures such problems. Extractions as part of orthodontic treatment do not cause TMD, nor do they cause collapse of the vertical dimension.

The major improvements in dental health in the last 40 years have been accompanied by a great increase in demand for treatment. In any public health service that is free at the point of use, demand for treatment invariably exceeds the ability of resources to supply this. Indices of treatment need are widely used to determine treatment need and eligibility for treatment in public health systems. Demand for orthodontic treatment among adolescents can be as high as 60% in the general population, while the professionally-assessed need for treatment is approximately half this figure. Age, sex, socio-economic status, perceived unattractiveness of dental appearance, and availability of orthodontic services all influence receipt of treatment.

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# Clinical audit –what, why and how?

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### What is clinical audit?

Clinical audit is part of a continuous quality improvement process that seeks to improve patient care by improving professional practice as well as the quality of services delivered. It achieves this through a systematic review of care against defined standards or criteria and, if necessary, recommendations of changes to meet those standards. The audit is then repeated to evaluate the changes against new outcomes, to ensure that patient care has improved. The whole process is often called the audit cycle,<sup>1,2</sup> and it is central to clinical governance.

Clinical audit should identify good clinical practice and provide any requisite infrastructure changes and training in order to ensure better use of resources, so that optimal outcomes for patients are assured. As well as clinical audit, an organisation will undertake financial (concerned with accounts and how well they reflect an organisation's position), internal (which looks at activities in an organisation to review the service to all levels of management, for example, monitoring the cross-infection control policy in a practice), and organisational (which is an external, independent audit of the entire organisation and how well it is set up and operates on a day-to-day basis) audit.

The difference between these types of audits and clinical audit is that the latter is owned by healthcare professionals – they undertake the audit, they review the results and they implement any necessary changes.

Audit is different from research.<sup>3</sup> Research aims to provide the evidence on which standards can be based for subsequent audit activity. As defined by Smith:<sup>4</sup>

"...research is concerned with discovering the right thing to do; audit with ensuring that it is done right".

So, audit monitors processes, looking at whether things work, not how they work.

### Why do a clinical audit?

Clinical audit is now a compulsory activity for consultants, and also for those working in

primary dental care, as part of clinical governance in the UK. Internal audit is already a requirement of the Dental Council here in Ireland.<sup>1</sup> In the UK, it is recognised as a legitimate postgraduate activity and included in continuing professional development credits. Dentists in primary care have to demonstrate 15 hours of audit activity over the three-year CPD period with the General Dental Council.<sup>5</sup> A completed audit report is normally sufficient for this purpose. However, for audit to move on from what the National Institute for Clinical Excellence (NICE)<sup>6</sup> calls a fringe activity for enthusiasts to a mainstream activity, investment needs to be made in a supportive infrastructure and the best methods that will produce the optimal results for patients.

# How do we go about an audit of our clinical activity?

Wherever you work, those responsible for governance need to decide which topics are suitable for audit. This will depend on a number of factors:

- is the topic being considered a high risk for patients or staff?;
- is the topic one that generates high cost or frequent incidence?; and,
- is there a standard against which to carry out an audit of current practice? For example, do clinical guidelines already exist or has there been a systematic review of the topic?

By its very nature audit is ongoing, in that having identified a standard, the audit cycle seeks to ascertain if the agreed standard has been met. Clinical guidelines, and thus standards, will change, necessitating ongoing review of how current practice meets these. A frequent question is: does an audit project require ethical approval? Usually the answer is no but the project should be scrutinised for any ethical implications.

Clinical audit in primary dental care is well embedded and there are many worked examples. The NHS Education for Scotland<sup>7</sup>

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FIGURE 1: Modified after: Principles for best practice in clinical audit. National Institute for Clinical Excellence, 2002.<sup>6</sup>

has a list of audit projects already on its database, for example, audits on:

- pain relief measures in general dental practice;
- recall procedures phone calls versus recall cards;
- the quality and consistency of our silicone-based impression; and,
- an audit of the five-year success rate of molar endodontics.

Worked examples of clinical audit are available to view on the West Midlands Dental Peer Review and Clinical Audit website.<sup>5</sup> One such is an audit to see if treatment offered to patients accords with their basic periodontal examination (BPE) score. The standard selected is that 95% of patients over 14 years of age should be offered treatment based on their BPE score. It is acknowledged that a large sample will be required in order to include a representative group of people with BPE scores of 3 or 4. A data collection form is designed in order to abstract the information from a random sample of five patient records per day, over a period of one month. This is followed by a staff meeting to review the results and to discuss action plans. Standards will then be modified if necessary, and changes implemented. A second review of five cases per day for one month will be timetabled, to be audited against any new standard agreed by the staff. If, at the end of this cycle, the standard is exceeded, plans may be made to repeat the audit in a year or, alternatively, to raise the standard, instituting changes and engaging in another cycle of audit.

Improving outcomes for patients is the key role of clinical audit;

sustaining change and continuously improving it is a hallmark of the professional. In primary dental care the collaboration required of clinical audit has the added benefit of peer review, and is another means to comply with continuing professional development requirements that is viewed positively by general dental practitioners.<sup>8</sup>

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# The relationship between pericoronitis, wisdom teeth, putative periodontal pathogens and the host response

### Abstract

**Purpose:** To review the literature concerning pericoronitis, in particular the nature of the lesion and its aetiology, what factors may be used to predict if some patients would benefit from early removal of third molars, and if a scoring system can be developed for this purpose.

**Method and materials:** A literature search using PubMed and the facilities of the Dublin Dental Hospital (DDH) library were used to gather the relevent information. PubMed lists all of the journals available in the DDH library and was used to identify relevent papers, which were then retrieved from the shelves and stacks with the help of library staff. The key word used was 'pericoronitis'.

**Results:** The studies reviewed assert that the bacteriology of pericoronitis is predominantly anaerobic in character, yet no causative species has been identified. Marker organisms for periodontitis were not generally isolated. Host factors examined in various studies were the inflammatory markers interleukin 1b and prostaglandin E2, and the immunological responses of neutrophils, macrophages, natural killer cells, T cells, helper T cells and suppressor/cytotoxic T cells. While all of these factors, with the exception of prostaglandin E2, tend to be elevated in cases of pericoronitis, both symptomatic and asymptomatic, no clearcut measurable entity has emerged that can be used as a predictive marker.

**Conclusion:** A hypothesised scoring system to predict which patients would benefit from early removal of asymptomatic impacted lower third molars would be clinically advantageous in justifying prophylactic third molar surgery, but is not yet feasible or proven.

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### Introduction

This paper reviews the literature concerning pericoronitis, specifically the nature of the pericoronal lesion, its bacteriology, host susceptibility and host response. It is hypothesised that a correlation of these factors would assist in predicting which patients, particularly in the older age groups, would benefit from third molar surgery. It is proposed to develop a scoring system to identify patients who will subsequently require surgical removal of wisdom teeth, possibly later in life, with the potential extra risks of developing excessive bone loss around the second molar, and increased morbidity. Early judicious removal justified by robust evidencebased indicators could conceivably avoid surgery at later ages with its concomitant medical risks. There is evidence confirming the

increased difficulty and morbidity of third molar surgery in older patients.<sup>1</sup>

### Background

The National Institute of Clinical Excellence (2000), the Faculty of Dental Surgery of the Royal College of Surgeons of England (1997), and the Scottish Intercollegiate Guidelines Network (2000) have been quite specific in relation to asymptomatic partially erupted third molars, clearly stating that they should not be removed prophylactically.<sup>2,3,4</sup> Clinical practice may well diverge from this, with up to 50% of third molars removed falling into this category. There has been a greater reticence to remove asymptomatic lower third molars than in the past, with the result that more and more patients are attending in their 30s and 40s with

impacted, partially erupted third molars.<sup>5</sup> Typically, these patients are regular attenders, have good oral hygiene, no active caries or periodontal disease and a full dentition, possibly due to the advent of fluoride and increased awareness of oral health. The challenge for the general dentist and the specialist surgeon is to predict which of these patients will go on to develop problems, typically pericoronitis or caries due to local cleansing difficulty. As already stated there is evidence that the older the patient, the greater the difficulty, and consequently the morbidity, of third molar surgery, so some of these patients may benefit from prophylactic removal while some may not. As pericoronitis is the most common reason for the removal of wisdom teeth, understanding the nature of the pericoronal lesion is at the heart of this dilemma.<sup>6,7</sup>

# Bacteriology, host susceptibility and host response of the pericoronal lesion

Many studies have been conducted on the bacterial flora residing in the pericoronal pocket, with various aims. Some have looked for periodontal pathogens, others have looked at the general flora from an antimicrobial point of view, and others have carried out studies of the flora before and after third molar removal.<sup>8,9,10,11,12,14,15,19</sup> Lately, using more sophisticated techniques such as immunohistochemistry and DNA hybridisation, researchers have explored the inflammatory and immunological aspects of pericoronitis, and searched for indicators of increased susceptibility in individuals.<sup>16,17</sup>

Hurlen and Olsen (1984) extracted third molars with follicles intact from nine patients with a history of recent pericoronitis and examined their specimens with scanning electron microscopy (SEM) with the aim of investigating the microscopic contents of the pericoronal pouch.8 They noted the lack of information in the literature on the microbiology of pericoronitis at the time. Their micrographs showed decreasing levels of bacteria in apical tissues, but with an increasing preponderance of spirochetes in the deeper portions of the pericoronal pocket, as well as fusobacteria-like rods, leading them to speculate a link between pericoronitis and acute necrotising ulcerative gingivitis (ANUG). They found different microenvironments present in the follicle evidenced by different levels of rods, cocci and "corncob" structures, and noted that their ongoing research using anaerobic sampling techniques was yielding 30-50 anaerobic species present, which correlates well with later research. Finally, they demonstrated leukocyte activity and phagocytosis taking place on the tissue surface within the pericoronal space.

Nitzan *et al* (1985) reviewed clinical aspects of pericoronitis, also sampling the space around the third molar by using saline to flush the space and then re-aspirating it and subjecting it to microscopy as well as culture.<sup>9</sup> On microscopy, they found large numbers of spirochetes and fusobacteria, while their cultures showed no difference to control sites. Their anaerobic sampling techniques were clearly inadequate and they acknowledge that further work needs to be done in this area. They strongly suspected a link between ANUG, pericoronitis and dry socket. They considered the possibility that the spirochetes present may just be bystander organisms, paving the way for whatever is the true infectious agent.

Weinberg *et al* (1986) used light and electron microscopy to analyse exudates from six cases of acute pericoronitis and, like Hurlen and Olsen in 1984, found large numbers of spirochetes present and large scale phagocytoses by polymorphonuclearleucocytes and macrophages of bacteria other than spirochetes in the exudates.<sup>10</sup> No phagocytosis of spirochetes was observed. They conclude by speculating that bacterial penetration into the pericoronal tissues may be taking place and following a similar mechanism to that observed in advanced periodontitis.

Mombelli *et al* (1990) searched for periodontopathogens in a group of healthy subjects with impacted third molars.<sup>11</sup> Using sound anaerobic sampling and culture techniques, a wide range of bacteria was detected, including small, medium and large spirochetes, fusobacterium species, *Bacteroides intermedius, Bacteroides gingivalis, Capnocytophaga, Actinobacillus actinomycetemcomitans, Selenomonas* species and *Veillonella* species. These were present in the absence of pericoronitis, although the authors speculated that anaerobic bacteria were probably responsible for acute pericoronitis based on the sensitivity of these organisms to ornidazole (a nitromidazole antibiotic similar to metronidazole), and the superiority of ornidazole over penicillin for treating pericoronitis. They could not conclude, however, that the ecological niche provided by the pericoronal pocket led to periodontal disease and further stated that acute pericoronitis, since it did not involve attachment loss, was not a lesion of periodontitis.

Wade *et al* (1991) found, in a microflora study of pericoronitis, an absence of marker organisms for severe periodontitis, but found that the predominant cultivable microflora was highly anaerobic and superficially similar to that found in chronic periodontitis.<sup>12</sup> Organisms isolated were *Prevotella (Bacteroides) intermedia, Peptostreptococcus micros, Veillonella* species, *Fusobacterium nucleatum* and *Streptococcus mitis. Porphyromonas gingivalis,* a marker for periodontitis, was not isolated.

Blakey et al (1996) conducted a thorough investigation of the outcomes of treatment for pericoronitis, using a sample of 20 patients (18-24 years old) who presented with minor signs and symptoms of pericoronitis.13 A total of 12 control patients with previous third molar surgery were used. Samples of plaque and gingival crevicular fluid (GCF) were taken at entry, one week after initial treatment and three months post removal of all wisdom teeth. The GCF was analysed for levels of interleukin-lb and prostaglandin E2 (IL-lb and PGE2) to assess host inflammatory response. The plaque samples were analysed with a DNA hybridisation technique testing for 40 different oral micro-organisms. Generally, all the subjects were fit and healthy with good periodontal health. It was noted that 80% of symptomatic lower third molars were vertical or distoangular, and 80% of these were at or beyond the occlusal plane. These percentages correlate with a number of other studies.<sup>1,18</sup> At entry, IL-lb levels were significantly increased in the GCF adjacent to symptomatic third molars as compared to asymptomatic third molars and control sites. PGE2 levels were not elevated at symptomatic sites compared to asymptomatic and controls. The microbial flora that was sampled from the distal of the second molar was similar regardless of whether the third molar was symptomatic or asymptomatic; however, the levels of anaerobic organisms Bacteroides gracilis, Prevotella nigricens, Fusobacterium nucleatum subspecies vincentii and

Selonomonas noxia were elevated compared to control patients. Micro-organisms that are considered risk markers for periodontal disease, Porphyramonas gingivalis and Bacteroides forsythus, were only detected at low levels, in contrast to other studies that show elevated levels of these micro-organisms. At three months post surgical removal, bacteria levels reduced significantly at the distal of the second molar; however, not to the levels of control subjects. It was noted as well that IL-lb levels in GCF were reduced, but not to the levels of controls, suggesting that in these patients, possibly due to their genetic make-up, an inflammatory response equilibrium dominated by systemic characteristics rather than local factors may play a role in their developing pericoronitis. Also, the fact that PGE2 levels remained consistent between symptomatic, asymptomatic and controls correlates with the fact that periodontal destruction was not seen in any patients, leading to the conclusion that pericoronitis is a type of severe gingivitis rather than chronic periodontitis. They note that elevated IL-Ib levels could be used as a marker of patients susceptible to pericoronitis, but that no data exists to differentiate which patients will experience a mild pericoronitis amenable to treatment other than removal of the third molar, and patients who will go on to develop severe pericoronitis, necessitating third molar removal. This thorough report looked at many aspects of pericoronitis and its treatment; however, the sample size was small with only 20 patients involved.

Peltroche-Llacsahuanga et al (2000) studied bacterial isolates from 37 patients with severe pericoronitis exhibiting limited mouth opening, palpable regional lymph nodes, pyrexia and tender pericoronal tissues.<sup>14</sup> Using extremely fastidious techniques and a wide range of selective and non-selective agar media, more comprehensive than any previous study, 441 isolates were identified, comprising 437 bacterial isolates, three yeasts and one protozoan. The predominantly isolated species were facultative anaerobes including Streptococcus milleri, Stomatococcus mucilaginosus, Rothia dentocariosa, Streptococcus sanguis and Streptococcus oralis. The predominant obligate anaerobic flora consisted of microscopically identified spirochetes and fusobacteria and culturally identified Actinobacillus naeslundii and Prevotella melaninogenica. Staphylococcus aureus and Steptococcus pyogenes, both well known for causing supperative infections, were only rarely recovered. Three out of 441 samples were yeasts and one out of 441 was a protozoan identified as Entamoeba gingivalis. The results were broadly in line with previous studies, but all studies differ in choice of culture media and techniques used. What was striking in this study was the frequent recovery of bacteria of the Streptococcus milleri group. These bacteria have the ability to bind soluble fibronectin, allowing them to form plaques, and from this position infections can be initiated by extra-cellular enzymes such as hyaluronidase, DNAse, gelatinase and collagenase. These enzymes can kill migrating neutrophils, which is one essential step in the development of pus. These bacteria are commonly found in dentoalveolar and peri-tonsilar abscesses and it has been shown in vitro that their growth can be potentiated by the presence of obligate anaerobes such as Prevotella intermedia. These possibly secrete a metabolic substance, which supports Streptococcus milleri group bacteria in survival and multiplication in a hostile environment. For this reason, they suggest that metronidazole should not be used alone for the treatment of pericoronitis, but that therapy should include penicillin or other beta-lactam antibiotics as metronidazole is not active against streptococci.

Sixou *et al* (2003) took bacterial samples for 26 subjects, all suffering from pericoronitis, principle symptom being acute pain.<sup>15</sup> They found a broad range of bacterial species in line with previous studies and, using amoxycillin-containing media, they were able to identify beta-lactamase-producing species in nine of the 26 individuals of the genera *Prevotella*, *Bacteroides*, *Staphylococcus*, *Capnocytophaga* and *Fusobacterium*. As before, periodontal pathogens were rarely found, and *Streptococcus milleri* was common. The authors note that pericoronitis is a gingivitis-like lesion, and that the presence of beta-lactamase-producing strains may be as a result of widespread beta-lactam antibiotic use from early childhood onwards, which may make these infections more difficult to treat in the future.

More recent studies of pericoronitis reflect the increasing understanding of the host/pathogen response, and bring new techniques to bear on this problem. Laine *et al* (2003) compared asymptomatic impacted third molars with clinical signs of inflammation with impacted third molars without signs or symptoms of inflammation in 20 patients.<sup>16</sup> All were extracted and tissue samples from each type were analysed immunohistochemically, looking for neutrophils, macrophages, natural killer cells, T cells, helper T cells and suppressor/cytotoxic T cells. CD68+ macrophages were the most numerous, particularly in the vicinity of the lamina propria, in patients with signs of pericoronitis, and in general there were elevated levels of all the inflammatory cells tested for as compared to controls. The group conclude that this type of pericoronitis is a "smouldering" infection that is best treated by removal of the tooth, preferably before 25 years of age.

Becklin *et al* (2005) compared healthy tissue and inflamed tissue samples, staining for tumour necrosis factor- $\alpha$  (TNF- $\alpha$ ), which is a proinflammatory cytokine, the production of which is thought to be stimulated by bacterial lipopolysaccharide (endotoxin).<sup>17</sup> They found markedly increased levels of TNF- $\alpha$  and its receptors in the connective tissue of the clinically inflamed samples, and postulated that the application of TNF blockers may be of value in the study of pericoronitis, but it is not yet of therapeutic value.

More recently Yamalik and Bozkaya (2007) looked at the position of third molars in cases of pericoronitis and confirmed earlier studies showing that third molars at or beyond the occlusal plane and vertical or distoangular are the most frequently associated with pericoronitis.<sup>18</sup> They go on to recommend prophylactic removal in these cases.

Rajasuo *et al* (2007), using 20-year-old male Finnish conscripts with pericoronitis as subjects, looked for *Actinobacillus actinomycetemcomitans*, *Porphyromonas gingivalis*, *Prevotella intermedia* and *Tannerella forsythensis* in bacterial samples that were taken from the deepest pockets of the pericoronal lesion and analysed by polymerase chain reaction.<sup>19</sup> Apart from *Actinobacillus actinomycetemcomitans* the other species were commonly found in the pericoronal pocket. This result is at odds with the previous studies of Blakey *et al* and Sixou *et al* in that these marker organisms for periodontitis were not commonly found in pericoronitis.

### Conclusions

The nature of pericoronitis is not yet fully understood. It is a common problem in the third decade of life, and is associated with third molars that are at or above the occlusal plane, often vertical or distoangular, but also mesioangular, which can also erupt above the occlusal plane in some instances. By their orientation, vertical or distoangular third molars will generally have the ability to erupt higher, while the opposite is the case for mesioangular. Blakey et al in 1996 noted that clinicians and patients often focus on these deeply impacted mesioangular third molars, which have a "spectacular" appearance radiographically, but in reality they are least likely to be symptomatic, at least early on. Third molars that are close to, at or above the occlusal plane are difficult to follow long term, as most of them are eventually extracted. More importantly, what is the fate of these more deeply impacted teeth? It should be mentioned at this point that impacted third molars that remain unerupted are not thought to give rise to pericoronitis; however, they may erupt passively later in life, accounting in part for late onset pericoronitis. It is possible that the deeper below the occlusal plane the third molar resides, the longer it takes for bacteria to penetrate the pericoronal tissues that seem to be more tightly bound down and so the onset of pericoronitis may be delayed, possibly by a decade or more. Extensive studies of the bacterial flora have failed to identify a causative organism, and it seems likely that the anaerobic load combines to provoke a host response that can lead to pericoronitis. Further information on the host factors - particularly differences between individuals' responses to the same challenge - may yield understanding of factors that reliably predict susceptibility to pericoronitis. Further studies undertaken on impacted third molars in individuals in the fourth or subsequent decades of life may be fruitful and widen the grasp of the natural history of pericoronitic infection in third molars.

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### ABSTRACTS

# Ridge preservation: what is it and when should it be considered?

Darby, I., Chen, S., De Poi, R.

The resorption of bone following extraction may present a significant problem in implant and restorative dentistry. Ridge preservation is a technique whereby the amount of bone loss is limited. This paper discusses the scientific literature examining the healing post extraction and ridge-preserving techniques, primarily from the perspective of implant dentistry. Some indications for ridge preservation and methods considered appropriate are discussed.

Australian Dental Journal 2008; 53: 11-21.

### Medical emergencies in the dental practice

Greenwood, M.

Medical emergencies can be alarming to any clinician but these situations are less alarming if proper preparation has been made. Medical emergencies occur in dental hospital practice more frequently than in dental practice, but in similar proportions in terms of their nature. A thorough patient history can draw the practitioner's attention to potential medical emergencies that could occur. It is particularly important in the history to enquire about known allergies or adverse reactions to medication so that these can be avoided.

Good methods of practice can prevent many emergencies, for example prompt treatment of a diabetic patient at a predictable time, thereby avoiding hypoglycaemia. In one study there was a perceived need for further training among dental practitioner respondents to a survey on training in medical emergencies.

Dental procedures themselves can jeopardise the airway, which must therefore be adequately protected. Patients with pre-existing medical conditions such as asthma or angina are usually taking prescription medications and the practitioner should always check that these are readily available and have been taken on the day of treatment. Patients who have an asthma attack and who have not brought their normal medication will not be helped significantly by oxygen alone (because of the bronchoconstriction). It is therefore vital that patients with asthma bring their inhalers with them or that they are available in the emergency drug box. The various national formularies, including the *British National Formulary*, list the drugs to be included in an emergency box for the dental surgery. Similar documents may be available in different countries. A further addition to the list in the *British National Formulary* is the benzodiazepine antagonist, flumazenil.

The common emergencies that may occur in dental practice will be discussed in turn and refer to adult patients. In all of these situations the basic principles of resuscitation should be remembered, i.e., attention to the airway, breathing and circulation (A, B, C). Routes of drug administration are also important and, wherever possible, alternatives are given. Drugs are continually being developed that may be administered by more 'convenient' routes.

Periodontology 2000 2008; 46: 27-41.

### Accuracy of impressions and casts using different implant impression techniques in a multi-implant system with an internal hex connection

Wenz, H.J., Reuter, H.U., Hertrampf, K.

### Purpose

The aim of this study was to investigate the deviations of the implant positions of both impressions and casts using different impression materials and techniques. Furthermore, the existence of a correlation between the deviations of the impression and those of the cast was investigated.

### Materials and methods

A reference model was fabricated with five Frialit-2 implants parallel to each other. In a standardised experimental setting, five stone casts were produced with five different techniques using polyether (A) or polyvinyl siloxane (B to E). In three groups, a direct technique was used with a medium-viscosity material or a putty-tray material in combination with a light-viscosity syringe material (A to C). In two groups, an indirect technique (either one-step [group D] or two-step [group E] was used with a putty-tray material in combination with a light-viscosity syringe material. The centre-tocentre distances were measured for impressions and casts in the horizontal plane using a computer-aided microscope, and the relative and absolute deviations compared to the reference model were calculated. Analysis of variance followed by the post-hoc Scheffi test (parametric data), or the Kruskal-Wallis test followed by pair-wise Mann-Whitney tests (non-parametric data), were used for statistical analyses. Deviations of impressions were compared with their respective casts using paired t tests and the Pearson correlation coefficient.

### Results

No significant differences for the relative deviations were found for impressions (-5 to  $-8\mu$ m) or casts (+7 to  $+16\mu$ m). Group E produced significantly higher absolute deviations for impressions ( $38\mu$ m) and casts ( $39\mu$ m) compared to the other groups (11 to  $18\mu$ m and 17 to  $23\mu$ m, respectively). A significant correlation between deviation of the impression and its respective cast was found for every group (r = 0.40 to 0.80) except group D.

### Conclusions

The distortions in the horizontal plane of the casts obtained from the impression techniques of groups A to D would probably not affect the clinical fit of implant-retained superstructures. Because of the high variation of deviations (-113 to  $+124\mu$ m), the two-step technique cannot be recommended. The method to measure both impression and cast provided a better understanding of how inaccuracies are caused.

Int J Oral Maxillofac Implants 2008; 23: 39-47.

### A critically severe gingival bleeding following non-surgical periodontal treatment in patients medicated with anti-platelet

Elad, S., Chackartchi, T., Shapira, L., Findler, M.

### Background

Only a few dental procedures have been reported to cause lifethreatening bleeding. All of these cases followed surgical intervention.

### Material and methods

In this paper, we report a case of severe bleeding following nonsurgical periodontal procedures in a patient treated with a dual anti-platelet regimen post coronary stent insertion.

### Results

The patient's medical history included ischaemic heart disease, hypertension and diabetes mellitus. Haemostasis was achieved at the conclusion of the non-surgical periodontal treatment. However, several hours later, the patient arrived at the emergency room and was diagnosed with hypovolaemic shock.

### Conclusion

This case should raise the clinician's awareness of bleeding complications in non-surgical procedures, as well as the risk for bleeding when a dual anti-platelet regimen is administered. The importance of patient monitoring and the use of local haemostatic agents is demonstrated in these cases.

J Clin Periodontology 2008; 35: 342-345.



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# Data protection in dentistry – your responsibilities

Like any professional who keeps personal data about clients, dentists must comply with data protection law. DR AISLINN MACHESNEY explains how you can fulfil your data protection responsibilities.

If you keep data about patients/clients in your surgery, you must comply with data protection principles. Under data protection regulations, dentists are considered to be 'data controllers'. According to the website of the Data Protection Commission: "Data controllers can be either individuals or 'legal persons' such as companies, Government Departments and voluntary organisations. Examples of cases where the data controller is an individual include general practitioners, pharmacists, politicians and sole traders, where these individuals keep personal information about their patients, clients, constituents, etc." The person whose data is kept by the data controller is known as the 'data subject'.

### **Data protection responsibilities**

Every data controller is bound by the data protection responsibilities set out in the Data Protection Acts 1988 and 2003. Certain categories of data controllers are required to register with the Data Protection Commissioner.

Under section 16 of the Data Protection Act, anyone processing personal data related to mental or physical health, which is regarded as "sensitive personal data", must register with the Commissioner. Dentists are listed under this category and are therefore required to register.

# How do you register with the Data Protection Commissioner?

Registration involves setting out:

- what kinds of personal information you keep on computer;
- for what purposes you keep it; and,

■ to whom the information is disclosed and related details. You must then submit a form to the Data Protection Commissioner so that these practices can be made available to be viewed.

A specific form must be completed. The Data Commission encloses a very helpful advice sheet with the application form, which gives advice on how to complete this form.

### Fee to register

The processing fee for registration depends on how many employees the data controller has. It ranges from  $\in$ 35 for one to five employees, to  $\in$ 90 for six to 25 employees, and  $\in$ 430 for 26 or more employees. Payment can be made online using a credit or laser card, or by post with a cheque or postal order. Registration must be renewed annually.

### **Report of the Data Protection Commissioner 2007**

In the Annual Report of the Data Protection Commissioner 2007, which was published recently, the Data Protection Commissioner drew particular attention to health-related data, saying: "The data protection rights of individuals can take on a particular significance in relation to their sensitive health data. ... individuals wish to be assured that their

personal health data is kept confidential. ... [However] the use of a person's data is critical to the success of their treatment and there is also a desire to use that data to improve health outcomes for the population generally through audit and research".

The report introduces new guidelines, which set out data controllers' obligations and responsibilities with regard to the collection, storage and use of personal data in health research, including clinical audit. This 'Guidance Note on Research in the Health Sector', arises from an extensive consultative process carried out last year, and is available in full on the Commission's website – www.dataprotection.ie. The Commissioner's office can also be contacted with queries regarding individual projects.

For further information, contact The Data Protection Commission in Co. Laois.

### PRACTICE MANAGEMENT

# Dental negligence – the legal perspective revisited

CAROLINE O'REILLY outlines the standard for establishing dental negligence in the legal setting.

The basic test for establishing liability in professional negligence claims is whether the professional in question has acted with reasonable care in the general or specialised area in which his skill has been sought. This will be judged by a standard that is partly set by members of his profession and partly by legal principles.

In order to prove negligence under Irish law, the first question to be decided is whether or not there has been breach of a duty of care. The principles to be applied in deciding this issue have been laid down by the Supreme Court in *Dunne vs. The National Maternity Hospital*, and the salient points are as follows:

- the true test for establishing negligence in diagnosis or treatment on the part of a medical practitioner is whether he has been proved to be guilty of such failure as no medical practitioner of equal specialist or general status and skill would be guilty of if acting with ordinary care;
- if the allegation of negligence against a medical practitioner is based on proof that he deviated from a general and approved practice, that will not establish negligence unless it is also proved that the course he did take was one which no medical practitioner of like specialisation and skill would have followed had he been taking the ordinary care required for a person of his qualification; and,
- if a medical practitioner charged with negligence defends his conduct by establishing that he followed a practice which was general and which was approved of by his colleagues of similar specialisation and skill, he cannot escape liability if, in reply, a plaintiff can establish that any such practice has inherent defects, which ought to be obvious to any person giving the matter due consideration.

Accordingly, a medical practitioner may not be found negligent simply because the diagnosis made by him is incorrect or the prescribed treatment has been unsuccessful. Provided both are reasonable and pass the "ordinary care" test, then he will not be found negligent. However, if an error of judgement was an unreasonable one, then the impugned decision would be deemed negligent.

In *Geoghegan vs. Harris*, the plaintiff decided to have dental implants, which required a bone graft be taken from his chin. Following the surgery he developed chronic neuropathic pain in his lower jaw. He claimed that his dentist told him before the operation that his procedure would involve no pain, and that he received no warning of the possibility of chronic pain developing, saying that if he had been warned, he would not have undergone the surgery.

The defence pleaded that Mr Geoghegan had been warned about the possibility of pain but that the onset of chronic neuropathic pain was so remote a possibility that a warning as to it occurring was unnecessary. Furthermore, they contended that even if he had received such a warning, he would still have proceeded with the operation.

The court held that the defendant was obliged to give a warning to the plaintiff of any material risk (however remote) that was a known or



foreseeable complication of the operation. Essentially, a patient has the right to know and the practitioner has a duty to advise of all material risks associated with a proposed form of treatment. While the court will decide what is material, consideration of both the severity of the consequences and the statistical frequency of the risk will be taken into account.

In order for a plaintiff to recover damages, he must prove that a warning should have been given but that it was not given, and that if he had received a proper warning, he would not have undergone the operation. On the facts of that particular case, the court found in favour of the defendant, Dr Harris, on the basis that even had the warning been given the plaintiff would have proceeded with the operation.

Therefore, in elective surgery, any risk that carries the possibility of grave consequences for a patient must be disclosed. However, the issue of whether an individual patient (taking into account his own personal circumstances) would go ahead with such an operation, irrespective of the warning of the risk given, will be deemed very relevant when deciding if there has been negligence on the part of the medical practitioner.

Caroline O'Reilly works with O'Reilly Legal Consultants, a Dublin-based firm of solicitors.

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- Associate sought for busy, modern three-surgery clinic, Carrick-on-Shannon, Co. Leitrim (Dublin two hours) to replace departing colleague (three years). Hygienist, digital OPG, great team. Tel: 086 160 8426, or Email: doylepete@yahoo.com.
- Dental associate required for busy two-surgery practice with hygienist in County Galway. Start immediately. Tel: 087 997 2877.
- North Dublin, near airport. Associate to replace colleague immediately. Fulltime. Excellent opportunity for highly skilled clinician to deliver quality care in established practice with sizable client base, motivated team, and technology including digital radiography, OPG, HealOzone, DiagnoDent, digital shading, Caesy. Email: dentalassociate1@gmail.com. North east region. Full/part-time associate required to replace departing

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colleague. Seven-surgery practice. Well-equipped, air-conditioned surgeries. On-site orthodontist/oral surgeon. Highly trained and friendly support staff. Full clinical freedom. Previous VT practice. For further information contact Dr Colm Smith, Tel: 087 235 4963.

- Dental associate required for busy Dublin practice. Email: dublindentist@live.com.
- Associate, part-time, required for busy practice located 30 minutes from Dublin city. Please Email: riverforestdentalclinic@gmail.com.
- Friendly associate required (full-time) for a very busy practice in Nenagh, Co. Tipperary. OPG and laboratory on-site. Tel: 087 686 6180.
- Full-time or part-time dental associate required for a very busy modern practice in Lucan. Excellent support staff, package and prospects. PRSI and private. Please contact Maria/William, Tel: 01 610 5022, or Email: maria.kavanagh@primacare.ie.
- Associate required full-time to replace departing colleague in very busy practice in Clane, Co. Kildare. Starting July 2008. Tel: 087 665 9600.
- Dental associate, with a view, required for full-time position in Cork area. Please send CV to Box No. J308.001.
- West Cork. Associate required for full-time position in a busy mixed practice. All modern equipment, computerised, OPG. Tel: 086 172 7064 after 6.00pm.
- Dental associate wanted for busy Donegal practice, only 20 minutes from Derry. Tel: 074 936 2666, or 074 936,2475.
- Associate dentist required, initially for four days a week. Northside, 15 minutes from city centre. Please Tel: 087 682 6840.
- Part-time (three days) associate required to replace departing colleague in a busy private/PRSI modern practice in Co. Kerry. Trained, friendly staff, nice atmosphere! Please Email: kerrydentist@hotmail.com.
- Associate position available from early July to replace departing colleague, Waterford city centre. Busy, modern, family-based practice, digital OPG, digital x-ray, excellent support staff. Tel: 087 771 8078 after 6.00pm, or Email: chopperdoc@eircom.net.
- Dental associate required, part-time, for modern, purpose-built dental practice in Portlaoise. Multi-surgery practice with vocational trainee, hygienist, visiting oral surgeon, digital OPG. Gas and IV sedation provided. Reply with CV to Box no J308.002.
- Experienced associate required for family practice in south county Dublin. Part-time initially with a view to full-time. Tel: 01 280 9753 after 6.00pm, or Email: moroneydlk@imagine.ie.
- Associate required for Co. Louth practice. Modern equipment, great staff, OPG, hygienist, etc. Expense-sharing an option, with future freehold/leasehold buy-out options. Tel: 087 278 5239, or Email: shaunacianeoghan@eircom.net.
- Limerick city centre. Part-/full-time associate dentist required to cover one month's leave during August/September. Excellent support staff and state-of-the-art surgeries. For more details, please Tel: 087 657 1043, or Email: info@limerickdentist.com.
- Experienced DSA required for maternity cover in Dublin 2 practice from mid April. Flexible full-/part-time. Excellent salary, etc. Tel: 676 6759.
- Part-time dental surgeon required to work in the Community Dental Service of the HSE in Dublin South City. Email: colleen.oneill@hse.ie.
- Full-time/part-time dental surgeon required for prestigious general dental practice in Cavan town, which offers high calibre support staff. Newly

refurbished building, fully computerised surgeries. Digital OPG, motorised endo. Visiting orthodontist and oral surgeon. Contact Joanne, Tel: 087 864 1990/049 433 2488, or Email: churchstreetdental@eircom.net.

- Experienced dental surgeon required for West of Ireland practice, to replace departing colleague. Modern practice, digital x-ray, computerised records. Partnership available. Email: oralcentre@hotmail.com.
- Dentist required for position in the HSE community dental service in Kildare/West Wicklow. For further information contact Dr S. Doherty, Tel: 087 662 4795, or Email: skdoherty@eircom.net, or contact Dr W. Ryan, Tel: 087 927 4147, or Email: william.ryan@hse.ie.
- Experienced dentist required immediately to join our busy, Dublin city centre practice. Excellent facilities include I.O. cameras, Siemens Cerec, digital x-ray (I.O., OPG and Ceph). First-class facilities and support. Excellent package and prospects. Please contact us, Tel: 086 818 7373.
- Busy, modern, computerised dental practice in the north east requires experienced full-time dentist to replace relocating dentist. Group practice. Two full-time hygienists. All mod cons. Excellent remuneration. Email: info@dbholly.com.
- VHI SwiftCare clinic. Full-time and part-time dentists required to work on a sessional basis to help deliver a new seven-day emergency dental service at the VHI Swiftcare urgent care centre in Balally. Initial hourly rate guaranteed. Submit CVs to: recruitment@vhiswiftcare.ie.
- Part-time dentist required for busy city practice in Kilkenny. Tel: 087 230 0379.
- Experienced dentist required: excellent position. Partnership available for ambitious dentist. Text telephone number to 086 855 7173 and we will telephone you, or Email: lboland@iol.ie.
- Locum dentist required for maternity leave in Athlone (August '08-February '09). OPG, digital x-rays, computerised. Tel: 087 206 8020, or Email: dentalvacancy@hotmail.com.
- Locum dentist required. Full-time position in general dental practice in Drogheda, from mid June to Christmas. Well-established, private/PRSI, progressive two-surgery practice (dentist/hygienist). Would suit experienced and conscientious applicant. Tel: 041 984 6333 (daytime), or 086 858 3366.
- Locum. Superb opportunity, three months from June, to cover very busy single-handed, two-surgery, modern, well equipped practice north of Dublin. 40 minutes from the airport. No medical card. Highly generous fixed minimum salary with bonus on top. Tel: 086 807 5273.
- Killaloe, Co. Clare. Full-time locum position, if interested, from May-September 2008, to cover maternity leave. Part-time associate position available after this term. Friendly, modern GMS/RSI/private practice. Busy, excellent staff, hygienist, computerised. Tel: 087 233 3053, or Email CV to brendaodowd@eircom.net.
- Locum position, May-August/September '08. Generous fixed minimum salary plus bonus. Modern practice 30 minutes from Dublin Airport. Contact Cormac, Tel: 087 988 0800, for details.
- Locum dentist required for busy south Dublin practice to cover maternity leave from early July for approximately four months. Please call Norma Jean, Tel: 01 298 6029, or Email: 1dundrumdentalsurgery@eircom.net. Hygienist required one to two days per week in Dublin 10 area. Modern

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equipment with experienced support staff. Please Tel: 087 834 4001, or Email: jpdheaney@eircom.net.

Hygienist required one day per week. North east area. Tel: 087 268 5973.

- Hygienist invited to join Dublin 9 (Glasnevin) practice, part-time. Please Tel: 01 837 3714, or Email: rcahill@cahilldental.net.
- Hygienist required. South Dublin location. Please Email: dentalsurgerydublin@yahoo.ie.
- Full-time hygienist required for busy Galway city centre general practice. Fully computerised, digital x-rays. Excellent support team. Email: fleetwood@ireland.com.
- Hygienist required, immediate start. Contact Coole Dental Surgery, Tel: 044 966 1777, for further details.
- Hygienist required, Leixlip, Co. Kildare. Please Email: riverforestdentalclinic@gmail.com.
- Part-time hygienist wanted to start mid June in fully computerised practice in Dublin south west. Email: ada@smileclinic.ie.
- Locum dental hygienist required for busy south Dublin practice to cover holiday period of approximately four weeks in September 2008. Please call Norma Jean, Tel: 01 298 6029, or Email: 1dundrumdentalsurgery@eircom.net.
- Dental nurse/practice manager required. Full-time, progressive south Dublin practice. Applicant should be strongly motivated and work on their own initiative. Computer/marketing experience required. Good people skills. Excellent terms for right candidate. Tel: 086 807 5273.
- Dental nurse required. Full-time for experienced/qualified. Pay according to time qualified. Dublin city centre just off Grafton Street. Fully computerised, digital radiography. Dental nursing/administration/some reception tasks. Position available April 7, 2008. Contact Dr Des Gallagher, Tel: 087 647 8524.
- Dental nurse/receptionist required for practice in Dublin 12. Position is three days nursing and one to two days reception per week. Tel: 086 851 1141.
- We are pleased to introduce an emergency dental service at our Vhi Swiftcare facility in Balally. We require experienced part-time dental nurses to join our growing team. Sessional basis, to include evenings and weekends. Generous rates. Submit CVs to: recruitment@vhiswiftcare.ie.
- Dental nurse required for city centre practice. Forward-thinking environment with rewarding opportunities and excellent salary conditions. For all enquiries and applications, please Email: aileen@thebodyclinic.ie.
- Qualified dental nurse/receptionist required for dental practice in Mullingar. Full-/part-time. Please Tel: 087 139 7646 after 6.00pm, or Email CV to bronmike@eircom.net.
- Qualified dental nurse required for specialist oral surgery and implantology practice, Dalkey. Email: darren.mccourt@oralsurgery.ie.
- Employment DSA Galway. Dental nurse/practice manager. Full-time. Immediate start. Fully computerised, digital radiography. Applicants should be strongly motivated and work on their own initiative. Excellent terms, right candidate. Tel: 091 531531, or Email: asta@galwaydentist.com.
- Exclusive Dental Employment Agency (DSA). Provides staff for temporary/permanent/part-time positions. Also available: in-practice staff training courses, e.g., cross infection control. Tel: 087 768 1405, web: www.dsa.ie.

### **PRACTICES FOR SALE/TO LET**

- Edenderry, Co. Offaly (Granary Medical Centre). Individual surgical rooms to rent. Avoid huge set-up costs. From one to four rooms available. Town centre location with dedicated car park. Busy doctor's surgery, chemist and optometrist already signed up. Tel: 087 253 5990.
- For sale, south Dublin. Great location. Freehold property with full planning permission. Two existing surgeries with potential to expand plans available. Long established, high profile practitioner retiring. Huge growth possible. No medical card. Immediate sale. Tel: 086 807 5273.
- For sale, Co. Kildare. Very busy two-surgery. Great location. Thriving town 30 minutes from Dublin. Reasonable rent. Good staff. No medical card. Realistic price. Tel: 086 807 5273.
- For sale, Dublin southwest. Very busy two-surgery, leasehold. Good location, high visibility. Ample free parking. Huge potential for growth. Area wide open. Good figures. Fast sale – dentist retiring. Tel: 086 807 5273.
- Kilcock, Co. Kildare. Newly built modern office/surgery suites, town centre beside train station. Freehold or leasehold. Tel: 086 318 7431.
- For sale, south east Wicklow, 30 minutes south Dublin. Busy, well-located surgery. Modern equipment. Leasehold. Free parking. Large new patient numbers. Potential to expand. Plans available. Tel: 087 685 1568.
- South Kerry practice for sale, from August 1, 2008. Long established. Owner retiring. No medical cards. Single surgery. Low rent. Tel: 066 976 1998 after 7.00pm, or Email: sjegouzo@o2.co.uk.



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### DIARY OF EVENTS

- Galway city centre. Long established two-person general practice. Private, PRSI and DTSS. Leasehold or freehold options. Tel: 087 958 3962 for further details, or Email: bforde@iol.ie.
- Consulting rooms available associated with long-established medical practice, central location, Dublin 6. Would suit dentist. Newly refurbished period building. Please Tel: 087 239 9424 for further details.
- Dental Practice FREE, Portarlington, Co. Laois. Established 1995. Principal downsizing. Great location. One other dentist in town. Equipment needs upgrading. Ideal for somebody starting out. Email: pjobrien45@gmail.com.
- Carlow town centre. Dental surgery available to rent. Excellent location. Perfectly laid out. Opposite town parking. 1,700 sq ft over ground and 1st floor. 850 sq ft per floor. Can rent separately. CATS cabling/ISDN lines. Tel: 086 821 7801.
- For sale, Galway city. Unique opportunity. Well established. Private/PRSI only. Great figures. Excellent equipment. Leasehold. Goodwill only option. Good profits. Great location. Tel: 086 807 5273.
- For sale, Galway city. Single person long established. Two surgeries. Very busy. Huge potential. Strictly private/PRSI. Fast sale – realistic price. Freehold. Excellent location. Tel: 086 807 5273.
- For sale, north Dublin. Huge opportunity. Area wide open. Medical complex, pharmacy. Plentiful parking. Interior designed/plans. Own front door. Very saleable practice for future. 1,200 sq ft, including three surgeries, central sterilising, OPG. Long lease, reasonable rent. Tel: 086 807 5273.
- For sale. Modern three-surgery, active, vibrant, growing practice. Progressive town. Potential to expand. Dublin city centre short drive. Great staff. OPG, hygienist. Fully computerised. Leasehold/freehold options. Superb location. Busy footfall. Excellent figures. Flexible timescale. Tel: 086 807 5273.
- Commercial unit to let (1,000 sq ft approx.). Huge potential, busy village location (Coachford, Cork). Adjacent to doctor's surgery and chemist. Contact Declan Murphy, Tel: 021 7334 016, or Email: centracoachford@eircom.net.
- Castleknock Village. Premises available in a fantastic location in the heart of Castleknock Village, Dublin 15. Ideally suited to an orthodontist or specialist practice. Please Tel: 086 247 4288, or Email: peaks62@hotmail.com.
- Kilcullen, Co. Kildare. First floor premises to let, excellent Main Street location (700 sq ft). Progressive town. Full planning permission for dental surgery. One other dentist in town. Huge potential. Ample free parking. Flexible timescale. Tel: 045 482 095.

### **PRACTICES WANTED**

Dental practice wanted, ideally situated south Dublin area (Dublin 14, 16, 18, Co. Dublin), freehold property preferred. Other locations considered. Tel: 086 823 3747, or Email: dublinpracticewanted@gmail.com.

### **EQUIPMENT FOR SALE**

Panara dental software. Developed for Irish practice by an Irish dentist. Clinical charting, accounts, notes, recalls, private/PRSI/medical card, claims, SMS, word processing, integrates with Kodak, Vistascan, etc. Comprehensive data conversions from Bridges and XLCR. Tel: 087 239 6281, Web: http://www.panara.ie, or Email: panara@panara.ie.

### September 2008

Irish Dental Association Golf Society – The IDA Captains Prize September 6 Carlow Golf Club

### Metropolitan Branch IDA – Scientific Meeting

September 18Hilton Hotel, Charlemont Place, Dublin 2Speakers are Dr Mary Freda Howley, on 'The traumatised tooth', and DrJohn Lordan on 'Single visit molar endo – when, why, how?'

### FDI Annual World Dental Congress

September 24-27 Stockholm, Sweden The FDI Annual World Dental Congress, including the World Dental Parliament, the Scientific Programme and the World Dental Exhibition, will be held in Stockholm. For further information visit http://www.fdiworldental.org/microsites/Stockholm/congress1.html.

### Irish Academy of American Graduate Dental Specialists (IAAGDS) – Annual Scientific Meeting

September 27 Conrad Hotel, Earlsfort Terrace, Dublin 2 Time: 9.00am-1.00pm (registration from 8.30am). For further information, contact Dr Barry Dace, Email: barrydace@ireland.com.

### October 2008

#### **Prague Dental Days**

October 15-17 Prague Since 1993, the Czech Dental Chamber has been organising Prague Dental Days (PDD), an international congress focused on dental issues. For further information visit www.dent.cz.

### Metropolitan Branch IDA - Scientific Meeting

October 16 Hilton Hotel, Charlemont Place, Dublin 2 Speakers are Dr Spencer Woolfe on 'Implant problems/solutions', and Dr Stuart Jacobsen on 'Restorative solutions'.

### November 2008

### Metropolitan Branch IDA – Scientific Meeting

November 20 Hilton Hotel, Charlemont Place, Dublin 2 Speakers are Dr Sabine Maguire on 'Non accidental injury', and Dr Billy Fenlon on 'What's new in paediatric dentistry?'

#### Inaugural Trans-Tasman Endodontic Conference

November 20-22 Hotel Grand Chancellor, Hobart, Tasmania, Australia Inaugural Trans-Tasman Endodontic Conference – 'Endodontics into the next decade'. Get on top of your endodontics at the bottom of the world, with key speakers Professors Markus Haapasalo and Ove Peters, plus local Australian and New Zealand presenters. For further information and to register your interest, visit www.ase2008.com.

#### Metropolitan Branch IDA – Christmas Party

November 29 RDS, Ballsbridge, Dublin 4

### December 2008

 Irish Dental Association Golf Society – The Christmas Hamper

 December 5
 Royal Dublin Golf Club



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# It's never too early to protect children's teeth from acid erosion





\*Image adjusted to illustrate clinical situation

Acid erosion in children's teeth is a growing concern.<sup>1-4</sup> When enamel is gone, it's gone for good. But with early diagnosis and timely advice to parents, you can help prevent enamel loss. For instance, tell them about Sensodyne Pronamel for Children, specially designed to protect children's teeth against the effects of acid erosion as well as caries. What could be simpler for their future dental health?



### Daily protection against acid erosion for children

References: 1. Nunn JH *et al.* Int J Paediatr Dent 2003; 13: 98-105. 2. Dugmore CR and Rock WP. Int J Paediatr Dent 2003; 13: 295-303. 3. Lussi A. Monogr Oral Sci 2006; 20: 1-8. 4. Chadwick BL *et al.* Br Dent J 2006; 200: 379-384.

