

Volume 58 Number 4
August/September 2012


IDA
irish dental association

Journal of the Irish Dental Association

Iris Cumainn Déadach na hÉireann



Mouthguard use and dental injury in sport:
a questionnaire study of national school
children in the west of Ireland

Everyone has a smile worth protecting



Visit our online store and oral health hub at www.dentalcover.ie or call our Dental Practice Support team on 1890 222 422

Supporting Mouth Cancer Awareness

Watch out for the latest edition of our Oral Health Zone magazine, which continues our support of Mouth Cancer Awareness.

**DENTAL
COVER.IE**
by Vhi DeCare

The Voluntary Health Insurance Board trading as Vhi Healthcare is regulated by the Central Bank of Ireland. This product is underwritten by DeCare Dental Insurance Ireland Limited trading as DentalCover.ie and is regulated by the Central Bank of Ireland.

Vhi Healthcare is tied to DeCare Dental Insurance Ireland Limited for Dental Insurance.

IDA PRESIDENT **Dr Andrew Bolas**
 IDA CHIEF EXECUTIVE **Fintan Hourihan**
 JOURNAL CO-ORDINATOR **Fionnuala O'Brien**

EDITOR
Professor Leo F.A. Stassen
 FRCS(Ed), FDSRCS, MA, FTCD, FFSEM(UK) FFDRCSI

DEPUTY EDITOR
Dr Dermot Canavan
 BDentSc, MGDS(Edin), MS(UCalif)

EDITORIAL BOARD
Professor Finbarr Allen
 BDS PhD MSc FDS FDS(Rest Dent) RCPS
 FFDRCSI

Dr Michael Crowe
 BSc BDentSc DPDS (Bristol)

Dr David Hussey
 BDS PhD FHEA FDSRCS FFDRCSI FDSRCS

Dr Mark Kelly
 BA BDentSc

Dr Christopher D. Lynch
 BDS PhD MFDRCSI FDS (RestDent)RCSI
 FACD FHEA

Jennifer O'Rourke
 RDN

Dr Ioannis Polyzois
 DMD, PhD, MDentCh, MMedSc

Dr Ciara Scott
 BDS MFD MDentCh MOrth FFD (RCSI)

Dr Seamus Sharkey
 BDS NUI FRACDS (Syd) MFDSRCS DChDent
 (Prosthodontics) FFDRCSI

Dr Simon Wolstencroft
 BDS FDSRCS MScD MOrth FDSOrth

The *Journal of the Irish Dental Association* is the official publication of the Irish Dental Association. The opinions expressed in the Journal are, however, those of the authors and cannot be construed as reflecting the Association's views. The editor reserves the right to edit all copy submitted to the Journal. Publication of an advertisement does not necessarily imply that the IDA agrees with or supports the claims therein.

For advice to authors, please see:
www.dentist.ie/resources/jida/authors.jsp

Published on behalf of the IDA by
 Think Media, 537 NCR, Dublin 1
 T: 01-856 1166
www.thinkmedia.ie

EDITORIAL
Ann-Marie Hardiman, Paul O'Grady
 DESIGN AND LAYOUT
Tony Byrne, Tom Cullen, Ruth O'Sullivan

ADVERTISING
Paul O'Grady

The Journal of the Irish Dental Association:
 - is the only dental publication produced in Ireland;
 - is Irish dentists' own Journal of record.

177 EDITORIAL
 Sports, dentists and more

178 PRESIDENT'S NEWS
 Busy times

179 NEWS

188 QUIZ

192 BUSINESS NEWS

194 FEATURE
 Dentistry's sporting lives

197 IDA NEWS
 Update for HSE Dental Surgeon
 members ...Fluoridation issues ...
 Taxation developments ...

202 PEER-REVIEWED
 202 Sporting injuries to the
 temporomandibular joint
D Canavan

205 Mouthguard use and dental injury in
 sport: a questionnaire study of national
 school children in the west of Ireland
*M O'Malley, DS Evans, A Hewson, J
 Owens*

212 Unilateral coronoid hyperplasia
 associated with early childhood facial
 trauma: a case presentation
D Sleeman, E Warren, M McAuliffe

216 ABSTRACTS

218 PRACTICE MANAGEMENT
 Credit where it's due

220 CLASSIFIED

222 DIARY OF EVENTS



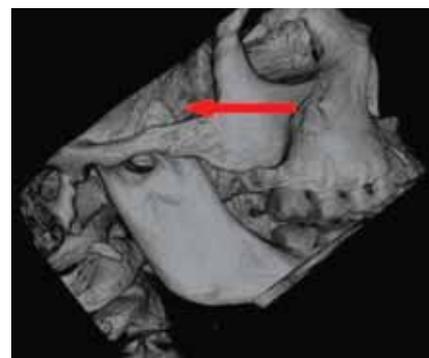
News 184

Professor Stassen receives Fellowship in Munich.



Feature 194

Sporting dentists



Peer-reviewed 212

Unilateral coronoid hyperplasia

Irish Dental Association Unit 2 Leopardstown Office Park, Sandyford, Dublin 18.
 Tel: +353 1 295 0072 Fax: +353 1 295 0092 www.dentist.ie
 Follow us on Facebook (Irish Dental Association) and Twitter (IrishDentists).



Total average net circulation 01/01/11 to 31/12/11:
3,397 copies per issue. Circulated to all registered dentists
 in the Republic of Ireland and Northern Ireland.

DON'T IGNORE THE SIGNS

54% OF ADULTS HAVE GINGIVAL BLEEDING.¹

NEW COLGATE® TOTAL® PRO GUM HEALTH TOOTHPASTE IS MEDICALLY LICENSED TO "IMPROVE GINGIVAL HEALTH AND REDUCE THE PROGRESSION OF PERIODONTITIS".



Recommend Colgate Total Pro Gum Health Toothpaste as part of your treatment and maintenance of your patients' periodontal health.

Name of the medicinal product: Colgate TOTAL Pro Gum Health Toothpaste. **Active ingredients:** Triclosan 0.30% w/w, Sodium Fluoride 0.32% w/w (1450ppm F). **Indications:** To reduce dental caries, to improve gingival health and to reduce the progression of periodontitis. **Dosage and administration:** Apply a 1 cm line of paste across the head of a toothbrush and brush the teeth thoroughly for one minute twice daily. Spit out after use. Children under 7, use a pea-sized amount for supervised brushing to minimise swallowing. If using fluoride supplements, consult your Dentist. **Contraindications:** None known. **Special warnings and precautions for use:** Children under 7, use a pea-sized amount for supervised brushing to minimise swallowing. If using fluoride supplements, consult your Dentist. **Undesirable effects:** None known. **Marketing authorisation number:** PA 320/5/1. **Marketing authorisation holder:** Colgate-Palmolive (U.K.) Ltd, Guildford Business Park, Middleton Road, Guildford, Surrey, GU2 8JZ. **Recommended selling price:** €4.59 (75ml tube). **Date of revision of text:** October 2011.

Colgate®

YOUR PARTNER IN ORAL HEALTH

Sports, dentists and more

There's a wide spread of excellent contents in this edition, says Honorary Editor LEO STASSEN.

Sport has such a beneficial effect on the general population. It is important in the physical and mental development of our children. Sport also provides a buffer against obesity and its many associated ills. Many dentists know this from personal experience, and many have achieved elite or international status in their sporting endeavours. There are so many that we couldn't feature all of them in this, our special sports edition. However, we have taken a representative cross-section and you can read about these dentists and their various sporting achievements on pp194-196.

An occasional consequence of sporting activity is, of course, injury to the mouth, jaw and face. We have two excellent papers covering related issues in this edition. Dr Dermot Canavan reviews the diagnosis and management of potential sporting injuries to the temporomandibular joints on pp202-204. Dr Margaret O'Malley *et al.* have carried out a questionnaire study on mouthguard use and dental injury among national school children in the west of Ireland. They report that one in ten children had reported a sporting injury in the previous year and, unsurprisingly, advocate that mouthguard use should be promoted (pp205-211).

And staying with mouthguards, one of our abstracts also evaluated performance with mouthguards and concluded that mouthguards should be encouraged in contact sports without concern for any negative effect on performance (p216).

Our final peer-reviewed paper is a case presentation on coronoid hyperplasia associated with early childhood facial trauma. We are grateful to Professor Sleeman and his colleagues in Cork for this paper, which reminds us that coronoid hyperplasia is an easily detectable condition, which should not go undiagnosed (pp212-214).

Mouth cancer and other issues

Elsewhere in this edition, we read of this year's Mouth Cancer Awareness Day. I would like to add my voice to those encouraging as many dentists as possible to get involved. All details are on the website – www.mouthcancerawareness.ie – and you can register your interest to participate via the website or by ringing the IDA office.

The Association is to be commended for its efforts to have the Revenue Commissioners defer implementation of their new regime for associates and others to 2013. This has been a very vigorous approach

by the Revenue to the tax treatment of associates and hygienists and the Association has worked hard to ensure that balanced and fair treatment is maintained.

In these difficult times, a credit union can be a reliable and supportive financial body. Some dentists will not be aware that the Irish Dental Credit Union even exists – but it does, and it does excellent work. The Chairman, Professor Bernard McCartan, explains how it operates on pp218-219.

Continuing professional development

The CPD Committee of the Association has come up with an ingenious way of bringing CPD to the members. The CPD Roadshow will bring a variety of topics to members in six different locations over the coming months and years. By developing this programme for Saturday mornings, which can travel to various locations, a great many members will have the opportunity to gain vital CPD hours. This is a welcome development, which deserves the full support of the members.

Finally, we are grateful to our readers, as always, for their continuing support of the *Journal*. Do keep in mind that this is the only publication for dentists that is produced here in Ireland.



Leo F. A. Stassen

Prof. Leo F. A. Stassen
Honorary Editor

Busy times

There's a lot going on in the Association, with several upcoming events. IDA President ANDREW BOLAS summarises.

I hope you've all enjoyed the summer and even though the bad weather has been the topic of conversation now for a few months, I hope you managed to get away either at home or abroad to recharge the batteries and relax.

I had the good fortune of representing members at the British Dental Association Annual Conference in Manchester this year. This was a very enjoyable and educational event and as always we were made very welcome.

I was delighted to be invited to present the Final Year Student Awards at the Dublin Dental School and Hospital earlier in the summer. Congratulations to all graduates: I hope you will continue in membership of the IDA now that you are a qualified dentist and that you will call on your Association during your career in the dental profession.

Dental Complaints Resolution Service

This Service is now up and running and the facilitator, Michael Kilcoyne, has reported that it is functioning well. There seems to be a good level of awareness of the service among members of the public.

Mouth Cancer Awareness Day 2012

As you are undoubtedly aware, Mouth Cancer Awareness Day will take place again this year on Wednesday September 19 and the MCAD Committee hopes to build on the great success of 2011 and make it an even bigger success in 2012.

Over 10,000 patients were examined in the two dental schools and by over 700 participating dentists nationwide last year. Thirteen cancers were detected. The response of the dental profession to last year's request to make this a nationwide campaign was truly outstanding.

I would urge you all to sign up today for Mouth Cancer Awareness Day by logging on to www.mouthcancerawareness.ie or by contacting IDA House directly. A series of scientific lectures will take place at branch meetings around the country so that participating dentists can refresh their knowledge on what to look out for in an examination. The dates of these lectures will be circulated shortly. All are welcome.

CPD

The CPD Committee, under the Chairmanship of Dr Garry Heavey, is to be commended for developing a regional CPD Roadshow that will commence in September 2012 and continue until April 2013. CPD workshops will take place in six different locations around the country with an excellent line-up of speakers covering a wide range of topics. I would encourage as many IDA members to attend as possible.

Workshops for HSE members

In June/July, the IDA hosted workshops for HSE dental surgeon members to ascertain their needs. This will provide the Association with valuable information so that it can steer its services towards the needs of public health dentists. It will also assist us in the ongoing discussions with the HSE on the reconfiguration of the Public Dental Service. The feedback for these workshops, which were held in Dublin, Cork and Galway, has been very positive, and a lot of ideas and insights were gained.

IDA seminar for HSE dental surgeons

The Annual Seminar for the HSE Dental Surgeons Group of the IDA will take place from Wednesday, October 10, to Friday, October 12, in the Galway Bay Hotel. The programme will cover all of the core CPD subjects, as well as many other topics, and will feature national and international speakers. I look forward to attending and meeting as many of my HSE colleagues as possible at this unique event for those employed by the HSE.

Dr Andrew Bolas

President, Irish Dental Association



IDA pushes for Revenue deferral

Dentists will be aware that the Revenue Commissioners are reviewing the tax status of dental associates and hygienists, and have signalled that some may now be regarded as employees for tax purposes.

The Irish Dental Union has strongly stated its disagreement with this analysis, but has also suggested a January 2013 commencement date for any new policy on this matter.

In conjunction with issuing revised guidance to IDA members, and with revised pro-forma templates now available in the members' section of the IDA website, the Union has written to the Revenue Commissioners regarding these and other initiatives to advise members. The letter reiterated the Union's call to defer the commencement date of any new policy in regard to the tax status of associates and hygienists until January 1, 2013.

The Revenue Commissioners have agreed to meet with representatives of the Irish Dental Union in the near future, to discuss these issues further.



See all the details in our special guide in the centre pages.

Queries

Since issuing revised guidance earlier this year, IDA House has received a number of queries from members. The Association will issue ongoing advice to address these issues.

The IDA/IDU is grateful for members' continued support and for the generous comments received following circulation of the revised guidance.

Please do not hesitate to contact IDA House with any further comments or queries.

RCSI awards inaugural Professor John McGimpsey Prize



Caoimhe McVeigh receives her Award from Professor Donald Burden, Director, Centre for Dental Education, Queen's University Belfast (right), and Professor Gerard Kearns, Dean of the Faculty of Dentistry, RCSI (left). The photograph in the background shows the late Professor McGimpsey.

The Faculty of Dentistry at the Royal College of Surgeons in Ireland (RCSI) has awarded the inaugural Professor John McGimpsey Prize to Caoimhe McVeigh, a final-year dental student at Queen's University Belfast. Professor John McGimpsey, Consultant in Oral Surgery, was Director of Teaching & Learning/Department Head at Queen's University and the Royal Victoria Hospital Belfast. He was also Dean of the Faculty of Dentistry, RCSI, from 1998-2001.



Omega Day 1 Income Protection.

Paying you from the moment you can't work.*

For details:

Call: 1850 260 261

Email: info@omegafinancial.ie

Web: www.omegafinancial.ie/incomeprotection

* Terms & Conditions Apply.

OFM Financial Ltd trading as Omega Financial Management is regulated by the Central Bank of Ireland.



Healthy mouth, healthy living, healthy ageing at the European Parliament

On June 26, the Council of European Dentists (CED) held a debate on oral and general health in the European Parliament in Brussels. Entitled 'Healthy mouth, healthy living, healthy ageing: Investing in prevention is the most cost-effective approach to healthcare', the event brought together representatives of practising dentists and academicians, as well as representatives of other healthcare professions, to discuss the implications of correlations between oral and general health for prevention and promotion campaigns and organisation of healthcare with the Members of the European Parliament. The Irish Dental Association was represented by Chief Executive Fintan Hourihan.

Specific challenges related to the ageing population were addressed in the context of the European Year for Active Ageing and Solidarity between Generations. CED President Dr Wolfgang Doneus and chair of CED Working Group Oral Health Dr Paula Vassallo led the discussion. Frauke Muller, Professor and Chair for Gerodontology at the University of Geneva and Secretary of the European College of



From left: Nina Bernot, Secretary General, CED; Dr Paula Vasallo, Chair, CED Working Group Oral Health; Dr Wolfgang Doneus, President, CED; and, Prof. Frauke Muller, University of Geneva.



IDA CEO Fintan Hourihan pictured with Rob Barnasconi of the Dutch Dental Association.

Rodericks Ltd

28 Queensbridge, Rushmills, Northampton, NN4 7BF

Would you like to be a Dental Associate in England?

Our Company operates an expanding group of dental practices offering NHS and private care. The majority of our Company Directors are practising dentists which we feel is one of the keys to our success. Our knowledge and experience of dentistry at all levels allows our Company to provide the highest quality care to our patients and support to our dental teams.

Rodericks Ltd is based in Northampton with practices across England. We are proud to be different, a Company for dentists by dentists. Our ethos is: "to provide quality care to patients by employing loyal, ethical and motivated staff."

We are experienced in supporting and integrating newly qualified graduates. When you join Rodericks you will receive:

- In-practice mentoring, a requirement set out by all Primary Care Trusts
- Fantastic development and CPD opportunities
- A very attractive earning potential

We currently have vacancies in:

Chard House Dental Practice, Chard, Somerset	Full-time
Yeovil Dental Practice, Yeovil, Somerset	Full-time
North Petherton Dental Practice, Somerset	Part-time
Mile House Dental Practice, Newcastle-Under-Lyme	Full-time
Cheltenham House Dental Practice, Cheltenham	Part-time
Blackbrook Dental Practice, Taunton, Somerset	Full-time

To apply, please email your current CV to tracie.lineham@rodericksdental.co.uk including which post(s) you would like to apply for. Or if you would like more information please call Tracie Lineham from our Recruitment Team on 01604 602491.

I joined Rodericks in January this year. They helped me through the inclusion process with the PCT and provided a mentor in the practice to give me practical support and advice that I need in the early days. I have found Rodericks a very supportive and professional team to work with". Ross Flannery BScDentC Dublin 2011

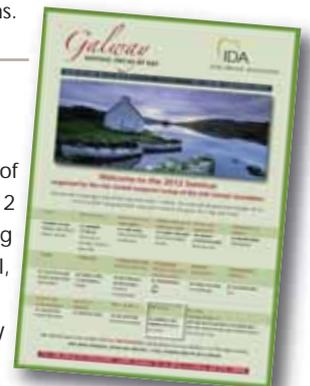
www.rodericksdental.co.uk
Providing NHS Dentistry

Gerodontology, was the keynote speaker. Other speakers included representatives of European associations of doctors, pharmacists, nurses and midwives, as well as a representative of patients. The event was sponsored by MEP Cristian Silviu Busoi.

The Council of European Dentists is a European not-for-profit association that represents over 330,000 practising dentists through 32 national dental associations and chambers from 30 European countries. Its key objectives are to promote high standards of oral healthcare and effective patient safety-centred professional practice across Europe, including through regular contacts with other European organisations and EU institutions.

IDA HSE Group Seminar

The Annual Seminar for the HSE Group of the IDA will take place from October 10-12 at the Galway Bay Hotel. Dr Pdraig Halvey, general dental surgeon in Donegal, will take over as President at the event. A full programme will be published shortly (see page 200 for more details).



Oral Health Promotion Research Group Ireland – Annual Conference

The Annual Conference of the Oral Health Promotion Research Group (OHPRG) Ireland will be held on September 14, 2012. After the success of the 2011 event, the Conference returns to the Ashling Hotel, just a two-minute walk from Heuston Station in Dublin.

The OHPRG Ireland was launched in September 2003 as a multidisciplinary group aiming to raise the status of oral health promotion in Ireland, both North and South, through the dissemination of good practice based on sound theoretical framework and practical research. The group has been supported by the Dental Health Foundation Ireland, which funds a bursary to facilitate oral health promotion and development in Ireland.



This year's conference theme is integration.

This year's Conference, with its theme of 'Integration', will appeal to a wide range of healthcare professionals (CPD points will apply). There will be registration, tea/coffee and a trade exhibition from 9.30am to 10.45am, and the Minister for Health, Dr James Reilly TD, will give the opening address at 11.00am.

Conference fees

Prepaid	
Dentists:	€50/£45
Others:	€40/£35
On the day	
All	€60/£55

Delegates who attend the conference will also receive complimentary membership of the OHPRG for one year. For further details contact rose.bradleymolloy@hse.ie or check out our website – www.dentalhealth.ie.







Introducing the New Standard in Intraoral Imaging Plate Technology

Carestream Dental CS7600 System

Only
€6,999

Terms & Conditions apply:
Offer valid until 30/09/12
Prices excluding VAT.



FREE Apple iPad!!!



with every Carestream Dental CS7600 System ordered before September 30th 2012

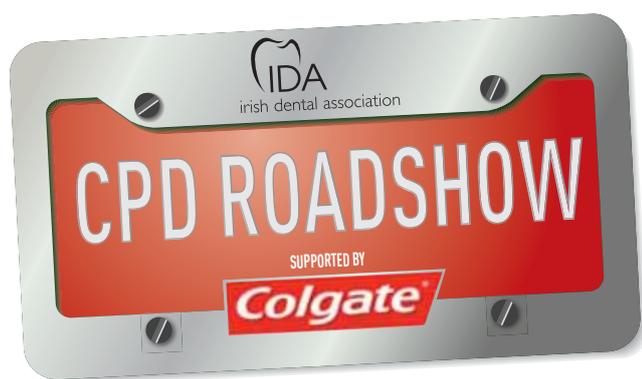
Call Us Today For A Demo...

www.medray.ie

T: +353 1 466 3773

E: sales@medray.ie

LOOK WHAT'S COMING YOUR WAY!



The Irish Dental Association, with the support of Colgate, has organised a series of half-day Saturday morning CPD meetings around the country.

Continuing professional development (CPD) complements formal undergraduate and postgraduate education and training. The Dental Council's Code pertaining to Professional Behaviour and Dental Ethics states that all dentists have an obligation to maintain and update their knowledge and skills through CPD.

The Dental Council recommends that dentists complete and keep records of at least 50 hours of CPD per year, at least 20 of which should be verifiable CPD. With this in mind, the CPD Committee of the Association has organised this CPD Roadshow.

CPD and the IDA

The members of the Council of the Irish Dental Association see CPD as a vital service offered to the dental profession. The Association, as part of its CPD programme for the next two years, is organising outreach seminars in six locations throughout the country.

Six teams of four speakers have been formed. Each team will be asked to do two seminars in the year over a three-year period. Each seminar will run from 10.00am to 1.00pm on a Saturday and the programme is designed so that four speakers will present each day and will rotate around the six locations over a three-year period. Lectures are being organised in the core areas of CPD – medical emergencies, oral radiology and infection control – as well as many other areas (see list of topics and proposed speakers). These events will only be open to IDA members at a fee of €60 per delegate, and are designed to allow members to access CPD on a regional basis.

How the Roadshow works

CPD will be delivered over six locations starting in September 2012. Each day will commence at 10.00am and conclude at 1.00pm. Each presentation will be of 40 minutes' duration.

Schedule

	DATE	VENUE	TEAM
Dublin	October 20, 2012	Bewleys Dublin Airport Hotel	B
	February 23, 2013	Bewleys Dublin Airport Hotel	E
Cork	October 13, 2012	Rochestown Park Hotel	A
	March 2, 2013	Rochestown Park Hotel	D
Limerick	November 10, 2012	Strand Hotel	C
	March 23, 2013	Strand Hotel	F
Galway	September 22, 2012	Clayton Hotel	D
	February 9, 2013	Clayton Hotel	A
Kilkenny	September 15, 2012	Ormonde Hotel	E
	March 2, 2013	Ormonde Hotel	B
Sligo	September 22, 2012	Clarion Hotel	F
	March 2, 2013	Clarion Hotel	C



Speakers



Dr Gerry Cleary
 Dr PJ Byrne

Principles of restorative treatment planning
 Periodontics – exam and diagnosis,
 pathogenesis of perio disease

Dr Pat Cleary

Endodontics – diagnosis, indications for endo
 treatment

Dr Garry Heavey

Practice management – concept of total quality
 management in a dental practice



Dr Paddy Crotty

Management of non-cariou tooth surface loss
 – diagnose the differences

Dr Declan Corcoran

Mechanical and chemical plaque control
 – therapeutic agents in the control of
 periodontal disease

Dr Michael Hartnett

Root canal anatomy – access to root canal
 system

Dr Sue Boynton

Practice management – consent issues



Dr Aisling O'Mahony

Aesthetics – tooth discolouration, tooth
 whitening

Dr John Molloy

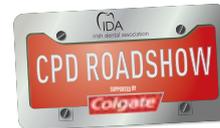
Periodontics for children – perio systemic
 interface

Dr Johanna Glennon

Endodontics – preparation and obturation

Dr Andrew Bolas

Oral radiology – an overview



Dr Edward Cotter

Complete and partial dentures

Dr Anne O'Donoghue

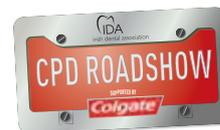
The scope of periodontal surgery for the GP

Dr John Dermody

Management of the adult traumatised teeth

TBC

Medical emergencies



Dr John Walsh

Diagnosis and treatment planning in
 paedodontics

Dr Gerry Kearns

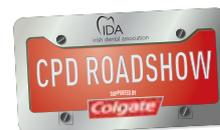
Oral surgery – surgical tooth extractions and
 potential complications

Dr Marielle Blake

An overview of orthodontics relevant to general
 practice

Dr Nick Armstrong

Infection control in the dental setting



Dr Alison Dougall

The scope of special care dentistry in general
 practice

Dr Anne O'Connell

Trauma in paediatric dentistry

TBC

Lesions that concern me

Ms Claire Dowling

Employment law for general practice

Course structure

- ▶ All of the courses listed are approved and accredited for verifiable CPD hours/points.
- ▶ All courses begin at 10.00am sharp and will finish at 1.00pm.
- ▶ There will be four lectures of 40 minutes' duration with a tea/coffee break at 11.20-11.40am.
- ▶ Certificates of attendance will be issued to all participants.
- ▶ All courses are open to all IDA members and team members (team members cannot be another dentist).

Course fees

IDA members €60 IDA member's team members €50*
 (*Team members can only attend if accompanied by an IDA member.)

- ▶ All prices include tea/coffee and any course documentation.
 - ▶ Payment/bookings MUST be received prior to the event.
- Contact the IDA by phone at 01-295 0072 or via email to info@irishdentalassoc.ie to register to attend one or more of the roadshows. The Irish Dental Association gratefully acknowledges the support of Colgate in the presentation of these roadshows.



Mouth Cancer Awareness Day

Mouth Cancer Awareness Day will take place on Wednesday September 19. Registration forms have been sent to IDA

members, and you can also register your interest to participate online at www.mouthcancerawareness.ie.

The IDA will hold scientific lectures for dentists participating on the day – see details in ‘Diary of Events’ page 222.

Professor Leo Stassen receives ICD Fellowship in Munich



Pictured at the ICD Annual Meeting were (from left): Dr Tony Connellan; Mrs Joan Feeney; Mrs Claire Stassen; Professor Leo Stassen; Dr Tom Feeney; Dr Frank Ormsby; Mrs Deirdre Connellan; Dr Mary Ormsby; Dr Ethna Lemasney; and, Dr Joe Lemasney.



Dame Margaret Seward, a former editor of the British Dental Journal, with Professor Leo Stassen.

The 57th Annual Meeting of the International College of Dentists took place in Munich from June 21-23, 2012. The Scientific Day was of the highest calibre with many cutting-edge speakers delivering excellent lectures on endodontics, implantology, restorative and preventive dentistry, and more. A series of presentations on very impressive humanitarian projects engaged in by Fellows of the College completed the day. The induction ceremony at which Professor Leo Stassen was inducted to Fellowship of the College was held at the Pinakothek der Moderne and afterwards celebrations took place at the Gala Dinner in the Castle of Nymphenburg.

Will you still be smiling at the end of the year?

Make sure your practice is profitable in 2012
As Ireland's only specialist dental accountants we're here to help you control your practice costs

QUARTERLY ACCOUNTS	PAYROLL SERVICES
TAX CONSULTANCY	COST OF TREATMENT

MedAccount SERVICES

Medaccount offer a full range of specialist dental accounting support and advisory services for Associates, Principals, Expense Sharing Partners and Hygienists.

FIRST CONSULTATION
FREE

MedAccount Services
96 Lower Georges Street
Dun Laoghaire
Co Dublin
Tel: 01 280 6414
Email: info@medaccount.ie

First consultation free of charge, with no obligation to engage.

Captain's Prize

The Captain's Prize will be played this year on Saturday September 1 at Carlow Golf Club. Tee times are from 10.00am to 12.00pm. To reserve your time please contact Fergus Duddy, Email: ffduddy@hotmail.com.

Calling all final-year DDUH students

In conjunction with the Metro Branch, the IDA is hosting an information evening for final-year students and recent graduates of the Dublin Dental University Hospital on Thursday October 18 at the Hilton Hotel, Charlemont Place, Dublin.



From far left:
Dr Mark Condon;
Dr Kieran Daly;
and, Dr Ronan
Perry.

The informal meet and greet will commence at 6.30pm when refreshments will be served. A short presentation will be given on the many benefits of IDA membership and the importance of joining your professional organisation. This will be followed by the Metro Branch meeting covering two topics: 'Tips and Techniques for Crowns and Veneers', presented by Dr Mark Condon; and, 'Orthodontic Treatment for Faces', presented by Drs Kieran Daly and Ronan Perry.



Renowned Canadian speaker to visit Waterford

Dr Kenneth KS Lee, a Canadian-based dual perio-pros board-certified specialist with over 30 years of practice in dentistry, will present in Waterford on September 27 from 2.00pm-6.00pm. This unique event will take place at Faithlegg House Hotel and places are limited.

Dr Lee is an ITI fellow and currently works in private practice in Vancouver in Canada. The title of Dr Lee's presentation will be: 'Interdisciplinary dentistry with long-term results'.

An optional evening dinner with Dr Lee will follow, with personal treatment planning and case discussion. The fee for dinner is €55.

To book your place, contact IDA House, Tel: 01-295 0072.

Munster Branch ASM

The Annual Munster Branch ASM will take place on Friday November 23 at Fota Island Hotel and Resort, Cork. Further details to follow.

EndoVac2

Apical Negative Pressure Irrigation System

SybronEndo is proud to offer the latest and safest technology in endodontic irrigation – the EndoVac system. This true apical negative pressure irrigation system presents a unique and safe new way to irrigate during root canal treatments.

Unlike positive pressure systems which use cannulas or side-port needles, the EndoVac is a true apical negative pressure system that draws fluid apically by way of evacuation. Irrigation solution and debris are sucked away from the apical foramen, providing exceptional cleaning while virtually eliminating the risk of irrigation accidents.

The **EndoVac MDT**
delivers irrigant coronally.

The **EndoVac MacroCannula**
pulls irrigant into the canal
and evacuates gross debris.

EndoVac Starter Kit
€299*
*plus VAT of 19%

Learn more about the EndoVac, please contact Graham Parkin | Graham Parkin, Mobile: 00 44 (0) 797 004 5937, Email: Graham.Parkin@sybrondental.com

RCSI Faculty of Dentistry celebrates success



From left: Dr Declan Corcoran, Board Member, Faculty of Dentistry, RCSI; Mr Sean Sheridan, Board Member and Past Dean, Faculty of Dentistry, RCSI; Professor Helen Whelton, Fellowship Ad Eundem recipient; Dr Joan Nolan, Membership by examination recipient; Professor Gerard Kearns, Dean, Faculty of Dentistry, RCSI; Mr Clive Pratt, Fellowship Ad Eundem recipient; Professor Mark McGurk, Fellowship Ad Eundem recipient; Professor JV McLoughlin, Fellowship by Election recipient; Professor Robin O'Sullivan, Professor of Anatomy, RCSI Bahrain; and, Mr Ken Halpenny, Board Member, Faculty of Dentistry, RCSI.



Professor Hannah McGee, Dean of the Faculty of Medicine and Health Sciences, RCSI.



Ms Joanne McDaid, Membership by examination recipient, and Ms Geraldine McDermott, Membership by examination recipient.

Diagnostic Computerised Technology
Training for the General Dental Practitioner (GDP)



Morning seminar sessions will be provided for GDPs to enable them to comprehensively understand and utilise 3D technology for dental implant diagnosis. Individual hands-on tuition will be provided to a select group of practitioners. At the end of each session, participants will have a comprehensive understanding from a diagnostic viewpoint of what 3D imaging can provide for them and their patients.

Sessions will be held at the Northbrook Clinic in Dublin 6 on Saturday mornings with light refreshments provided. Limited places are available on a first come/first serve basis. The first five respondents will be invited to bring a patient for 3D radiological evaluation free of charge.

The courses are free of charge.

For information, please contact: (01) 4967111 ext 239/240

The Faculty of Dentistry at the Royal College of Surgeons in Ireland (RCSI) was proud to honour a number of local and international dentists at the Summer Conferring Ceremony on July 2.

A total of 63 new Members of the Faculty were recognised (MFD RCSI and MGDS RCSI), along with eight new Fellows. The Faculty holds sittings of its MFD examination in Dublin, Belfast, New York, Bahrain, Ajman, Jordan and Sudan.

The Faculty is also proud to announce details of new Fellows (By Election and Ad Eundem) who were honoured for furthering the mission of the Faculty – the pursuit of excellence in dentistry both in Ireland and overseas. This year, the following individuals were honoured:

Professor David Bouchier Hayes (FFD By Election) is Emeritus Professor of Surgery, RCSI, and Consultant Vascular Surgeon, Beaumont Hospital, Dublin.

Professor Vincent McLoughlin (FFD By Election) is Emeritus Professor of Comparative Physiology, Trinity College Dublin (1977-1997).

Professor Mark McGurk (FFD Ad Eundem) is Professor of Oral and Maxillofacial Surgery at Guy's and St Thomas' Hospitals, London, and President Elect of the British Association of Oral and Maxillofacial Surgery.

Mr Clive Pratt (FFD Ad Eundem) is Consultant Oral and Maxillofacial Surgeon at St Richard's Hospital, Chichester, and Worthing Hospital, UK. He is also Lead Clinician for the Head and Neck Oncology Service in West Sussex.

Professor Helen Whelton (FFD Ad Eundem) is Director of the Oral Health Services Research Unit in the Department of Oral Health and Development at University College Cork. She is also Vice President of the International Association for Dental Research.

For dentists who are interested in registering for RCSI Membership or Fellowship examinations, further details are available at <http://dentistry.rcsi.ie/wp/examinations>.

How long more will you have to work?

JOHN O'CONNOR of Omega Financial Management advises on the critical importance of properly managing your exit strategy from dentistry.



Everyone has suffered financially since the end of the economic boom. Now more than ever, we need to get crystal clear on our future financial objectives and how we might best achieve them.

Thankfully over the last decade many dentists have maintained funding into their pension funds each year, gaining that all-important tax relief. However many dentists have been extremely disappointed with the performance of their funds which was exacerbated in some cases by really poor service and inaction by the dentist's adviser.

Inappropriate risk levels

How tuned in were dentists to the risk levels of their pension fund and were these appropriate? To all of us, a 30% drop in the value of our savings is far more disappointing than a 30% rise is encouraging. During the boom years, not enough attention was paid to the potential downside of taking risk. Let's face it, the main advantage of making a pension contribution in the first place is the tax relief, so in reality the preservation of the fund with a reasonable growth expectation is all that most people actually look for.

What our survey results told us

We commissioned a survey among dentists at the end of last year, which told us that 40% of dentists saw themselves working past the age of 65. In a separate answer, almost 50% of dentists believed that their pension funds would be their main source of income in retirement. However only 10% of them felt that their pension fund was their most valuable asset currently. So there is some way to go in funding levels (see graphs).

Developing an exit strategy

It is natural for us to ask ourselves 'How long more will I have to work?' Most of us ask ourselves this frequently, but at different stages in our careers it is asked with more intent than at other times. Some dentists continue (by choice) to do a few sessions per week into their seventies, but this is not for everyone.

To answer 'How long more will you have to work', there are a number of key questions you need to consider:

- 1 What is the value of my practice and is it possible for me to sell it to someone?
- 2 At retirement will I own my practice building?
- 3 Is my pension fund on track to help me achieve my financial goals?

In relation to the first question, our survey also told us that while 21% of dentists want to sell their practice in the next five years, only 7% of associates actually want to buy. So market conditions create a challenge for those wishing to sell their practices at the moment.

Dentists who own their own practice buildings need to consider if they want to sell their building at retirement or retain a rental income. Selling the building is difficult currently with values deflated and the current lending environment. Retaining a rental income at least in the short term may be preferred.

In relation to the third question, dentists that come in to see me usually don't have a handle on the value or risk profile of their pension savings. They want someone who will expertly manage their pension affairs for them on a consistent and ongoing basis. They need an assessment of the value of their funds and help to design a plan to meet their financial objectives, utilising the 25% tax-free element of the fund and also optimising the remainder of the fund. Remember that anyone over age 50 will have access to their pension fund in less than 10 years time.

We are delighted to help dentists across the country to address their pension challenges, so please avail of a free consultation by contacting me today.

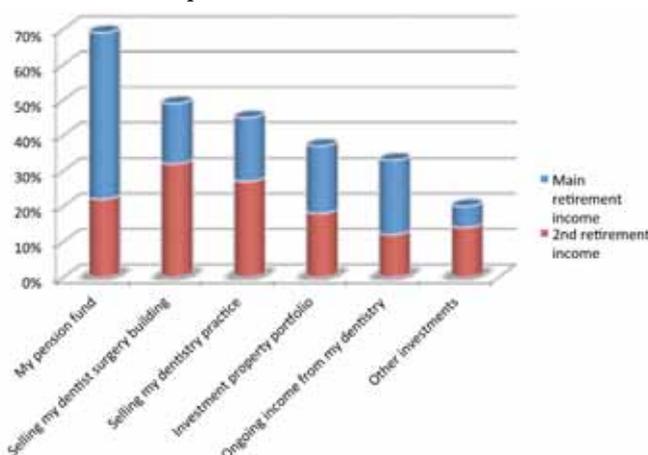


Omega Financial Management

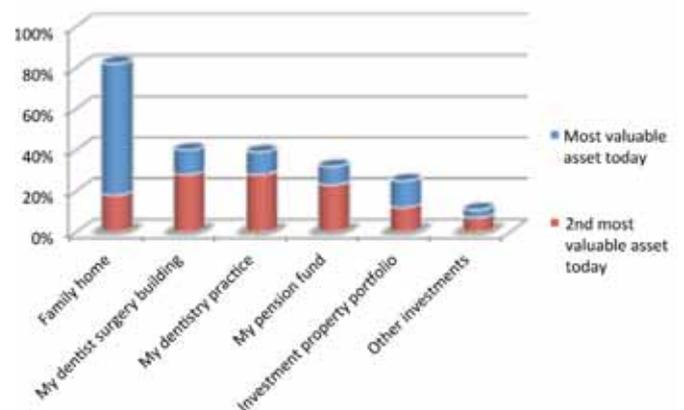
Tel: 1850 260 261 Email: john@omegafinancial.ie

www.omegafinancial.ie

GRAPH 1: Anticipated retirement income source



GRAPH 2: Most valuable asset today



Quiz

Submitted by Dr Ciara Scott

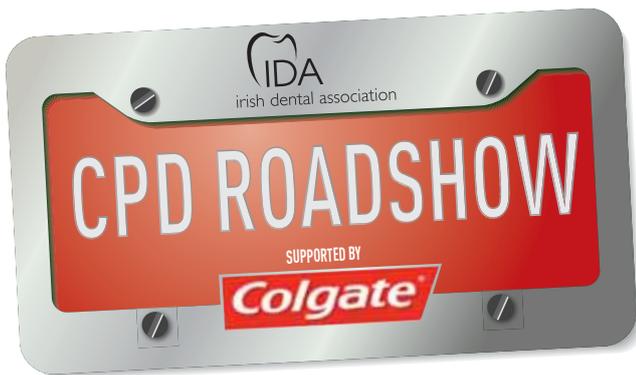


An eight-year-old boy presents with a Class II Division I malocclusion on a moderate Skeletal II base. He is in the early mixed dentition with an overjet of 12mm and an increased overbite. He has incompetent lips. His mum is concerned that he needs orthodontic treatment straight away.



1. What is his IOTN?
2. What are the dental health risks of a large overjet with incompetent lips?
3. What advice would you give his mum about the timing of orthodontic treatment?
4. What other dental care advice would you give?

Answers on page 217.



Starting in 2012, the CPD Committee of the IDA will bring a CPD Roadshow to the regions. Members will now be able to access exciting, educational presentations on a Saturday morning from 10.00am to 1.00pm in six locations: Dublin, Galway, Sligo, Cork, Limerick and Kilkenny.

Each event will consist of four lectures of 40 minutes' duration covering a range of topics including medical emergencies, oral radiology, endodontics, orthodontics, restorative dentistry, periodontics, etc.

This is a fantastic opportunity for members and their teams to avail of top-class educational programmes in their local areas. See the advertorial on pp182-183 for further information or log on to www.dentist.ie.

IDA membership numbers rise

Membership of the Irish Dental Association rose by over 8% in the period to July 2012, according to updated statistics from the Association. Total membership now stands at 1,384. Highlights from the breakdown include:

- the number of private practitioners is up by 109;
- 130 dentists joined or re-joined in the first half of 2012;
- private practitioners form the greatest proportion of dentists joining/rejoining (103);
- the number of public dental surgeons continues to decline to a worrying extent;
- life members now make up the second biggest membership category (12.7%);
- all branches bar one have experienced increases in members; and,
- general practice numbers have increased by 60 to 800.

CEO Fintan Hourihan commented: "We are delighted to see membership numbers increasing, particularly in the extremely harsh economic conditions under which many dentists are working. Membership of the IDA/IDU offers significant benefits, which far outweigh the cost of joining, and we hope that dentists will continue to avail of these benefits". He said that the Association was concerned at the fall in the number of HSE dentist members: "The public dental service has seen draconian cuts in recent years, and the IDA/IDU is committed to fighting for their reversal".



IRISH MEDICINES BOARD

Hydrogen peroxide in tooth whitening products – new legislation from October 2012

The Irish Medicines Board (IMB) is highlighting changes in EU legislation that will come into effect in October 2012 under Council Directive 2011/84/EU, the 'Tooth Whitening Directive', for the purpose of assuring a greater degree of protection of consumer health in this area.

An assessment by the European Commission's Scientific Committee on Consumer Safety published in 2007 (SCCP/1129/07) notes that particular care in using tooth whitening/bleaching products should be taken by persons with gingivitis and other periodontal diseases or defective restorations. A clinical examination by a dentist prior to using such tooth whitening products will ensure the absence of any conditions, such as, pre-existing oral tissue injury or pathology or concurrent use of tobacco and/or alcohol, which may exacerbate the possible toxic effects of hydrogen peroxide.

The assessment concludes that a limit of 0.1% hydrogen peroxide, present or released, is safe for products sold directly to consumers. Products containing more than 0.1% and up to 6% hydrogen peroxide, present or released, should be administered only by a dental practitioner. Because of the increasing risks of acute and long-term effects, tooth whitening products containing more than 6% hydrogen peroxide are not considered safe for use by the consumer. In light of this opinion, the Tooth Whitening Directive was adopted in September 2011 and will be in force from October 2012.

What does this new legislation mean for dentists?

The Tooth Whitening Directive will allow use of hydrogen peroxide in oral hygiene products above 0.1% and up to 6% under the professional supervision of a dental practitioner. A restriction on the sale of such products means that tooth whitening or bleaching products, containing greater than 0.1% hydrogen peroxide, can only be sold to dental practitioners. In addition, such products should not be used on persons under 18 years of age.

For each cycle of use, the first application is performed by a dental practitioner, as defined under Directive 2005/36/EC, or under his/her direct supervision if an equivalent level of safety is ensured.

Dental practitioners may then provide the product to the consumer to complete the cycle of use.

Complaints and undesirable effects (adverse reactions)

It is recommended that all serious undesirable effects (SUEs) occurring on the Irish market be reported to the IMB as Competent Authority for cosmetics and to the Responsible Person for that tooth whitening or bleaching product in order to allow the effect to be investigated. The IMB can be contacted by e-mail at cosmetics@imb.ie.

Importing tooth whitening products

If a dentist imports a tooth whitening product from a country outside the European Union (including internet supplies) for sale or supply in the form of a service, the dentist may be considered the Responsible Person (RP) for the product. In such cases, dentists are advised to contact their supplier to determine if a designated European RP has been appointed for the specific product.

The RP is legally accountable for ensuring that the cosmetic product is in compliance with the cosmetics legislation. As such, the RP is required to maintain a product information file, which includes a safety assessment, and to submit a cosmetic product notification to the IMB or the EU Commission. For further information on product information file requirements and the responsibilities of the RP, refer to the IMB's Guide to Cosmetics at www.imb.ie.

Market surveillance

A risk-based approach to market surveillance will be adopted by the IMB and its market surveillance partners in the Health Service Executive (HSE). Environmental Health Officers within the HSE are also authorised to inspect, seize and detain cosmetic products. The IMB and HSE will coordinate activities in this area with initial focus on products sold directly to consumers and illegal products that contain in excess of 6% hydrogen peroxide.

LABELLING REQUIREMENTS FOR TOOTH WHITENING PRODUCTS

The following information should appear in English on the packaging of tooth whitening products:

- Name and address of the Responsible Person (EU address)
- Nominal weight/volume
- Best before date or open jar symbol (where applicable)
- Precautions for use*
- Professional use only (where applicable)
- Batch number for traceability
- Product function
- List of ingredients

**Specific precautions for use to appear on tooth whitening products containing between 0.1% and 6% hydrogen peroxide include:*

'Contains hydrogen peroxide'

Concentration of hydrogen peroxide present or released indicated in percentage terms.

'Avoid contact with eyes, rinse immediately if product comes into contact with them.'

'Not to be used on a person under 18 years of age'

'To be only sold to dental practitioners.'

For each cycle of use, the first use to be carried out only by dental practitioners, or under their direct supervision if an equivalent level of safety is ensured. Afterwards to be provided to the consumer to complete the cycle of use.

Note: Tooth whitening products that are CE marked as medical devices are incorrectly classified as such and should be brought to the attention of the IMB.

This section has been supplied by the IMB for use in The Journal of the Irish Dental Association. However, the IMB is independent and impartial to any other information contained in this publication.

Huge interest in new dental complaints scheme



The new Dental Complaints Resolution Service is already proving an outstanding success, and claims mediator Michael Kilcoyne says that the number of enquiries received is already well ahead of expectations. Michael sees this as a really positive indication of support for the Scheme from both the dental profession and the general public. In the ten weeks since the Scheme's launch, Michael has received 54 enquiries.

He says that most of the complaints relate to patient concerns regarding pricing, allegations of poor service, poor communications or unsatisfactory aftercare service. Of course there are two sides to every story, and Michael ensures that dentists receive detailed written statements of concern from patients and encourages dentists to avail of advice from their professional defence bodies in deciding how best to respond to any complaints. Already a handful of complaints have been fully resolved to the mutual satisfaction of the parties, which represents a very timely and successful outcome in such a short space of time. Dentists have been pleased to see cases resolved in a timely fashion and without recourse to lengthy and expensive legal correspondence.

The availability of the Scheme can also reassure patients, provide a useful way to review engagement with patients, and help to nurture long-lasting relations with patients who see the commitment of the practice to handling complaints in a professional manner. Michael says he has been very impressed with the positive engagement by dentists when they are notified of complaints, and has also noted how some complaints have been referred to him at the suggestion of dentists to aggrieved patients.

An interesting feature of the enquiries has been the large number of questions and complaints received in regard to the non-availability of dental benefits under the medical card and PRSI schemes and these are directed to the HSE and the Department of Social Protection as appropriate. A significant number of complainants have been slow to submit their complaint in writing or have sent in incomplete complaints, which has the effect of delaying or rendering it impossible to resolve complaints.

Michael has also noted how 10% of complaints relate to dental treatment received outside the State.

More information on the Scheme is available to dentists and members of the public at www.dentalcomplaints.ie.

Seeking Irish dentists



A reception area in one of the Group's dental centres.

Pacific Smiles Group, one of Australia's leading networks of dental care centres, is seeking qualified, experienced dentists to practise, live and love the Australian way of life. According to the company, Australia has a strong economy, excellent patient demand and an enviable lifestyle. Pacific Smiles Group offers attractive remuneration packages, migration sponsorships and assistance to make the move as easy as possible. Opportunities are now available within several of the Pacific Smiles Group's 32 modern, well-equipped dental centres primarily located throughout the east coast of Australia. Visit www.pacificsmiles.com.au/australia for more information.

New edition of IDA website

The new IDA website – www.dentist.ie – went live at the AGM in Killarney. All members are encouraged to log on to the members' section, where there is a wealth of information relating to practice management and clinical issues. If you cannot locate your username and password, please contact IDA House.

Update on music in surgeries

In light of a recent judgment from the European Court of Justice (ECJ) relating to dentists' liability to pay charges for broadcasting music in their surgeries, the IDA obtained a Senior Counsel's opinion, and wrote to the Irish Music Rights Organisation (IMRO) to seek their agreement that dentists would no longer face any such liability. IMRO disputes this contention.

The IDA has advised IMRO that in light of the judgement and the advice obtained, it seems clear that the requirement of members to hold an IMRO licence has clearly changed.

As no agreement has been reached, dentists should be aware that IMRO is likely to seek legal redress where dentists refuse to make payment. Members may also wish to consider whether they wish to continue to broadcast music in their surgeries.

The IDA regrets that it has not been possible to resolve this matter by agreement with IMRO.



SENSODYNE



IDA

journal of the irish dental association
Iris Cumainn Déadach na hÉireann

COULD YOU BE THE SENSODYNE Sensitive Dentist of the Year™?

The search for the 2012 Sensodyne Sensitive Dentist of the Year has begun.

This awards programme is dedicated to showcasing the marvellous work of Irish dentists
– and all through the words that mean most: those of your patients.

Patients have come forward, through this programme, in huge numbers to commend their dentists for the care and professionalism with which they have been treated.

If you need a competition pack, please call the Sensodyne team on 01 – 495 5000. Your patients have until November 30 this year to make their nominations. Patients can also nominate you through the internet at www.sensodynesensitivedentist.ie.



TG Medical becomes Sander Dental

For more than 10 years TG Medical (Ireland), run by Ralf Sander, has been supplying the Irish dental profession with consumables and small practice equipment. Ralf has decided to rebrand and TG Medical (Ireland) will soon be trading as Sander Dental, consumables, equipment and professional training.

Commenting, Ralf says: "We will be changing our name but our philosophy of 'quality is not expensive: it's priceless' will not. After three years of organising courses in restorative dentistry with Dr Paul A. Tipton, Specialist in Prosthodontics in Dublin and recently in Belfast, we have also moved premises. We now have generous office space including a showroom. We also have permanent training facilities complete with seminar room, 12 phantom head stations and a fully furnished dental clinic. In 2013 we will start a one-year hands-on implant course".

Sander Dental is also introducing a brand new and innovative teeth-whitening product to the Irish market. "After its successful launch in the UK, we decided to introduce NATURAL+ with live trials in our new premises in Tallaght this September.

Naturalw+ (patented) teeth whitening is the only stabilised

hydrogen peroxide and true neutral pH system available today. The neutral pH is sustained throughout the process so there is virtually no sensitivity. Natural+ will treat any tooth stain, including tetracycline and fluorosis, with no dehydration throughout the entire treatment, and there is no shade regression," says Ralf.

According to the company, Natural+ contains no heavy metals, and with the addition of Dead Sea minerals, it is 100% ecological. The new innovative LED lamp uses no heat, further guaranteeing no dehydration of the tooth, improved results and it lasts for 50,000 hours. ("This is not a typing error!" – Ralf.) Natural+ requires only one 30-minute application for the in-office treatment.

The live trials will take place on Saturday, September 1, 2012. The duration is approximately two hours and the attendance is free, with light refreshments being served. As we can only accommodate 12 delegates advance booking is essential by calling (01) 901 3194 or emailing ralf@tgmedical.com.

Ralf also tells us that Sander Dental will be introducing its own range of dental chairs shortly.

Wireless digital X-ray sensor technology

Medray Imaging Systems is introducing the Carestream Dental RVG6500 Wireless Digital X-ray Sensor to the Irish market. Most digital sensors in use today are cable linked to a PC and while dentists using these have accommodated the presence of the cable, there has been a general requirement for more mobility. According to Medray, the Carestream Dental RVG6100 is known for producing the highest resolution images currently available and demonstrates leading technology, but only now has a wireless option become available – the Carestream Dental RVG6500 Sensor.

Although the company talks about it being a wireless sensor, there is still a wire connected to the actual sensor, which is attached, by a small length of cable, to the transmitter. This allows the design of the sensor to remain slim and less cumbersome when in the patient's mouth. However, there is no wire connecting the sensor to the PC, as the x-ray image is transmitted wirelessly to the PC. This gives dentists a huge amount of flexibility, as the sensor can be taken to another chair but will still be able to transmit the image to the stationary PC. The fact that there is no wire to the PC allows the operator to move freely around the chair when positioning the sensor. Kodak RVG 6500s use Wi-Fi technology. With Wi-Fi technology, image transfer is both fast and secure, allowing the images to be immediately delivered to the PC without any loss in quality. Wi-Fi enabled sensors also provide other exciting viewing options. The image can now be transferred directly to an iPod or iPhone.

In addition to these advances, an intelligent positioning system (IPS) has been developed to enable users to accurately align the sensor with the generator cone. The IPS minimises the risk of alignment mistakes such as cone cuts, missed apices and angle distortion, and is also a very useful staff training tool.

To obtain a copy of the catalogue or discuss different product features, dentists should contact Medray directly.



The Carestream Dental RVG6500 Sensor.

„I am **convinced**
by GrandioSO's
similarity to
natural teeth!“

Dr. H. Gräber

Take advantage
of current offers!*

SO TOOTH-LIKE

In the sum of its physical properties, Grandio®SO is the filling material that on a world-wide scale is most similar to natural teeth.** The advantages you will gain are: durable, reliable restorations, and above all satisfied patients.

- Meeting highest demands, universally usable in the anterior and posterior areas
- Natural opacity for tooth-like results using only one shade
- Intelligent colour system with new shades that make good sense: ^{VC}A3.25 and ^{VC}A5
- Smooth consistency, high light stability, simple high-gloss polishing



* Find all current offers on www.voco.com

** Please feel free to request our scientific product information.

For more information please contact

John F. Fanning · Mobile: 085 725 6078 or

Claire Austin · Mobile: +44 7584200138

GrandioSO



Dentistry’s sporting lives

While the IDA is always proud of its members’ commitment to their profession, many Irish dentists have also excelled in other arenas. ANN-MARIE HARDIMAN looks at just some of the dentists who have combined caring for oral health with great sporting achievement.

Róisín Corkery – Showjumping



Like many showjumpers, Róisín Corkery commenced her competitive career, at the tender age of eight, in the highly competitive world of pony competitions. Her first major achievement was qualifying for the Dublin Horse Show at the RDS at 13, and she went on to qualify many times in subsequent years. She represented Ireland in the European Championships in France in 1987, and competed in young riders’ championships, including a win at a major international event in Millstreet. During her dentistry studies at Trinity College, Róisín competed in the World Student Games in Germany in 1995. The Games differ in format from other events – featuring both dressage and show jumping, and involving riding a horse that competitors had never ridden before.

After college, Róisín moved to England to practise dentistry, but the arrival of a four-year-old horse bred by her mother in Ireland added a new dimension to her life. Despite a rocky start, when Róisín broke her hip, Gold Crown (named after the surprising number of requests she was receiving for the restorations!) turned out to be a fantastic international competitor, and together they competed all over Europe, meaning that Róisín had to balance dental practise with competitive showjumping for some years.

Róisín gave up competitive riding after a fall at the Hickstead High-speed Derby while she was eight weeks pregnant. However, she is now passing her love of riding on to the next generation, as her two older children enjoy riding their pony, and the two younger will no doubt follow in their footsteps. Róisín moved back to Ireland in 2008 and worked as an associate in Kilbarrack before moving in 2011 to her own practice in Malahide, Co. Dublin.

Pat Hartnett – hurling



Originally from Midleton in Co. Cork, Pat Hartnett played for his local club, Midleton, and UCC, as well as having a distinguished inter-county career.

The centre-back played for Cork between 1984 and 1994, and was part of the team that won four Munster titles, and two All-Ireland senior hurling championships – in the centenary year of 1984, when Cork beat Offaly at Semple Stadium, and in 1986, defeating Galway in Croke Park.

Pat is a graduate of UCC and has an MSc (Cons) from the Eastman (ULond).

He is still involved in the GAA with underage teams in his native Midleton. Pat’s other great sporting interest is karate – he has been a black belt for over 25 years and continues training to the present day. Pat is based in Cork City, where he is in private practice. His brother Michael works as an endodontist, also in Cork.

Karen Humphreys – hockey



Karen began playing hockey while still at school at Ballymena Academy, and went on to captain both the Ulster and Irish under-21 teams. She was first selected to play for Ireland’s senior team in 1993, winning her first cap against Italy, and going on to play for the national team in the 1994 World Cup, which took place

in Dublin. She retired from Irish international hockey in 2002, after the 2002 World Cup in Australia, with a record 100 caps.

Her exploits on the hockey pitch did not get in the way of her dentistry training, as Karen graduated from Dundee University in 1996, and went on to complete specialist paediatric training at the

School of Dentistry in Belfast. These days Karen is a consultant in paediatric dentistry at the Royal Belfast Hospital for Sick Children, a position she has held since 2007. Her special interests include cleft lip/palate and trauma. She is still a member of Pegasus Hockey Club.

Vincent McGovern (1913-1972) – Gaelic football



Born in 1913, Vincent McGovern played inter-county football for Cavan during the 1930s, and was a vital part of what is still a defining period for the county. The undoubted highlight of his footballing career was when he helped Cavan to victory against Kerry in a legendary 1933 semi-final at Breffni Park. Vincent's last-minute punched goal stopped Kerry's bid for five in a row, and Cavan went on to All-Ireland glory, beating Galway in Croke Park. Vincent scored two goals in the final, once again providing a last-minute punch to consolidate his team's lead. This was the first time that an Ulster side carried away the Sam Maguire, and is commemorated by the GAA in the Croke Park Museum. What's more, this wasn't the end for the historic Cavan side, as it was victorious once again in 1935 against Kildare.



After his playing days were over, Vincent practised dentistry in Westport, Co. Mayo, from 1938 until his death in 1972. His son Joseph has continued the practice in Westport, while another son, James, practises in Galway. Two of Joe's daughters are also dentists – Eleanor is a locum consultant in paediatric dentistry at the Children's University Hospital, Temple St, Dublin, and Audrey is an associate with Dr Gary McMahon in Blackrock, Co. Dublin (see below).

Audrey McGovern – sailing

Sporting excellence obviously runs in the family, as Vincent's granddaughter Audrey is a very successful sportswoman, this time

on the water. Involved in sailing from a young age, she is a member of Mayo Sailing Club, The National Yacht Club, Dublin, and The Royal Ocean Racing Club, London.

Audrey skippered her first yacht offshore at the age of 19, and qualified as an RYA Offshore Yachtmaster at 23, allowing her to skipper yachts professionally. She team-raced for the Cardiff University sailing team, and then went on to skipper a 75' ketch in the Caribbean after completing her first year of dental practice in Southampton in 2006. Audrey has competed at national and international levels, racing in the Enterprise World Championship at 18. She was a crew member on the winning yacht, *Zen*, in the Swan World Championship in Sardinia in 2008, and crewed on the Irish Ladies' Match-racing team in La Rochelle in the same year.

She has sailed in two Fastnet races and one Round Ireland Yacht Race, on two of those occasions as first mate for her husband Paul Adamson, who is a professional sailor, and completed her first Trans-Atlantic crossing as medic and crew aboard the famous Superyacht *Eleanora*. Audrey also loves keelboat racing, and in recent years has helmed in the highly competitive SB3 class and has skippered match-racing teams. In March of this year Audrey and Paul were awarded The National Yacht Club Boyne Regatta Cup (1870) for outstanding performance in cruiser and offshore racing. And, this October she will fulfil a lifelong dream to sail around the world, working professionally on a brand new 90' private luxury sailing yacht in the Oyster World Rally.

She is currently in practice with McMahon Dental in Blackrock.

Roly Meates – rugby



Roly Meates is a former coach to the Irish rugby team and member of the Irish Rugby Football Union (IRFU) Board of Directors. After attending the High School in Dublin, where his playing career began, Roly studied dentistry at Trinity College Dublin, and played with Dublin University Football Club (DUFC), before moving to Wanderers. He also coached DUFC for 28 years, from 1966 to 1995, and coached Leinster for five years from 1970 to 1975. He was President of the Leinster branch of the IRFU during the 1968/1969 year.

Described as "the world's foremost expert in the front row", Roly became coach to the Irish national team in 1975 and held the post for two years. He later served on the selection board, including when

Ireland won the Triple Crown in 1982. He returned to Leinster as coach in 1987 for six years, and also worked as scrummaging coach for the side. He is a governor of The High School, and Chairman of the school's Sports Committee. He was the visiting dentist for Guinness for 30 years, and is in private practice in Ballsbridge, Dublin.

Roger Young – rugby



Born in 1943 in Belfast, Roger Young was capped 26 times for Ireland in an illustrious international career that lasted from 1965 to 1971.

After completing his education at Methodist College Belfast, he progressed to Queen's University, where he played for the Queen's Rugby Club. He later also played for Collegians.

Roger made his test debut against France at Lansdowne Road on January 23, 1965. The scrum half was selected for the 1966 British and Irish Lions tour to Australia and New Zealand, where he played two tests against Australia and one against New Zealand. The 1968 Lions tour took him to South Africa, where he played one test against the Springboks. Roger's final test match was against Wales in Cardiff on March 13, 1971.

His touring experiences must have had an impact, as he emigrated to Cape Town in 1971, where he practised as a dentist until his retirement. Since retirement, Roger has done a few locums. He now runs a B&B in Langebaan, about an hour's drive from Cape Town – www.emeraldview.co.za – with his wife Jennifer. He remains involved in rugby, particularly with local Langebaan Rugby Club near Cape Town, a club made up of players from underprivileged areas. Roger's old Ulster, Ireland and Lions colleagues have been a great help in fundraising for the club in recent years, and the players now have a scrum machine, tackling bags, match and practice balls, etc.

International stars

It's not just in Ireland that dentists have been stars of sport – as far away as South America and Africa, dental graduates have been making their mark on the field.

Dipak Nanalal Chudasama – cricket

Born in Mombasa, Kenya, in 1963, Dipak Nanalal Chudasama represented his country in table tennis tournaments in India, Tokyo and South Korea before turning to cricket. The right-handed batsman was (perhaps mistakenly) known as 'The Doc' because, as well as being a cricketer, he is a fully qualified orthodontist.

Chudasama made his debut as early as 1980, and represented Kenya at the 1996 World Cup, and the 1990, 1994 and 1997 ICC Trophies. In all, he played in 20 One-Day International matches. His top innings score was a stylish 122 against Bangladesh in Nairobi, a then record opening partnership for Kenya. He has toured several countries in Asia and Africa, as well as Holland.

Dipak carried out dental studies in India, the UK and the US, and practised in Nairobi, Kenya, before going to teach orthodontics at Jacksonville University in Florida, while pursuing research interests in archwires. He now practises as an orthodontist in Lewisville, Texas.



Hugo Sánchez – soccer

Born in 1958, Hugo Sánchez is a Mexican football coach and former striker. He played for four European clubs, including Real Madrid, and was a member of the Mexican national team, earning over 60 caps and participating in three World Cups. He briefly coached the national team from 2007 to 2008, and is currently manager of Pachuca of the Primera División de México.

At the age of 18, Sánchez signed as a youth player for UNAM Pumas, a professional team representing Mexico's National University, where he completed a degree in dentistry while keeping up his football career.

He was part of the legendary Real Madrid side that won five consecutive league titles – from 1985-'86 to 1989-'90 – the Copa del Rey in 1989, and the UEFA Cup in 1986.

Sánchez's trademark was to perform a celebratory somersault after every goal he scored, and he was also known for acrobatic goals, some involving his trademark bicycle kick, a legacy of early gymnastic training. To date, he is the most successful Mexican

football player to have played anywhere, in terms of years played, goal scoring, and achievements.

Tell us your sporting story

We know there are many other dentists that have achieved international or elite status in sport and naturally we couldn't feature all of them here. However, if you have a favourite memory or a superb picture of a dentist excelling in sport, please let us know: contact.ann-marie@thinkmedia.ie.



**Wednesday 19th September 2012
is Mouth Cancer Awareness Day**

**Have you signed up
for Mouth Cancer
Awareness Day 2012 yet?**

Log on to
www.mouthcancerawareness.ie
today to register.

www.mouthcancerawareness.ie

Sporting injuries to the temporomandibular joint

Précis:

This short article reviews the diagnosis and management of potential sporting injuries to the temporomandibular joints.

Journal of the Irish Dental Association 2012; 58 (4): 202-204.

Introduction

While some of injuries to the temporomandibular joint (TMJ) are of an acute nature, they may resolve relatively quickly and with limited treatment. A small number of acute injuries do not resolve fully and become chronic. Chronic injuries may be characterised by persistent pain and limited function, requiring long-term therapies to restore normal sensation and function. The factors influencing the transition from acute to chronic injury are complex and include genetic, psychological and physiological responses that are difficult to predict.

Injury to the head and neck area may result in damage to muscles, joints, teeth and bone. Injuries may occur in isolation or in combination, thus increasing the diagnostic and therapeutic challenge for the treating clinician. For example, cervicogenic pain located in the upper segment of the cervical spine frequently refers to the orofacial region (e.g., the angle and lower border of the mandible, and/or the TMJ). This happens as a result of neural pathways from the cervical spine connecting with the spinal tract of the trigeminal nerve in the brain stem. Thus, apparent discomfort in the TMJ and adjacent tissues is not always indicative of underlying injury to the joint. Similarly, undetected dental injuries may provoke painful responses that influence muscle and joint function.

The assessment process must include the possibility that more than one type of tissue was injured. Failure to carry out a

comprehensive assessment may result in misdiagnosis, with continuing discomfort and disability for the affected patient.

Acute capsulitis

Direct trauma to the face may trigger an acute inflammatory response in the TMJ. The immediate response to irritation of the synovial tissues lining the joint is sensitisation of peripheral nociceptors (leading to pain) and an increased volume of synovial fluid within the joint space. This is a relatively common form of acute injury in contact sports like football, hurling, rugby, hockey, martial arts, etc. The condition is characterised by the development of immediate swelling in and around the joint, painful function of the mandible and occlusal changes. The increased volume of fluid with the joint causes displacement of the affected condyle-disc assembly anteriorly and inferiorly.¹ The displacement may be small but patients perceive a sense of occlusal change on the affected side, having difficulty in bringing the posterior teeth together. There may also be a degree of lateral displacement if the injury is severe enough, with the midline of the mandible shifting towards the opposite side.

Assessment of the patient should confirm that the onset of symptoms was immediate after the injury. Clinical and radiographic assessment must rule out bony fracture and/or infection, i.e., findings that would not be consistent with an acute capsulitis. A panoramic radiograph (orthopantogram) is the radiograph of choice for TMJ assessment and

Dr Dermot Canavan

BDentSc (TCD) MGDS (Edin.)

MS (Calif.) Dip Cons Sed

Lecturer in orofacial pain management,
Dublin Dental University Hospital, and
69 Eglinton Road,
Donnybrook, Dublin 4, and
The Galway Clinic (Doughiska).

Address for correspondence:

69 Eglinton Road

Donnybrook

Dublin 4

T: 01-269 4022

F: 01-269 4004

E: drcanavan@eircom.net

there are only a few occasions when a CT or MRI scan is required. Although diagnostic terms like joint capsulitis and synovitis are by definition different entities, in practical terms it is difficult to differentiate between the two.

The therapeutic approach is largely symptomatic:

- apply an ice pack to reduce soft tissue swelling;
- prescribe anti-inflammatories to promote healing and reduce pain; and,
- adhere to a soft diet to minimise functional discomfort.

The choice of anti-inflammatory is extensive and at the discretion of the dentist. Ibuprofen 800mg three times per day is regularly used for adult patients. Vimovo is a combined preparation of naproxen 500mg and esomeprazole 20mg (a proton pump inhibitor), which can be prescribed as one tablet twice per day for four or five days. The newly available Keral sachet (dexketoprofen) has reduced gastric effects and should be taken three times per day. Patients should be reviewed after about ten days, when improvements in mobility and discomfort are generally noted. Full recovery takes place within a month or so, and the use of intra-oral appliances is of little value to the patient (given the likelihood of spontaneous recovery).

Acute closed lock (disc displacement without reduction)

Direct trauma to the face may result in a sudden displacement of the intra-articular disc, which is characterised by an immediate and significant reduction in the range of mouth opening. This condition is sometimes painful but not always so.² It may be difficult to differentiate between an acute closed lock and an acute capsulitis. MRI studies on joints with acute disc displacement suggest that the disc generally tends to be displaced anteriorly and medially, but similar symptoms may also occur when the disc adheres to the roof of the fossa.³ With a locked joint the mandible tends to deviate towards the affected (painful) side, and there is generally no report of occlusal changes (no difficulty in bringing the posterior teeth together on the affected side). The full extent of mouth opening is frequently in the 25-30mm range, in contrast to an acute capsulitis, where mandibular movement tends to be more flexible. Patients will sometimes be aware that clicking is no longer detectable in the symptomatic joint. Clinically, the range of movement is limited by what is termed a 'hard end feel'. In other words, downwards pressure on the mandible elicits a sense of rigidity in the lower jaw.

Findings from the clinical and radiographic examination should be clearly documented in the patient's record before providing treatment.

Recommendations for treatment include the following:

- explanation of the diagnosis and reassurance for the patient;
- control of pain with anti-inflammatories and/or paracetamol;
- an exercise programme to gradually restore mobility to the affected joint (facilitated by the application of hot or cold packs to the symptomatic joint);

- intra-articular injection when necessary to try and mobilise the disc and restore a normal range of movement; and,
- assessment from a maxillofacial surgeon with a view to considering arthroscopy, arthrocentesis or eminectomy.

Only a small percentage of patients with locked joints require surgical intervention, but in appropriately selected cases this approach can provide significant relief for the patient. Intra-oral appliances have traditionally been used in the treatment of TMJ problems. Despite the controversy on how appliances actually work, it is clear that they have a role to play. However, in the presence of an acute injury the usefulness of an intra-oral appliance is limited. The evidence would seem to suggest that appliances may have a preventive role, or they may offer mechanical support in joints recovering from injury.

Open locking

Open locking may occur spontaneously but may also be associated with facial trauma. The patient usually feels that the mouth is 'half open' and cannot close comfortably. The most common cause for this is movement of the whole condyle-disc assembly beyond the crest of the eminence onto the pregenoid plane. This condition is always unpleasant and in some cases patients become extremely anxious when this occurs. The level of pain experienced by the patient will vary. Patients who have hypermobile TMJs may develop open locking on a recurring basis and thus learn to self-manage the condition. When the open lock reduces easily there is little post-operative pain and normal function of the mandible is restored. However, it can also occur as a result of facial injury in patients who are not hypermobile. The resulting tissue trauma may provoke long-term discomfort with joint function.

The therapeutic approach should provide:

- explanation and reassurance for the patient;
- reduction of the open lock by applying downward pressure on the posterior teeth of the mandible;
- oral or intravenous sedation, which may be helpful when available;
- pain control with analgesics;
- post-operative review of the patient to determine if the joints are truly hypermobile or, in the absence of hypermobility, to determine the extent of tissue trauma; and,
- long-term follow-up to reinforce the concept of self-management where appropriate.

Chronic temporomandibular joint injuries

Head, neck and facial trauma does not always provoke an acute response. For example, some patients will report the onset of non-painful clicking in the TMJs after trauma and generally not seek treatment in the absence of pain or functional disability. The literature suggests that 90% of patients with non-painful clicking will not progress to joint locking or have pain with function. Thus, we tend to monitor these patients rather than intervene. Patients may also report

the development of momentary locking episodes following facial trauma, which implies a slightly higher level of joint dysfunction. Under these circumstances the risk is greater for the patient, in terms of potentially developing an acute closed lock. These patients require comprehensive assessment to determine all risk factors in order to try and establish what level of intervention is appropriate. In this case the provision of an intra-oral appliance for night-time use may be sufficient to stabilise joint function. Elimination of parafunction habits (use of chewing gum, keeping the teeth apart during the day, biting fingernails, etc.) may be equally important.

Muscle pain in the masticatory system is frequently associated with facial injury. The condition may be characterised by an unusual level of tenderness in the masticatory muscles, soft tissue swelling, redness of the overlying skin, muscle stiffness and pain with function.

The therapeutic approach should include:

- explanation and reassurance for the patient;
- a programme of habit avoidance;
- an exercise programme to stretch and/or strengthen the affected muscles;
- the application of hot or cold packs to minimise pain while exercising;
- analgesic regimens as needed;
- intra-oral appliances where bruxism is considered to be a contributing factor to the patient's pain and disability;
- stress management programmes where anxiety is a contributing factor; and,
- chronic pain medications where appropriate (in the presence of significant sleep disturbance, high anxiety levels, widespread body pain, etc.).

Nerve injuries to the temporomandibular joint

The development of neuropathic pain following injury to the orofacial region is a rare but serious condition. Clinically it presents as an area of persistent pain in the TMJ area, often against a background of normal joint function. It is an even greater diagnostic challenge when the symptomatic joint has obvious functional limitations. It may be difficult to differentiate between a classical functional disorder and neuropathic pain. However, the presence of neuropathic pain may explain why some patients do not appear to respond to appropriate therapies for TMJ dysfunction.

Treatment for neuropathic pain is based on the use of a selection of neuropathic pain medications, most of which have significant side effects. Nerve blocks and specialist pain control interventions may be required. For many patients with neuropathic pain the condition is incurable, although it may ease considerably over time.

References

1. **Dworkin, S.F., LeResche, F.** Research diagnostic criteria for temporomandibular disorders: review, criteria, examinations and specifications, critique. *J Craniomandib Disord* 1992; 6 (4): 301-355.
2. **Nitzan, D., Benoliel, R., Heir, G., Dolwick, F.** Pain and dysfunction of the temporomandibular joint. In: **Sharav, Y., Benoliel, R. (eds.).** *Orofacial Pain and Headache*. Mosby Elsevier, 2008.
3. **Nitzan, D.W., Etsion, I.** Adhesive force: the underlying cause of the disc anchorage to the fossa and/or eminence in the temporomandibular joint – a new concept. *Int J Oral Maxillofac Surg* 2002; 31 (1): 94-99.

Mouthguard use and dental injury in sport: a questionnaire study of national school children in the west of Ireland

Précis

A survey of parents of 505 national school children (aged nine to 13) found that 22% wore mouthguards during sport. A mouthguard policy may increase mouthguard use.

Abstract

Statement of the problem: The risk of children getting dental injuries during sport can be minimised by using a mouthguard. Within Ireland, information on mouthguard use and policy is limited. The extent of dental trauma experienced by children during sport is also unclear.

Purpose of the study: To determine the extent of mouthguard use, dental trauma and barriers to use among children. The survey also investigated school and sports club policy on mouthguard use in sport.

Materials and methods: A questionnaire was sent to parents of 1,111 children aged nine to 13 years attending 25 randomly selected schools in the Health Service Executive West region of Ireland. It sought information about children's sporting activities, mouthguard policy and use, barriers to use, and dental accidents.

Results: A total of 505 questionnaires were returned (46%). More than nine out of ten children were involved in sport. Mouthguards were worn by 22% of children during sport. Less than one-third of schools and sports clubs that children attended had a mouthguard policy. Significantly more children used mouthguards where there was a mouthguard policy. Reasons for not wearing mouthguards included cost, lack of knowledge and information, and lack of a mouthguard policy. One in ten children had suffered a sports accident in the previous year, of which 51% injured teeth. Of these, 72% visited a dentist within two hours.

Conclusions: The dental profession and individual practitioners should promote mouthguard use for children during sport and be advocates for the development of policies in schools and sporting organisations.

Journal of the Irish Dental Association 2012; 58 (4): 205-211.

Margaret O'Malley

HSE-West Dental Services,
St Mary's Headquarters,
Castlebar,
Co. Mayo.

David S. Evans

Department of Public Health,
HSE-West,
Merlin Park Hospital,
Galway.

Antonia Hewson

HSE-West Dental Services,
St Mary's Headquarters,
Castlebar,
Co. Mayo.

Jenny Owens

Dental School,
University College Cork,
Cork.

Address for correspondence:

Margaret O'Malley
HSE Dental Services,
St Mary's Headquarters,
Castlebar,
Co. Mayo.

T: 090-49226

F: 090-21147

E: Margaret.OMalley@hse.ie

TABLE 1: Summary of key questions included in the survey.

QUESTION	RESPONSE CHOICES
What age is your child?	_____years
Gender of child	Male, female
What sports does your child play?	Gaelic football, soccer, camogie, hurling, rugby, basketball, other
Does your school have a policy about the wearing of mouthguards?	Yes, no, don't know
Does the sports club/clubs your child attends have a policy about the wearing of mouthguards?	All of the clubs, most of the clubs, some of the clubs, none of the clubs
Does your child wear a mouthguard while playing any sport?	Yes, no
Why doesn't your child wear a mouthguard while playing sport?	Open-ended question
For which of the following sports does your child wear a mouthguard?	Gaelic football, soccer, camogie, hurling, rugby, basketball, other
What type of mouthguard do they wear?	Sports shop brand (Ozone, Shockdoctor, Rugbymate, Rival), dentist (impression of child's mouth), other, don't know
Did your child have any accidents in the past year, while playing sport?	Yes, no
Did any of the accidents involve your child's teeth?	Yes, no
In any of the accidents in the past year were the teeth involved permanent or baby teeth?	Permanent teeth, deciduous/baby teeth
Following the last accident, did your child visit the dentist?	Yes, no
Was the dentist that you attended a private or a public dentist?	Private, public (HSE)
Following the accident, approximately how much was the overall cost of the dental treatment from the private dentist?	€_____
How long after the accident did you visit the dentist with your child?	Immediately, the day of the accident – within two hours, the day of the accident – more than two hours, within a week, within a month, longer than a month

Introduction

Sport plays a key role in the promotion of children's health and well being.¹ However, children are susceptible to sports injuries. Injuries to teeth in particular can be very distressing both to children and to parents,² and can have a significant social, psychological and economic impact.^{3,4} The US Surgeon General's report on oral health⁵ found that sporting activities are linked to nearly one-third of all dental injuries. Castaldi⁶ has shown that dental and facial injuries contribute up to 39% of total injuries experienced in youth sport. In Ireland, Stewart *et al.*⁷ found that sports injuries accounted for 23% of children attending Cork emergency services for dental trauma treatment. Injuries involving teeth require extensive aesthetic and functional rehabilitation involving long-term multi-disciplinary dental treatment.⁸ Dental injury represents a significant economic cost, not alone to individual affected families, but to public health services in general. The lifelong financial cost for a lone avulsed tooth is estimated to be €18,000.⁹

There will always be a risk of children getting dental injuries during play and sporting activities (particularly in unsupervised activities where protective equipment may not be worn). However, this risk can be reduced by using a mouthguard (gumshield).⁴ Mouthguards distribute the impact of a 'blow' evenly throughout the mouth, lessening the chances of injury.¹⁰ They are generally made from ethylene vinyl acetate (EVA) because of its non-toxicity, minimal

moisture absorption, elasticity, and ease of manufacture.¹¹ Several reviews of studies on mouthguards have shown that they are effective in reducing hard and soft oral tissue injuries, jaw fractures and neck injuries.^{4,10,12,13} As a result, a number of sporting organisations in several different countries promote their use or have made them compulsory (e.g., rugby union,¹⁴ American football,¹² ice hockey^{12,15}). Studies have shown that this has had a significant impact on reducing the incidence of dental trauma, dental injury costs, and the number of dental insurance claims.^{14,16} Individualised well-fitting mouthguards (provided by a dentist) have been shown to deliver the best protection.^{4,17} These require a dental impression, dentist models, and a forming process based on vacuum or pressure.¹¹ This involves one to two visits to a dentist.¹⁸ The cost of an individualised mouthguard varies significantly by dental practice. On reviewing the available prices of 50 dental clinics in Ireland,¹⁹ the average cost was €109 (minimum = €50; maximum = €250). A stock mouthguard is a preformed thermoplastic tray that loosely fits over the teeth.²⁰ These are available in stores (approximately costing between €2.50 and €12) and are worn without modification. However, these offer limited protection.²¹ Mouth-formed 'boil and bite' mouthguards are also available in stores. These are moulded by the user after softening the mouthguard in hot water and forming it in the mouth with pressure from fingers, tongue and cheeks.¹¹ 'Boil and bite' mouthguards provide better protection and comfort than stock mouthguards. They

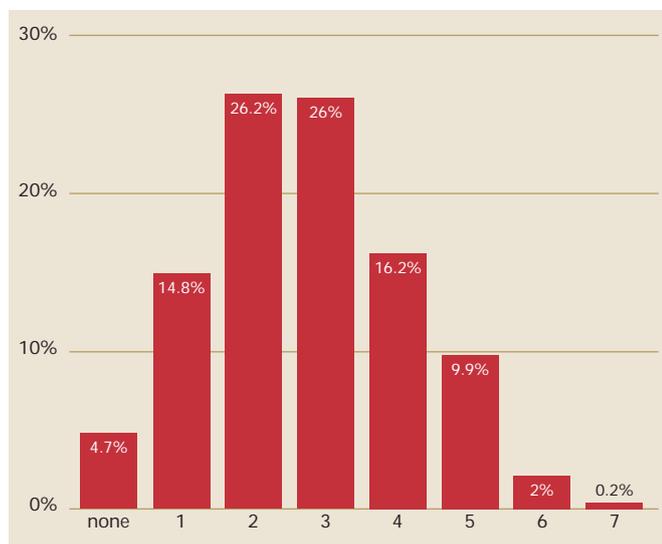


FIGURE 1: Number of sports played.

are lower in cost than individualised mouthguards (costing approximately between €3 and €30) and are the most common type of mouthguard used.⁴

Within Ireland, the extent of dental trauma experienced by children during sport is unclear. There is also limited information on the use of mouthguards by children and whether there are any measures in place to promote their use. This study aimed to determine the extent of mouthguard use, dental trauma, and barriers to use among children. It also investigated the policies of schools and sports clubs in relation to the prevention and management of dental injuries in sport.

Materials and methods

The study focused on national school children in the Health Service Executive (HSE) West region of Ireland. HSE-West includes counties Donegal, Sligo, Leitrim, Cavan, Mayo, Roscommon, Galway, Clare, North Tipperary and Limerick. It has 1,287 national schools and 159 special schools, comprising 35% of the total number of such schools in Ireland.²² Children aged nine to 13 years (fourth, fifth and sixth class) were selected, as at this age the mouth and teeth are in a key stage of development, which increases the potential of an injury having long-term effects.²³ There is also an increased risk of injury as school and club team sports in Ireland actively focus on this age group.²⁴ A random sample of 25 schools in HSE-West, stratified by county, was selected. The principals of each school then sent the parents of children in fourth, fifth and sixth class a confidential self-completion questionnaire for each child they had attending these classes. The questionnaire (which is summarised in Table 1) sought information about the parent's child (or children), including sporting activities, policies on mouthguards, mouthguard use, barriers to mouthguard use, and history of dental trauma and treatment. Quantitative data was analysed using PASW Statistics V19 (SPSS Ireland Ltd). Pearson's Chi-square test, Fisher's Exact test, and independent T tests were undertaken to assess the significance of any differences between key variables. The reason

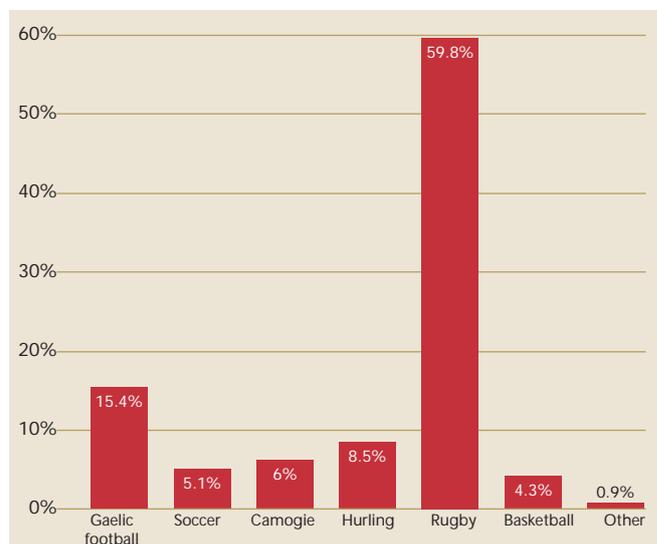


FIGURE 2: Sports played by children wearing mouthguards.

for not wearing a mouthguard was asked as an open-ended question. Responses were grouped into the main reasons following a grounded theory approach.²⁵

Results

Background profile

Of the 1,111 questionnaires that were posted, 505 were returned, giving a 46% response rate. A total of 53% of children were male, with 47% female. The mean age of children was 10.91 years (minimum = 9; maximum = 13) with no significant differences in mean age by gender (independent T test, $t = 1.532$, $df = 496$, $p = 0.126$). The majority of children (95%) were of Irish nationality.

Involvement in sport

From Figure 1 it can be seen that 95% of parents report that their children are engaged in sport and over two-thirds of children (67%) play between one and three sports. The average number of sports played is 2.73 (male = 2.99, female = 2.47). Boys play a significantly greater number of sports than girls (independent T test, $p < 0.001$). The main sports that children played included gaelic football (65%), soccer (62%), basketball (40%), other sports (39%), hurling (27%), rugby (27%), and camogie (12%).

Policy on mouthguards

Over two-thirds of parents (68%) stated that none of the sports clubs that their child (children) attended had a policy on mouthguards. A total of 2% reported that the national school that their child (children) attended had a policy on the wearing of mouthguards, while 70% stated that it did not have a policy, with 28% not knowing if it had a policy.

Mouthguard use

A total of 22% of children were reported as wearing mouthguards while playing sport. Figure 2 shows that the main sports played for

TABLE 2: Mouthguard use by gender and school/club policy on mouthguards.

Mouthguard use	YES		NO	
	No.	%	No.	%
Gender				
Male	82	32	173	68
Female	24	11	201	89
Age				
9-10	37	21	140	79
11-13	69	23	234	77
School policy on mouthguards				
Yes	8	80	2	20
No	69	21	265	79
Don't know	27	20	106	80
Sports club policy on mouthguards that child (children) attend				
All of the clubs	16	94	1	6
Most of the clubs	19	66	10	35
Some of the clubs	59	62	37	39
None of the clubs	9	3	297	97

those that wore mouthguards were rugby (60%), gaelic football (15%), and hurling (9%). Table 2 shows mouthguard use by age, gender, and the existence of a mouthguard policy. It can be seen that significantly more boys wore mouthguards compared to girls ($\chi^2 = 31.40$, $df = 1$, $p < 0.001$), with no significant differences in use by age ($p > 0.05$). In addition, significantly more children wore mouthguards if at least some of the sports clubs they attended had a policy on mouthguards (66% compared to 34% if none of the clubs attended had a policy, $\chi^2 = 219.92$, $df = 1$, $p < 0.001$). Where there was a school policy on mouthguards, significantly more children were reported as wearing mouthguards in schools (80% compared to 20% if the school did not have a policy, $\chi^2 = 20.30$, $df = 2$, $p < 0.001$). The main type of mouthguard used for those wearing mouthguards was 'boil and bite' (64%), other types of mouthguard (12%), and a mouthguard from a dentist (4%). Almost one-fifth of parents (19%) did not know the type of mouthguard used by their children.

In terms of reasons for not wearing mouthguards, content analysis of this open-ended question revealed that the main reasons given by parents of children that did not use mouthguards was the cost of mouthguards, lack of knowledge and information about the benefits of wearing mouthguards, and the lack of a policy on mouthguards in schools or clubs.

Sports-related dental injuries

A total of 10% of parents reported that their child (children) had suffered a sports-related accident in the past year, with 52% of these sustaining injuries to teeth. The majority of injuries to teeth were to permanent incisors (87%). Of the parents whose children had injured their teeth, treatment from a dentist was sought for all those that had injured permanent teeth and for 50% of those that had injured deciduous teeth. Almost three-quarters (72%) visited a dentist immediately or within two hours of the injury. The average cost of emergency dental treatment was €214.23.

Discussion

In Ireland, sport and exercise have been identified as key factors contributing to children's well being.²⁶ The importance of sport in children's lives is evident in the current study, with 95% involved in at least one sports activity. This is promising and has implications in terms of the prevention of obesity. However, it is worth noting that boys play significantly more sports than girls. A number of other studies have shown that boys are more physically active than girls.^{1,27,28} This highlights the importance of making sports more accessible and attractive to girls. It suggests the need for gender-based initiatives to encourage girls' ongoing participation in sport.

The most popular sports played by children in the study are all sports that involve a degree of bodily contact with other participants (e.g., gaelic football, basketball, soccer). This increases the potential for dental injury and highlights the importance of dental protection. For example, although basketball is not a full contact sport, it does have a considerable risk of dental injury.¹³ The close contact between athletes and speed of the game are predisposing factors, with injuries caused by hand or elbow contact in the facial area.²⁹ Similarly, soccer and gaelic football have a risk of contact with other players, the ground, the ball, and the goalposts. Pribble *et al.*³⁰ state that up to 30% of all injuries in soccer are to the orofacial region. However, the results suggest that there is a lack of awareness among parents of the risks of dental injury to children during sport. Indeed, a number of parents also stated that they lacked knowledge and awareness in terms of the benefits of wearing mouthguards. Only 22% of parents stated that their children wore a mouthguard while playing sports. The findings suggest that there was a 52% chance that if a child had a sports injury, it would be a dental injury. Parents need to be made aware of the risks of dental trauma and of the benefits of wearing mouthguards so that they can make an informed decision about the need for dental protection. This is particularly the case for parents of girls. Girls are involved in sports where there is the potential for injury, yet were reported as being significantly less likely to wear mouthguards. Nowjack-Rayner and Gift³¹ suggest that gender differences in headgear and mouthguard use in the United States may be due to perceptual and cultural differences, peer pressure, and the nature of the sports played. Such issues would require further investigation in an Irish context.

A number of other studies have also reported low levels of mouthguard use among school children. Onyeaso's study of 1,127

secondary school athletes (aged 12-19) in Nigeria found that 20% reported using mouthguards.³² Rodd and Chesham,³³ in a study of 770 14- to 15-year-old children in England, reported that 14% had worn a mouthguard at some stage, with fewer than 6% currently using one. Fakhruddin *et al.*³⁴ in a Canadian study of 270 12- to 14-year-old children found that 6% of children wore mouthguards for school sports, with 20% wearing them for league sports. As with the current study, gender differences were also found in all these studies, with significantly more boys reporting that they wore mouthguards compared to girls. These studies demonstrate that the west of Ireland is not unique in its low level of mouthguard use. It also highlights the scope for countries to work together to develop policies and initiatives to increase mouthguard use.

The study found that rugby is the main sport where mouthguards are used. The International Rugby Board (IRB) has recommended that mouthguards are worn in training and games.³⁵ In addition, many local rugby clubs have made the wearing of mouthguards mandatory. An unpublished survey of rugby clubs by the Irish Rugby Football Union (IRFU) found that 85% of clubs have made the wearing of mouthguards mandatory (IRFU Medical Department, personal communication, December 15, 2011). These policies appear to have been effective in promoting mouthguard use in children who play rugby. Another contributing factor could be the influence of professional rugby players (often seen wearing mouthguards), who can act as role models for young players.¹⁸ For other sports, only a minority of children were reported as wearing mouthguards. With the exception of rugby, none of the main sports played by children have a policy on the mandatory wearing of mouthguards. For hurling and camogie, it must be acknowledged that mandatory helmet use^{36,37} reduces the risk of orofacial injury. However, only 0.7% of children solely played these sports, with most children who played hurling or camogie also playing other sports that do warrant the use of mouthguards. Clearly there is a need for policies such as that employed in rugby to also be developed for other sports.

The need for policies on mouthguard use is also reinforced by the fact that significantly more parents reported that their child (children) wore mouthguards if the school or the sports clubs that their children attended had a policy on mouthguard use. However, less than one-third reported that sports clubs currently had policies, and only 2% stated that schools currently had policies. Interestingly, when school principals were contacted about participating in the study, they were asked about existing policies. None reported that there was a specific policy on mouthguards, which supports the survey findings. The 2% of parents reporting the existence of a school policy may have been referring to informal policies or other generic policies that addressed mouthguard use. This highlights a need for mouthguard policies to be developed and promoted within schools and sports clubs. This is reinforced by comments from parents of children who did not wear mouthguards, who stated that this was due to the lack of school and club policy on mouthguard use. Both the HSE and the Irish Dental Association (IDA) could have a role in promoting and developing policies. A promising development in 2010 was the call by the IDA to

address the lack of mouthguard use in gaelic football at both adult and juvenile levels.³⁸ Subsequently, the Gaelic Athletic Association (GAA) and the Gaelic Players Association (GPA) provided custom-made mouthguards to every inter-county senior football squad.³⁹ The mandatory wearing of mouthguards is also being considered by the GAA and was a proposed motion at their 2011 Congress.⁴⁰ The issue was referred to the 2012 Annual Congress, and in April 2012, Congress passed a motion making it mandatory for juvenile football players up to minor grade to wear mouthguards from the start of 2013. The rule will come into effect for senior football players from the start of 2014.

It is suggested that the GAA and other organisations considering making mouthguard use mandatory should liaise with organisations that have successfully developed such policies (e.g., rugby union clubs). In this way any concerns can be addressed and lessons can be learnt in terms of implementation and adherence to the policy at all levels.

The lack of awareness of the risks of dental injury to children during sport is in complete contrast to awareness levels in terms of what to do if an accident occurs. Almost three-quarters of parents of children that had a dental accident visited a dentist immediately or within two hours. Immediate care after a dental injury has been shown to increase the chance of survival of a damaged tooth and reduce the risk of post-injury complications.^{41,42} It is encouraging that appropriate action is being taken when an accident occurs.

Of the parents whose children wore mouthguards, almost two-thirds used mouth-formed 'boil and bite' mouthguards. These are the most commonly used mouthguards, and are good for growing children as they can be remoulded over time.⁴ However, this type of mouthguard can be loose fitting, which can limit their effectiveness.⁴ They are significantly less effective than individualised custom-made mouthguards.^{10,17} Customised mouthguards were only used by 4% of children. Policies on mouthguard use should emphasise the preference for customised mouthguards provided by a dentist. However, these are generally more expensive than stock and 'boil and bite' mouthguards. A number of parents stated that the cost of mouthguards was a barrier to their use. In addition, as children's dentition changes rapidly,³¹ a customised mouthguard may not always be practical. In such circumstances, a 'boil and bite' mouthguard may be more appropriate. Here, dental practitioners could have a role in helping to ensure that 'boil and bite' mouthguards are fitted properly and are not loose. Although customised mouthguards are more expensive, it is worth noting that the cost of a customised mouthguard would be significantly cheaper than dental treatment costs, which were €214 on average in the current study (excluding long-term treatment costs). This is approximately double the cost of a custom-fitted mouthguard (€109 on average). In a position paper on sports mouthguards, the Canadian Dental Hygienists Association⁴ cites a study that found that the total costs for repairing one avulsed tooth were 20 times the cost of a customised mouthguard. The costs of customised mouthguards could be significantly reduced if schools, sports clubs, and sports organisations negotiated a bulk purchase fee with manufacturers and

dental practitioners. The approximate cost of a customised mouthguard in Ireland ranges from €50 to €250. Parents/guardians could possibly reduce the cost of purchasing a mouthguard if they shopped around. There may be scope for some dental practitioners to reduce the cost of mouthguards. Dental practitioners could also consider introducing flexible methods of payment, such as spreading the cost over a given time period. In addition, the Government could also consider introducing a scheme to subsidise the cost of mouthguards. Such initiatives could help to ensure that the optimum level of protection is accessible to a greater proportion of children. It must be recognised that the study does have some limitations. Feedback was not obtained from children directly. This would have been useful in terms of determining children's attitudes towards mouthguards, barriers to their use, and attitudes towards sport and physical activity. However, it must be acknowledged that self-reports from children under 10 years of age can be inaccurate and unreliable.⁴³ While feedback was obtained from the parents of 505 children, the study is not statistically representative of children in the west of Ireland, nor of the counties within the region. This would have required a significantly larger sample. Over half the parents that were contacted (54%) did not respond to the survey, meaning that there is a possibility of sampling bias. Time and resource constraints meant that it was not possible to follow up non-responders with a reminder letter or telephone call. Such strategies have been shown to significantly increase response rates.⁴⁴ The small sample of children that had experienced dental accidents during sport limited the level of statistical analysis possible (e.g., a breakdown of dental accidents by type of sport could not be undertaken). The number of hours that children participated in sports activities was not elicited from parents. This could have provided interesting comparisons by gender and the incidence of dental injury. Despite these limitations, it is worth noting that it is (as far as the authors are aware) the largest study of mouthguard use among school children in Ireland to date, and does provide a valuable insight into the issues of mouthguard use by children during sport.

Conclusions

In this study, only 22% of parents reported that their children wore mouthguards while playing sport. This suggests that parents lack awareness in terms of the risk of dental injury during sport. Dental injuries do have significant social, psychological, and economic costs to children and their families. It is fundamental that awareness levels are raised among parents, as they are the key decision makers in terms of children's mouthguard use.¹³ The dental profession and individual practitioners have a role to play in providing information and advice to parents about using mouthguards during sport. Indeed, involvement in sports and mouthguard use should form part of a child's dental assessment. While the study found an overall lack of mouthguard policies among schools and sporting organisations, it highlighted their importance in promoting mouthguard use. Dental organisations should have an advocacy role in promoting and developing such policies in the future.

Acknowledgements

We would like to thank all the school principals for their co-operation in distributing and collecting questionnaires. We are grateful to all the parents who returned completed questionnaires, to Garrett Coughlan (IRFU) for providing information on mouthguard policy in rugby union, and to Claire Dunne for proofreading and assistance throughout the project.

References

1. Fahy, T., Delaney, L., Gannon, B. Schoolchildren and Sport in Ireland. The Economic and Social Research Institute, 2005.
2. Cortes, M.I., Marcenes, W., Sheiham, A. Impact of traumatic injuries to the permanent teeth on the oral health-related quality of life in 12- to 14-year-old children. *Community Dentistry and Oral Epidemiology* 2002; 30 (3): 193-198.
3. Rayes, M.A., Arenson, L., Chudasama, D., Siracusa, D., Wu, A. Mouthguard effectiveness, do intraoral mouthguards work?: University of Toronto, Faculty of Dentistry, 2007.
4. Canadian Dental Hygienists Association. CDHA position paper on sports mouthguards. Putting more bite into injury prevention. *Canadian Journal of Dental Hygiene* 2005; 39 (6): 1-18.
5. US Department of Health and Human Services. Oral health in America: A Report of the Surgeon General. Rockville, M.D.: US Department of Health and Human Services, National Institutes of Health, National Institute of Dental and Craniofacial Research, 2000.
6. Castaldi, C.R. Sports-related oral and facial injuries in the young athlete: a new challenge for the paediatric dentist. *Paediatric Dent* 1988; 8: 311-316.
7. Stewart, C., Kinirons, M., Delaney, P. Clinical audit of children with permanent tooth injuries treated at a dental hospital in Ireland. *Eur Archs Paediatr Dent* 2011; 12: 41-45.
8. Froberg, U., Bonsmann, M. Orofacial injuries in skateboard accidents. *Aktuelle Traumatol* 1992; 22 (2): 84-86.
9. Persic, R., Pohl, Y., Filippi, A. Dental squash injuries – a survey among players and coaches in Switzerland, Germany and France. *Dental Traumatology* 2006; 22 (5): 231-236.
10. Ranalli, D.N. Prevention of sports-related traumatic injuries. *Dent Clin North Am* 2000; 44 (1): 35-51.
11. Westerman, B., Stringfellow, P.M., Eccleston, J.A. Beneficial effects of air inclusions on the performance of ethylene vinyl acetate (EVA) mouthguard material. *British Journal of Sports Medicine* 2002; 36 (1): 51-53.
12. Knapik, J.J., Marshall, S.W., Lee, R.B., Darakjy, S.S., Jones, S.B., Mitchener, T.A., et al. Mouthguards in sport activities: history, physical properties and injury prevention effectiveness. *Sports Medicine* 2007; 37 (2): 117-144.
13. Newsome, P.R.H., Tran, D.C., Cooke, M.S. The role of the mouthguard in the prevention of sports-related dental injuries: a review. *International Journal of Paediatric Dentistry* 2001; 11 (6): 396-404.
14. Quarrie, K.L., Gianotti, S.M., Chalmers, D.J., Hopkins, W.G. An evaluation of mouthguard requirements and dental injuries in New Zealand rugby union. *British Journal of Sports Medicine* 2005; 39 (9): 650-651.
15. Hawn, K.L., Visser, M.F., Sexton, P.J. Enforcement of mouthguard use and athlete compliance in National Collegiate Athletic Association men's collegiate ice hockey competition. *Journal of Athletic Training* 2002; 37 (2): 204-208.

16. Sane, J. Comparison of maxillofacial and dental injuries in four contact team sports: American football, bandy, basketball, and handball. *The American Journal of Sports Medicine* 1988; 16 (6): 647-652.
17. Mekayarajananonth, T., Winkler, S., Wongthai, P. Improved mouth guard design for protection and comfort. *The Journal of Prosthetic Dentistry* 1999; 82 (6): 627-630.
18. Holmes, C. Mouth protection in sport in Scotland – a review. *Br Dent J* 2000; 188 (9): 473-474.
19. WhatClinic.com. Mouth Guard Ireland, All 106 Mouth Guard Clinics in Ireland: <http://www.whatclinic.com/dentists/ireland/mouth-guard>, 2011.
20. ADA Council on Access Prevention and Interprofessional Relations, ADA Council on Scientific Affairs. Using mouthguards to reduce the incidence and severity of sports-related oral injuries. *The Journal of the American Dental Association* 2006; 137 (12): 1712-1720.
21. Widmer, R.P. Oro-facial trauma in children. *Aust Fam Physician* 1992; 21 (9): 1263-1265.
22. Department of Education and Science. Statistical Report 2004/2005, 2005.
23. Oral Health Services Research Centre, The Dental Health Foundation. Oral Health in Ireland, 1999.
24. National Council for Curriculum and Assessment. Physical Education, Primary School Curriculum. Government of Ireland, Department of Education and Science, 1999.
25. Corbin, J., Strauss, A. *Basics of Qualitative Research* (3rd ed.). Sage Publications, 2008.
26. Nic Gabhainn, S., Sixsmith, J. Children's understandings of well-being. Centre for Health Promotion Studies, Department of Health Promotion, National University of Ireland, Galway, 2005.
27. Sallis, J.F. Epidemiology of physical activity and fitness in children and adolescents. *Critical Reviews in Food Science and Nutrition* 1993; 33 (4-5): 403-408.
28. Van Der Horst, K., Paw, M.J., Chin, A., Twisk, J.W., Van Mechelen, W. A brief review on correlates of physical activity and sedentariness in youth. *Medicine & Science in Sports & Exercise* 2007; 39 (8): 1241-1250.
29. Cohenca, N., Roges, R.A., Roges, R. The incidence and severity of dental trauma in intercollegiate athletes. *The Journal of the American Dental Association* 2007; 138 (8): 1121-1126.
30. Pribble, J.M., Maio, R.F., Freed, G.L. Parental perceptions regarding mandatory mouthguard use in competitive youth soccer. *Injury Prevention* 2004; 10 (3): 159-162.
31. Nowjack-Raymer, R.E., Gift, H.C. Use of mouthguards and headgear in organised sports by school-aged children. *Public Health Reports* 1996; 111 (1): 82-86.
32. Onyeaso, C.O. Secondary school athletes: a study of mouthguards. *Anglais* 2004; 96 (2): 240-245.
33. Rodd, H.D., Cheshem, D.J. Sports-related oral injury and mouthguard use among Sheffield school children. *Community Dent Health* 1997; 14 (1): 25-30.
34. Fakhruddin, K.S., Lawrence, H.P., Kenny, D.J., Locker, D. Use of mouthguards among 12- to 14-year-old Ontario schoolchildren. *J Can Dent Assoc* 2007; 73 (6): 505a-e.
35. International Rugby Board (IRB). Laws of the game of rugby football. Dublin; International Rugby Board, 2011.
36. Gaelic Athletic Association. Official Guide – Part 2. Dublin; Gaelic Athletic Association, 2011.
37. An Cumann Camogaiochta. Rialacha Imearta, Playing Rules. Dublin; The Camogie Association, 2010.
38. Irish Dental Association. Dentists urge all Gaelic footballers to wear gunshields: Irish Dental Association – <http://www.dentist.ie/resources/news/showarticle.jsp?id=1012>, 2010.
39. Gaelic Players Association. GPA completes gumshield programme. Gaelic Players Association – <http://gaelicplayers.com/home/695-gpa-completes-gumshield-programme>, 2011.
40. Gaelic Athletic Association. GAA Annual Congress 2011: Motions: GAA, Croke Park, Dublin 3, 2011.
41. Al-Jundi, S.H. Type of treatment, prognosis, and estimation of time spent to manage dental trauma in late presentation cases at a dental teaching hospital: a longitudinal and retrospective study. *Dental Traumatology* 2004; 20 (1): 1-5.
42. Saroglu, I., Sönmez, H. The prevalence of traumatic injuries treated in the pedodontic clinic of Ankara University, Turkey, during 18 months. *Dental Traumatology* 2002; 18 (6): 299-303.
43. Saris, W.H.M. The assessment and evaluation of daily physical activity in children. A review. *Acta Pædiatrica* 1985; 74: 37-48.
44. Edwards, P., Roberts, I., Clarke, M., DiGiuseppi, C., Pratap, S., Wentz, R., et al. Increasing response rates to postal questionnaires: systematic review. *BMJ* 2002; 324 (7347): 1183.

Unilateral coronoid hyperplasia associated with early childhood facial trauma: a case presentation

Précis

A case presentation of coronoid hyperplasia presenting in adolescence. An association with early childhood trauma to the chin and subsequent development of the condition is proposed.

Journal of the Irish Dental Association 2012; 58 (4): 212-214.

Introduction

Although a rarely encountered clinical entity, hyperplasia of the coronoid process is a condition that dental practitioners should consider when encountering patients with limited mandibular movements. The condition was first described by von Langenbeck in 1853,¹ though currently the actual incidence is unknown.² Coronoid hyperplasia may occur bilaterally or unilaterally, and is defined as an increase in the coronoid process, resulting from an abnormal bony elongation of histologically normal bone.³ The main clinical feature is a progressive, painless limitation of mouth opening, widely accepted to be due to an impingement of the elongated process on the posterior aspect of the zygomatic arch.⁴ Unilateral cases are more common than bilateral ones, and a number of theories have been postulated as to the pathogenesis.⁵ These include developmental causes, inflammatory reactions, endocrine influences, neoplasia, and traumatic events.⁶ Within the available literature, a number of authors have outlined an association of coronoid hyperplasia with direct trauma to the zygomatic complex.⁷ The following report describes an unusual case of unilateral coronoid hyperplasia presenting in early childhood, which we suggest may be related to an incident of indirect trauma.

Case report

A seven-year-old girl was referred to the oral and maxillofacial department due to an

apparent facial asymmetry and restricted mouth opening. On examination, she was comfortable and healthy. Furthermore, she was not at this time experiencing any particular functional difficulty. Clinical examination revealed deviation to the right hand side on mandibular opening, with an interincisal distance of 15mm. The limitation in mouth opening was painless and there was no associated dysfunction of the temporomandibular joints. A history of trauma at age three years was reported and clinically she had a chin scar.

Orthopantomography showed an elongation of the right coronoid process. No evidence of condylar pathology was observed (Figure 1). Subsequently, a CT scan with appropriate three-dimensional reconstruction demonstrated gross enlargement of the right coronoid, with impingement upon the inner aspect of the zygomatic bone (Figures 2 and 3).

Due to the young age of the patient at initial presentation and the lack of relative functional problems, immediate surgical intervention was not undertaken. On further assessment following new referral at 11 years old, the patient was now more aware of her facial appearance and was concerned with the obvious asymmetry on opening. She was also distressed regarding her restricted mouth opening, recorded clinically at 15mm. Further radiographic examination showed no excessive change in the enlarged coronoid process (Figure 4).

Under general anaesthesia, a right coronoidectomy was performed via an

Professor Duncan Sleeman
Consultant Oral & Maxillofacial Surgeon

Dr Emma Warren
Specialist Registrar in Oral Surgery

Dr Micheal McAuliffe
Specialist Registrar in Oral Surgery

Address for correspondence:

Emma Warren
Dental School and Hospital,
Cork University Hospital,
Wilton,
Cork.

T: 021-490 1127
E: e.warren@ucc.ie



FIGURE 1: OPG at aged seven showing no signs of condylar pathology.

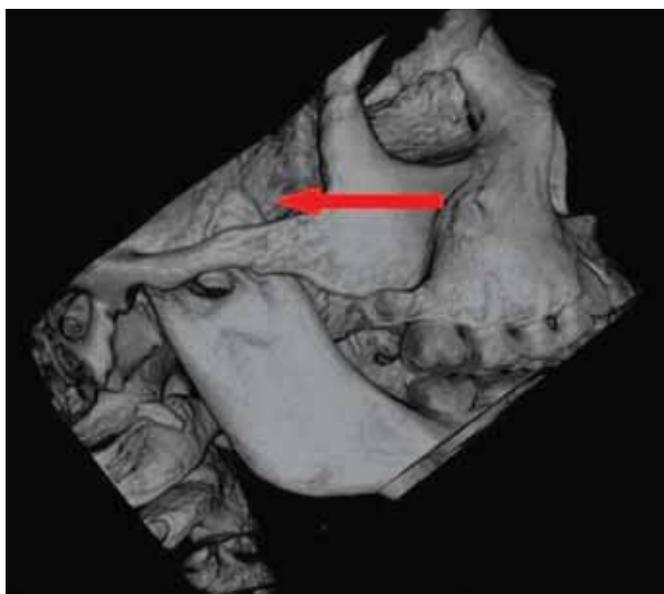


FIGURE 2: 3D scan showing hyperplasia of the coronoid process.



FIGURE 3: 3D CT scan demonstrating proximity of enlarged coronoid process to the inner aspect of the zygomatic arch.

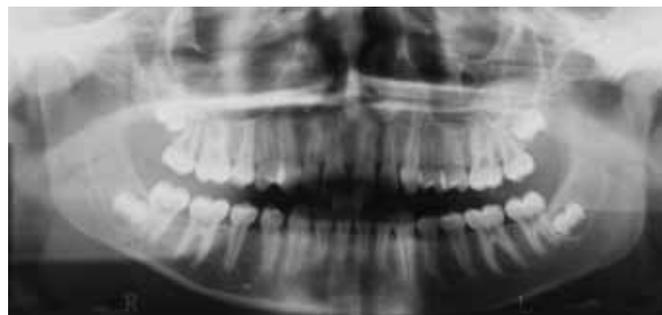


FIGURE 4: OPG at aged 11.

intraoral approach. A standard sagittal split incision was made along the anterior border of the mandibular ramus, and the tissues reflected to expose the top of the coronoid process. Blunt dissection was used to detach the temporalis muscle and a horizontal osteotomy was made from the sigmoid notch to the anterior border of the ascending ramus. The entire right coronoid process was then removed, bleeding controlled, and the surgical site closed with resorbable sutures. Opening improved to 30mm at operation. Postoperative recovery was uneventful and mouth-opening exercises were commenced. The bone appeared histologically normal.

Discussion

Restricted mouth opening caused by coronoid hyperplasia is rare, and so is often overlooked or misdiagnosed.¹ Limitation in mandibular movements logically draws the clinician towards the temporomandibular joint; nonetheless, pathoses of the coronoid process anterior to the joint may well be the origin of the problem. Despite several case reports within the literature, the aetiology of

coronoid hyperplasia remains under discussion. The mean age of presentation is 25 years.³ Unilateral coronoid enlargement is seen more frequently than bilateral cases,⁸ and it had been suggested that the former differs in distinction to the bilateral condition, as its bone displays neoplastic growth or cartilaginous changes.⁹ This theory was disputed by the work of McLoughlin *et al.*, who provided evidence of histologically normal bone in both unilateral and bilateral cases of coronoid hyperplasia.³ Numerous causal factors have been proposed in the development of the condition. Hyperactivity of the temporal muscle causing reactive elongation of the coronoid process has been hypothesised,¹⁰ as has an association with long-standing temporomandibular joint dysfunction. The latter theory was put forward by Isberg *et al.*, who explained that hyperplasia of the coronoid process may result from internal joint dysfunction due to an increased pull of the temporalis muscle without adequate counterbalance from the condylar region.¹¹ Facial trauma has been implicated within the literature, with particular reference to zygomatic arch injury.⁷

Although plain radiographs are useful in illustrating enlargement of the coronoid process, three-dimensional reconstructions from computerised tomography are by far the superior aids to diagnosis, as the exact shape and relation to surrounding bones can be clearly established.¹² Treatment by an intraoral coronoidectomy is generally accepted to be the preferred surgical approach,¹³ with adequate postoperative physiotherapy key to the success of management.¹⁴

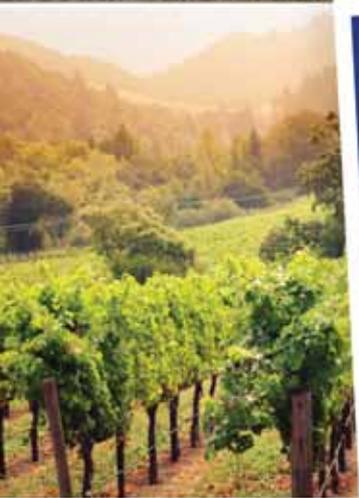
This case outlines an unusual presentation of coronoid hyperplasia, with an early age of onset and a history of trauma to the chin region some years earlier. We assume that there may indeed be a causal relationship between the events. It is likely the trauma caused a fracture of the coronoid process with temporalis muscle pulling the fracture ends apart, acting in a similar fashion as distraction osteogenesis. Uninterrupted development of the unaffected side leads to lengthening and shifting of the mandibular midline to the affected side.¹⁵

Conclusion

Despite its relatively rare occurrence, coronoid hyperplasia should not be ignored in the differential diagnoses of patients presenting with reduced mandibular opening. Dental clinicians should be aware of the possibility of coronoid pathoses when encountering patients with painless restriction in mouth opening. If suspected, referral to a specialist practitioner is appropriate. With the routine availability of computerised tomography to assist clinical examination, coronoid hyperplasia is an easily detectable condition and should not go undiagnosed.¹⁶

References

1. Wenghoefer, M., Martini, M., Anwander, T., Gotz, W., Reich, R., Berge, S.J. Hyperplasia of the coronoid process: diagnosis and treatment. *Mund Kiefer Gesichtschir* 2006; 10: 409-414.
2. Symth, A.G., Wake, M.J.C. Recurrent bilateral coronoid hyperplasia: an unusual case. *British Journal of Oral and Maxillofacial Surgery* 1994; 32: 100-104.
3. McLoughlin, P.M., Hopper, C., Bowley, N.B. Hyperplasia of the mandibular coronoid process: an analysis of 31 cases and a review of the literature. *Journal of Oral and Maxillofacial Surgery* 1995; 53: 250-255.
4. Izui, M., Isobe, M., Toyama, M., Arijji, Y., Gotoh, M., Naitoh, M., et al. Computed tomographic features of bilateral coronoid process hyperplasia with special emphasis on patients without interference between the process and the zygomatic bone. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2005; 99: 93-100.
5. *Minevera Stomatology* 2005; 54 (7-8): 461-470.
6. Azaz, B., Zeltser, R., Nitzan, D.W. Pathoses of coronoid process as a cause of mouth-opening restrictions. *Oral Surg Oral Med Oral Pathol* 1994; 77: 579-584.
7. Iqbal, S., Latif, A., Hamid, A., Purmal, K. Unilateral coronoid hyperplasia following trauma: a case report. *Dental Traumatology* 2009; 25: 626-630.
8. Ferro, M.F., Sanroman, J.F., Gutierrez, J.S., Lopez, A.C., Lopez de Sanchez, A., Perez, A.E. Treatment of bilateral hyperplasia of the coronoid process of the mandible. Presentation of a case and review of the literature. *Medicina Oral Pathol Cir Bucal* 2008; 13 (9): 595-598.
9. Alan, W., Macleod, G. Limitation of mandibular opening due to enlarged coronoid processes. *Australian Dental Journal* 1987; 32: 120-125.
10. Lyon, L.Z., Samat, B.G. Limited opening of the mouth caused by enlarged coronoid processes: report of a case. *Journal of the American Dental Association* 1963; 67: 644-650.
11. Isberg, A., Isacson, G., Nah, K.S. Mandibular coronoid process locking: a prospective study of frequency and association with internal derangement of the temporomandibular joint. *Oral Surg Oral Med Oral Pathol* 1987; 63 (3): 275-279.
12. Kishi, K., Hasegawa, I., Shigehara, H., Wakasa, T., Honda, Y., Saito Arita, E. Clinical applications of 3-D CT and 3-D plastic model in the maxilla-facial region. *Oral Radiology* 1997; 13 (2): 83-92.
13. Zhang, S.C., Xu, Z.J., Zhang, Z.G., Zheng, Y.H., Li, T.X., Su, K. Bilateral coronoid hyperplasia (Jacob disease on right and elongation on left): report of a case and literature review. *Oral and Maxillofacial Radiology* 2009; 107 (3): 64-67.
14. Gibbons, A.J., Abulhoul, S. Use of a therabite appliance in the management of bilateral mandibular coronoid hyperplasia. *British Journal of Oral and Maxillofacial Surgery* 2007; 45: 505-506.
15. Bello, S.A., Olokum, B.A., Olaitan, A.A., Ajike, S.O. Aetiology and presentation of ankylosis of the temporomandibular joint: a report of 23 cases from Abuja, Nigeria. *British Journal of Oral and Maxillofacial Surgery* 2011; doi:10.1016/j.bjoms.2010.12.006.
16. De Bont, L.G.M., Van der Kuijl, B.B., Stegenga, B., Vencken, L.M., Boering, G. Computed tomography in differential diagnosis of temporomandibular joint disorders. *International Journal of Oral and Maxillofacial Surgery* 1993; 22: 200-209.



Australia. Make your move!

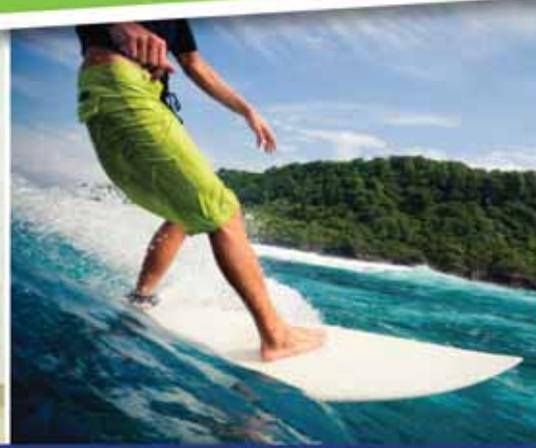


Australia's leading network of Dental Care Centres is seeking qualified, experienced Dentists to practice, live and love the Australian way of life.

We offer attractive remuneration packages, migration sponsorships and we can assist to make your move as easy as possible.

Our strong economy, high patient demand and enviable lifestyle make Australia the place to be for a satisfying and fulfilling professional career.

Visit www.pacificsmilesgroup.com.au/australia for more information or contact Tracy Haig via opportunities@pacificsmiles.com.au



www.pacificsmilesgroup.com.au/australia

PACIFIC
SMILES GROUP

Biological ageing of implant surfaces and their restoration with ultraviolet light treatment: a novel understanding of osseointegration

Att, W., Ogawa, T.

The topographic and physicochemical features of implant surfaces influence the process of osseointegration. The biologic properties of implant surfaces have been considered to remain stable over time, i.e., the capability of osseointegration of implant surfaces presumably does not change over time after manufacturing. However, recent reports have demonstrated that titanium surfaces undergo a progressive change in their biologic characteristics over time, resulting in a significant decrease in osseointegration capability. In comparison to newly prepared titanium surfaces, four-week-old titanium surfaces (i.e., stored for four weeks after processing) required more than twice as much healing time to achieve a similar strength of osseointegration. The bone-implant contact percentage for the four-week-old surfaces was less than 60%, as opposed to more than 90% for the new surfaces. *In vitro*, the four-week-old surfaces showed only 20% to 50% of the levels of recruitment, attachment, settlement and proliferation of osteogenic cells versus new surfaces. On the other hand, a series of recent papers reported the generation of highly cell-attractive and osteoconductive titanium surfaces by ultraviolet (UV) light treatment. The phenomenon, defined as photofunctionalisation, caused a fourfold acceleration in the process of osseointegration and resulted in nearly 100% bone-implant contact. Remarkably enhanced behaviour and response of osteogenic cells around UV-treated surfaces exceeded the levels observed for the newly prepared surfaces. These studies indicated that UV treatment reverses the time-dependent biologic degradation of titanium and even enhances the surface beyond its innate potential. The present paper summarises the findings about the ageing-like time-dependent biologic degradation of titanium surfaces, as well as about the discovery of UV photofunctionalisation as a solution for this phenomenon. It also provides a novel understanding of osseointegration and calls for immediate attention to a new avenue of exploration in the science and therapeutics of implant dentistry.

Int J Oral Maxillofac Implants 2012; 27: 753-761.

Fibre post adhesion to radicular dentine: the use of acid etching prior to a one-step self-etching adhesive

Scotti, N., Rota, R., Scansetti, M., Migliaretti, G., Pasqualini, D., Berutti, E.

The aim of this study was to evaluate the bond strength of fibre posts luted with a one-step self-etching adhesive with the push-out test after phosphoric acid conditioning of the root dentine. Thirty-six single-

rooted teeth were endodontically treated. Teeth were sectioned perpendicularly to the cemento-enamel junction, and a 10mm post space was prepared with a calibrated bur. Specimens were then divided into three groups according to the adhesive protocol: A, total-etch three steps; B, self-etch one step; and, C, 32% phosphoric acid conditioning and self-etch one step. Fibre posts were luted with self-curing resin-based cement. Teeth were cut in 1mm slices and pushed until failure with an Instron machine. Results were statistically analysed with the ANOVA and Bonferroni tests ($p < 0.05$). Two additional specimens from each group were examined under the scanning electron microscope (SEM). The 32% phosphoric acid significantly influenced the push-out bond strength of fibre posts luted with self-etch adhesives ($p < 0.05$). SEM analysis showed a continuous hybrid layer with resin tags and lateral branches in groups A and C, while group B showed smear layer dissolution with poor infiltration of the tubules.

Quintessence Int 2012; 43: 615-623.

Influence of different types of mouthguards on strength and performance of collegiate athletes: a controlled-randomised trial

Duddy F.A., Weissman, J., Lee Sr, R.A., Paranjpe, A., Johnson, J.D., Cohenca, N.

Background

Prevention of traumatic dental injuries relies on the identification of aetiological factors and the use of protective devices during contact sports. Mouthguards are considered to be an effective and cost-efficient device aimed at buffering the impacts or blows that might otherwise cause moderate to severe dental and maxillofacial injuries. Interestingly, besides their role in preventing injury, some authors claim that mouthguards can enhance athletic performance. Thus, the purpose of this controlled randomised trial was to evaluate and compare the effect of two different types of mouthguards on the athletic performance and strength of collegiate athletes.

Materials and methods

Eighteen college athletes ranging from 19 to 23 years participated in this study. Devices tested in this study included an over-the-counter boil-and-bite mouthguard (O-Flow™ Max Under Armour®) (UA) and a custom-made mouthguard (CM). Physical tests were carefully selected by the head athletic trainer and aimed at evaluating strength and performance. The following sequence was carried out on each test day: (i) three-stroke maximum power ergometer test; (ii) 1min ergometer test; and, (iii) a 1,600m run. A random assignment was developed to test all three experimental groups on each test day. Following the tests, each athlete completed a brief anonymous survey aimed at evaluating the athletes' overall satisfaction with each type of mouthguard.

Results

Custom-made mouthguards had no detrimental effect on athletic strength and performance and were reported by the athletes as being comfortable and not causing difficulty in breathing. In contrast, boil-and-bite mouthguards did not perform as well, and were reported as being uncomfortable and causing breathing difficulties.

Conclusions

Based on the results of this study, the use of custom-made mouthguards should be encouraged in contact sports as a protective measure, without concern for any negative effect on the athletic performance of the athletes.

Dental Traumatology 2012; 28 (4): 263-267.

General dental practitioners and hearing impairment

Messano, G.A., Petti, S.

Objective

The problem of hearing impairment (HI) among dentists was considered solved in the eighties. Nevertheless, hearing loss at speech frequencies was recently reported among dentists and dental hygienists. Thus, we investigated prevalence and factors associated with perceived HI among dentists.

Methods

In 2009-2010, 100 general dental practitioners (GDPs) and 115 general practitioners (GPs) (mean ages, 43.7 and 44.4 years) from

Rome (Italy), who started their practice ≥ 10 years ago, were interviewed on a series of occupation- and recreation-related HI risk factors and on HI-associated symptoms (tinnitus, sensation of fullness, hypoacusis). Prevalence of presumptive HI (≥ 1 symptom perceived during work days and weekends) was assessed and factors associated with presumptive HI were investigated.

Results

Prevalence was 30.0% (95% confidence interval, 21.0-39.0%) and 14.8% (95% confidence interval, 8.3-21.3%) among GDPs and GPs, respectively. Occupation (GDP vs. GP), family history of hypoacusis, hypertension, ear diseases and smoking were significantly associated with presumptive HI. Within GDPs alone, significant associations were found for frequent use of ultrasonic scalers, use of dental turbines aged ≥ 1 year and prosthetic dentistry as prevalent specialty.

Conclusions

GDPs had a higher HI risk than GPs. Such a risk was not generalised to all dentists, but was specific for those who frequently used noisy equipment (aged turbines, ultrasonic scalers) during their daily practice.

Clinical significance

GDPs with 10 or more years of practice who routinely use potentially noisy equipment, could be at risk of HI. In order to prevent such conditions, daily maintenance and periodical replacement of dental instruments is recommended.

Journal of Dentistry (in press).

Quiz answers

(Questions on page 188)

1. The Index of Treatment Need (IOTN) is an index to quantify orthodontic need. This boy has a score of 5a due to his overjet being >9 mm.
2. Patients with increased overjet and incompetent lips may be more prone to dental trauma or to teasing.
3. The potential advantage of early treatment (age eight to nine) is to reduce the risk of dental trauma or social problems. However, the most common appliance used to correct increased overjet is a functional appliance, and permanent premolars have much better retention than primary molars, making appliance wear easier and more efficient.

Several studies have examined the effectiveness of early orthodontic treatment to correct large overjets. A large multi-centre study in the UK over 10 years concluded that early twin block treatment (eight to nine years) had no advantages over treatment started at an average age of 12.4, but that the cost of treatment in terms of attendances and length of appliance wear was increased. A Cochrane Oral Health review concluded that early treatment was not more effective.

4. He should be wearing a gum shield for contact sports and



maintaining good dental health and oral hygiene. It is important that any non-nutritive habits have stopped. He is likely to benefit from a functional appliance at 11-13 years to reduce the overjet and overbite.

References

- O'Brien, K., Wright, J., Conboy, F., Appelbe, P., Davies, L., Connolly, I., *et al.* Early treatment for Class II Division 1 malocclusion with the twin-block appliance: a multi-centre, randomised, controlled trial. *Am J Orthod Dentofacial Orthop* 2009; 135 (5): 573-579.
- Harrison, J.E., O'Brien, K.D., Worthington, H.V. Orthodontic treatment for prominent upper front teeth in children. *Cochrane Database Syst Rev* 2007; 3: CD003452.



Credit where it's due

What do you know about the profession's own credit union? PROFESSOR BERNARD McCARTAN, Chair of the Irish Dental Credit Union, has all the information.

Most dentists might be aware of the Credit Union but they probably don't know much about it.

We were founded in the late '60s and have been taking savings and giving loans ever since. For those dentists who know and use our services, we have been a most useful facility, allowing dentists to re-equip practices, buy cars and pay tax bills, among many other things.

Do I have to be an IDA member to join?

We are extremely grateful to the Association for the help and support that they have given us over the years. We operate out of IDA House but we are a completely separate organisation, open to any dentist. Each credit union has a 'common bond', which defines who can be a member. In our case it is any dentist with a qualification registerable with the Dental Council, and the close family of members. We are starting a new recruitment drive: we need to target younger dentists and there are some parts of the country, south Munster for example, where we have very low penetration.

Will you give me a mortgage?

We give personal loans up to €39,000 for no longer than five years. We will lend up to five times a member's share balance, so someone with savings of €5,000 could potentially borrow €25,000. Our lending criteria used to be relatively simple; we knew the people who were

saving and borrowing with us, and we knew their reliability. The Central Bank has, quite rightly, begun to impose much greater scrutiny on the activities of credit unions. This forces us to employ set criteria, so if you have no history of saving with us we will usually expect you to show a set pattern of saving for at least three months, and we will always ask for full details of your financial position. This has slowed the process of making loans, but our refusal rate is still extremely low.

I would always suggest to younger dentists that they put €5,000-8,000 with us and just forget about it. This will allow them to borrow up to €39,000 when they are equipping their first practice.

Is my money safe with you?

Well, first of all we would never recommend to anyone that they should regard us as their primary investment. Even so, our bad debt rate has been incredibly low. We had one bad debt in the '90s but the member later came back and paid off the outstanding balance. We had to write off a second bad debt a few years ago but we have not yet given up hope of recovering the money. In any case, we are insured against bad debt. Our debt record is incredibly good; what other financial institution in Ireland can boast of one unrecoverable bad debt in half a century? We also have very strict governance and operating policies, and one of our officers has as their sole task the job of ensuring that we comply with these in every detail.



But a lot of credit unions are in trouble.

A few are reported to be in trouble. Some of this is due to lending outside the traditional areas covered by credit unions; we have declined to do this. There has also been a huge problem with investments. The Irish League of Credit Unions encouraged its members to deal with one financial institution, which sold what we now know to have been unsuitable bonds. We had only a small exposure to these, but even so, last year our investment committee decided to dispose of these in an orderly process – even though this meant taking a loss – so that we could avoid potentially greater losses in the near future. This means that we weren't able to pay a dividend last year, but we expect to be back to normal this year. Overall, we must be one of the stronger credit unions in Ireland.

How do your rates compare with the banks?

Well, as I said earlier, we wouldn't expect anyone to make us their major investment and that is reflected in an interest rate on savings that is generally lower than banks'. Current interest on loans is 0.75% monthly (APR 9.38%). This is a very attractive rate for personal loans compared to the banks. Plus, you pay only simple interest and so interest reduces monthly as the loan is repaid, there's no penalty for early repayment, and €10 is paid each month into your shares even as you are repaying.

What if I get into trouble?

You will find us much more sympathetic than the bank. If necessary, we can reschedule loans or allow you to transfer savings against outstanding balances. Our Credit Control Committee monitors loans and will step in quickly to help you, and to safeguard our members' savings, if you run into trouble.

Any other benefits?

Savings up to the age of 55 years are doubled in the event of death;

savings after that date are subject to pro-rata reductions in benefit to 70 years. Also, you can nominate someone to whom your savings will be transferred directly if you die. These cash payments can be a huge benefit to families who are waiting for probate to free up funds or who are trying to disentangle joint bank accounts. With some restrictions, loans up to €38,000 are also wiped out if you die and life assurance of €3,250 is payable.

Does a lot of the members' savings go on administration?

No, we are a very lean organisation with no flash offices or heavy administrative costs. We have a part-time administrator, Margaret Ferguson, whom many of your readers will remember from her days in the IDA office. Other than that, our main expenses are the registration fees that we have to pay to the Central Bank and the Irish League of Credit Unions, and insurance for bad debts and death benefits. To avoid money laundering problems and to reduce our costs we only accept cheques or drafts and we never pay out cash.

How did you get involved? How does anyone get involved?

The board has always relied on volunteers. We owe a huge debt to people like the late Joe Maloney and Fiacra Mac Fhionnlaioich and stalwarts such as Brendan Pigott, Bill Ievers, Michael O'Rahilly and Tom Sheridan, who have retired over the last year. I was recruited by Bill Ievers in the late '90s. Most of our volunteers have been similarly encouraged by officers and we have had a fresh influx of new blood in the last year. We always welcome new activists for our committees, with a view to joining the Board later. The commitment is just one evening a month.

Where can people find out more?

Our new website – www.irishdentalcreditunion.ie – should tell you most of what you want to know, or drop us a line to Irish Dental Credit Union Ltd, Unit 2, Leopardstown Office Park, Sandyford, Dublin 18.

Classified advert procedure

Please read these instructions prior to sending an advertisement. Below are the charges for placing an advertisement for both members and non-members. Advertisements will only be accepted in writing via fax (01- 295 0092), letter or email (fionnuala@irishdentalassoc.ie). Non-members must pre-pay for advertisements, which must arrive no later than Friday, September 7, 2012, by cheque made payable to the Irish Dental Association. If a box number is required, please indicate this at the end of the ad (replies to box number X). Classified ads placed in the *Journal* are also published on our website www.dentist.ie for 12 weeks.

Advert size	Members	Non-members
up to 25 words	€75	€150
26 to 40 words	€90	€180

Non-members must send in a cheque in advance with their advert. The maximum number of words for classified ads is 40.

Only if the advert is in excess of 40 words, then please contact:
Think Media

The Malthouse, 537 North Circular Road, Dublin 1.
Tel: 01-856 1166 Fax: 01-856 1169 Email: paul@thinkmedia.ie

Please note that all classified adverts MUST come under one of the following headings:

- ▶ Positions Wanted
- ▶ Positions Vacant
- ▶ Practices for Sale/To Let
- ▶ Practices Wanted
- ▶ Unwanted/Second Hand Equipment for Sale

Classified adverts must not be of a commercial nature. All commercial adverts must be display advertisements, and these can be arranged by contacting Paul O'Grady at Think Media, Tel: 01 856 1166.

POSITIONS WANTED

Dentist with seven years' experience available for part-time position in Dublin. Tel: 087-709 3700, or Email: emaildublindentist@gmail.com.

Irish dentist with three years' hospital and private practice experience available for work immediately anywhere in Ireland. Tel: 086-399 8339, or Email: johnlaois@gmail.com.

POSITIONS VACANT

Dublin – ambitious dynamic associate required. Minimum three to five years' experience. Superb modern facilities/equipment. Prime location city centre. Excellent earning potential. Incentives and long-term prospects for the right candidate. Flexibility crucial. Tel: 086-807 5273, or Email: niall@innovativedental.com.

South East: full-time associate position available with multidisciplinary practice that has consistently maintained an excellent reputation over the years. €280,000-300,000 has been generated in this position in the last couple of years. Contact Marguerite, Tel: 087-938 3155, or Email: cv@irishdentaljobs.ie.

Full-time dental associate required for modern practice 30 mins from Galway city. Minimum three years' experience. Please Email: countygalwaydentist@gmail.com.

Associate dentist required south-east to replace departing colleague. Computerised, digital radiography, hygienist, sedation, orthodontics, oral surgeon, Cerec. New graduate considered. Enquiries with CV to qds@eircom.net.

We seek a dedicated associate for busy role in an award-winning multidisciplinary practice with visiting specialists in the Southeast. A great position with excellent remuneration for skilled progressive colleague. Please send CV, Tel: 059-913 1667, or log on to www.pembrokedental.ie.

Full-time associate position available due to a departing long-term colleague in a practice in East Galway. Full support, experienced team operating a large client base. Replies to Box No. J412.001.

Limerick – part-time associate required with view to long term. Min. four years' experience required. Must be patient focused and have ambition to develop practice. Email: CitydentLK@gmail.com.

Great opportunity for associate to join our busy digital Wexford Town practice. Immediate start possible. Excellent conditions offered. Email: emmet@smiles.ie.

Co. Mayo. Associate position leading to principal. Fantastic opportunity. Practice has excellent facilities. Good equipment, great support staff. Ideal opportunity for ambitious dynamic personality. Tel: 086-807 5273, or Email: niall@innovativedental.com.

West Dublin. Associate required two sessions per week – one evening plus Saturday. Digitalised imaging, OPG, hygienist, etc. Immediate start. Please Email: jpdheaney@eircom.net with CV.

Limerick. Part-time associate required in modern, expanding clinic. Flexible hours, excellent terms. Minimum two to three years' experience. Email: limerickdentaljob@gmail.com.

Dental associate required part-time, very flexible hours. Up to four days a week available. Modern surgery. Medical card, PRSI and private. Tallaght location, South Dublin. Email wmunroe@eircom.net.

Experienced associate required for a busy south Dublin practice. Position available from September 4 consisting of three-and-a-half days per week and Saturday half day occasionally. Email CV to barndarrig@gmail.com.

Enthusiastic dentists required for part- or full-time position in modern practices with digital imaging in Dublin 16 and/or Skerries, Co. Dublin. Please email your CV to reddek78@gmail.com.

Experienced dentist to take over from retiring partner in cost-sharing long-established practice on east coast. All options considered. Computerised, digital OPG, intra-oral camera, good support staff including hygienist, visiting periodontist and implant specialist. Email with CV to eastcoastdentist@gmail.com.

Full-time and part-time dentist required for established busy city centre dental practice. Ideal position for enthusiastic and motivated dentist. Please Tel: 085-179 5312.

Healthwise Recruitment, the dental recruitment specialists, are currently searching for dentists and specialists for a large corporate practice in Sydney. If you are interested in relocating to Australia please Tel: + 61432 992824 or Email: Kimberley@healthwise recruitment.com.au.

High calibre, motivated practitioner with five years' experience wanted for an established practice in Bathurst, Australia. The ideal candidate will want to relocate for long-term employment with ambition to manage their own practice. Please submit applications to Maddy, Email: careers@dentalcorp.com.au.

Experienced dentist required to join family dental practice in Co. Galway market town, close to city. Email CV to job1dental@hotmail.com.

Dentist with own list of patients to join ethical, modern practice in Carlow. Suit colleague wishing to share expenses. Tel: 087-757 8326 for informal discussion.

Dental surgeon required for maternity cover in a busy multiple surgery practice outside Dublin. Experience essential. Commencing September, Mon-Fri with late session Thursday and Saturday mornings twice monthly. Apply with CV to ghanly@centrichealth.ie.

Locum dentist required Cork area: September to December 2012. Must have minimum of four years' experience and be highly conscientious. Email: dentallocumjob@yahoo.ie.

Limerick. Locum dentist required for maternity leave from October to January 2012. Fully computerised, busy modern practice with excellent support staff. Email: noelle@dotcobbe.com.

Part-time registered orthodontist required for sessions in a busy established three-dentist practice in Midleton, Co. Cork. History of orthodontics in practice for 18 years. OPG and ceph. on site. Strong demand for treatment. Contact Mike, Tel: 086-822 1334.

Prosthodontist required to join private referral practice in Edinburgh; principally implant prosthodontics, including full mouth rehabilitation and immediate loading of implants. Initially 1.5 days a week, building to full-time. More details at www.vermillion.co.uk, or Email: david.offord@vermillion.co.uk.

Endodontist required to join private referral practice in Edinburgh; initially one day a week, building to full-time. Entry on the GDC specialist list in endodontics is preferable, but not essential. More details at www.vermillion.co.uk, or Email: david.offord@vermillion.co.uk.

Periodontist required to replace departing colleague in long-established practice in South County Dublin. Please Tel: 01-280 9753, or Email: info@dentalclinic.ie.

Wanted: receptionist, nurse or trainee, dental hygienist. May suit part-time initially, for new practice opening on the Douglas Road. Email CV to eglantinedental@gmail.com.

Dental nurse required for four days a week for busy north Cork dental practice. Computer literacy essential. Commencing mid August. Apply with CV and cover letter to mu_sorrento@hotmail.com. No agency please.

Hygienist wanted for east Galway town. Must have at least three years' experience. Please email CV to countygalwaydentist@gmail.com.

Dun Laoghaire. Qualified DSA required to cover leave from mid-July. Busy practice. Full-time post. Please Email: jackgrennan@gmail.com.

Dental surgery assistant required, part-time, for Skerries general practice. Experience and knowledge of EXACT preferred. Email CVs to: care@skerriesdental.com.

PRACTICES FOR SALE/TO LET

Fully furnished and well-equipped dental room with digital imaging to let in established Dental Clinic in Dublin 16 and in Skerries Co. Dublin. Suitable for a range of associated dental specialists. For further information, please Email: redek78@gmail.com.

Practice for sale – Dublin 8. Long-established, single-handed, lock-up surgery, heavy footfall, village community, low rent and overheads. Tel: 087-760 3431.

For sale – Co. Louth. Long-established – good footfall. Low overheads. Reasonable equipment. Potential for growth. Excellent staff. Good private element. Excellent new patient numbers. Mainly a property deal, practice valuation low. Excellent suitability for start-up due to property. Tel: 086-807 5273, or Email: niall@innovatedental.com.

For Sale – Co. Cavan. Modern, 'walkinable' one-person practice. Excellently located – medical centre. Large area space. Opportunity for expansion – hours/facilities. Staff options flexible. Very high new patient numbers. High hourly income rate. No goodwill cost – equipment only. Immediate sale. Tel: 086-807 5273, or Email: niall@innovatedental.com.

EQUIPMENT WANTED

Wanted: microscope for endo; wall or ceiling mounted. Contact: peter@beechwooddental.ie.

EQUIPMENT FOR SALE

Kodak RVG 6100 Digital Radiography System size 2 sensor for sale. Virtually unused item in full working order. €3,000 ono. Contact gilliansmithdental@gmail.com for details and photograph.

Used CBCT (cone beam CT) scanner, four years old, still under full manufacturer's warranty. Top of the line i-CAT 17-19 with adjustable scan height and low radiation dose. Attractively priced for quick sale. Please Tel: 087-688 4094, or Email: farronmahon@hotmail.com.

Diary of events

JOURNAL OF THE IRISH DENTAL ASSOCIATION

SEPTEMBER

Mouth Cancer Awareness Day lecture

September 11

Cork Dental Hospital

Mouth Cancer Awareness Day lecture

September 12

Clayton Hotel, Galway

Metropolitan Branch IDA – Meeting

September 13

Hilton Hotel, Charlemont Place

Oral cancer symposium in conjunction with Mouth Cancer Awareness Day 2012. Speakers: Professor Leo Stassen, and Drs Mary Toner, Denise McCarthy and Kumara Ekanayake.

Mouth Cancer Awareness Day

September 19

Nationwide

For further information, log onto www.mouthcancerawareness.ie.

South Eastern Branch IDA – Meeting:

Interdisciplinary dentistry with long-term results

September 27

Faithlegg House Hotel, Faithlegg, Co. Waterford

Speaker is Dr Kenneth Lee from Canada. For more information or to RSVP, Email: traelacht@yahoo.co.uk, or info@waterfordperio.com.

BDA Seminar Series: Crown and bridgework – improve your skills, update your knowledge and get the best results

September 28

Belfast

To view the full programme and to book, contact Rebecca Hancock, Tel: 020-7563 4590, or Email: events@bda.org. CPD verifiable.

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

September 29

Radisson Blu Hotel, Golden Lane, Dublin 2

9.00am-1.00pm (short lectures). Free to attend for all dentists. Please contact Dr Traelach Tuohy for more information, Email: traelacht@yahoo.co.uk.

OCTOBER

The European Society of Microscope Dentistry (ESMD) Congress: 'Open Eyes, Open Mind'

October 4-6

Berlin, Germany

For further information, log on to www.esmd.info.

HSE Group of the IDA – Annual Seminar

October 10-12

The Galway Bay Hotel, Galway

For further information contact IDA House, Tel: 01-295 0072.

4th World Implant Orthodontic Conference

October 10-13

Hilton Hotel, Sydney, Australia

For further information, log on to info@wioc2012.com.

Metropolitan Branch IDA – Meeting

October 18

Hilton Hotel, Charlemont Place

Tips and techniques for crowns and veneers. Speaker is Dr Mark Condon.

Faculty of Dentistry of the Royal College of Surgeons in Ireland – 2012 Annual Scientific Meeting: 'An Overview of Aesthetic Dentistry'

October 25-26

Royal College of Surgeons, Dublin



Full programme and details on how to book are available from the Faculty's website – dentistry.rcsi.ie.

21st Congress of the International Association for Disability and Oral Health

October 28-31

Melbourne, Australia.

For further information, log on to www.iadh2012.com.

NOVEMBER

Metropolitan Branch IDA – Meeting

November 15

Hilton Hotel, Charlemont Place

Treatment of the worn dentition. Speaker is Dr Tom Canning.

Orthodontic Society of Ireland – Meeting

November 23-24

K Club, Co. Kildare.

Speakers are Drs Marco Rosa, Renato Colconi and Mirco Raffaini, on 'The face and occlusion in the diagnostic process: new strategies for treatment from mixed dentition to surgery'.

The Asia Pacific Orthodontic Conference

November 29 to December 2

New Delhi, India

For further information, log on to www.8thapoc-47thioc.in.

JANUARY 2013

IDA Practice Management Day

January 26

Croke Park

Further details to follow when available.

FEBRUARY 2013

The Dental Hygiene and Therapy Conference 2013

February 8

ILEC Conference Centre, London

For further information, log on to www.dentalhygienetherapy.co.uk

IDA
MEMBERS
ONLY

IDA
MEMBERS
ONLY

IDA
MEMBERS
ONLY

IDA
MEMBERS
ONLY

**New
Formulation**

Keral[®]
dexketoprofen trometamol
Keral[®]
25mg granules for oral solution

*Lemon
Flavour!*



Keral[®] 25 mg granules for oral solution (dexketoprofen). Prescribing information.

Please consult the Summary of Product Characteristics (SPC) for full prescribing information.

Presentation: Sachets containing 25 mg Dexketoprofen, as dexketoprofen trometamol.

Use: Short term symptomatic treatment of acute mild to moderate pain.

Dosage: Adults: 25mg every 8 hours or 12.5mg every 4-6 hours. Maximum daily dose 75mg. Use lowest effective dose for the shortest duration necessary to control symptoms. For acute pain administer 15 minutes before meals. For short term use only in the elderly or those with mild-moderate hepatic dysfunction or mild renal dysfunction, initial maximum daily dose of 50mg. Close monitoring advised in the elderly or those with hepatic dysfunction. Not recommended for children or adolescents.

Contra-indications: Hypersensitivity to dexketoprofen, the excipients or other NSAIDs, NSAID induced attacks of asthma, bronchospasm, acute rhinitis, or nasal polyps, urticaria or angioneurotic oedema. Known photoallergic or phototoxic reactions during treatment with ketoprofen or fibrates. History of gastrointestinal bleeding or perforation related to previous NSAIDs therapy. History of or active peptic ulcer/haemorrhage, chronic dyspepsia or suspected peptic ulcer/haemorrhage, other active bleeding or bleeding disorders, Crohn's disease or ulcerative colitis, severe heart failure, moderate-severe renal dysfunction, severe hepatic dysfunction, haemorrhagic diathesis and other coagulation disorders, severe dehydration, during the third trimester of pregnancy and lactation.

Warnings and precautions: Caution in allergic conditions. Avoid use with concomitant other NSAIDs including COX-2 selective inhibitors. Use lowest effective dose for the shortest duration necessary to control symptoms. Gastrointestinal bleeding, ulceration or perforation which can be fatal, have been reported with all NSAIDs at anytime during treatment, with or without warning symptoms or a previous history of serious gastrointestinal events. When gastrointestinal bleeding or ulceration occurs withdraw treatment. The risk of gastrointestinal bleeding, ulceration or perforation is higher with increasing NSAID doses, in patients with a history of ulcer, particularly if complicated with haemorrhage or perforation, and in the elderly. The elderly have an increased frequency of adverse reactions to NSAIDs especially gastrointestinal bleeding and perforation which may be fatal. Commence treatment in these patients on the lowest dose available. Ensure cure of oesophagitis, gastritis and/or peptic ulcer before starting treatment. Monitor patients with history of GI disease. Special care with NSAIDs in patients with a history of gastrointestinal disease (ulcerative colitis, Crohn's disease). Consider combination

therapy with protective agents (e.g. misoprostol or proton pump inhibitors), and in patients requiring concomitant low dose aspirin, or other drugs likely to increase gastrointestinal risk. Monitor patients with a history of gastrointestinal toxicity, particularly when elderly, for unusual abdominal symptoms (especially gastrointestinal bleeding) particularly in the initial stages. Caution in patients receiving oral corticosteroids, anticoagulants, SSRIs or anti-platelet agents. Do not use with warfarin, other coumarins or heparin. Caution in patients with impaired renal function, receiving diuretic therapy or those who develop hypovolaemia. Ensure adequate fluid intake, may increase plasma urea nitrogen and creatinine. Caution in patients with impaired hepatic function. May increase some liver parameters. Monitor and advise patients with hypertension and/or mild to moderate heart failure. Special caution in patients with cardiac disease, especially episodes of previous heart failure. Monitor and advise patients with a history of hypertension and/or mild to moderate congestive heart failure as fluid retention and oedema have been reported. Some NSAIDs (particularly at high doses and long term treatment) may be associated with a small increased risk of arterial thrombotic events (e.g. myocardial infarction or stroke). Careful consideration before treating patients with uncontrolled hypertension, congestive heart failure, established ischaemic heart disease, peripheral arterial disease, and/or cerebrovascular disease. Similar consideration before initiating longer-term treatment of patients with risk factors for cardiovascular disease (e.g. hypertension, hyperlipidaemia, diabetes mellitus, smoking). Serious skin reactions (some of them fatal), including exfoliative dermatitis, Stevens-Johnson syndrome, and toxic epidermal necrolysis reported very rarely. Discontinue treatment at the first appearance of skin rash, mucosal lesions, or any other sign of hypersensitivity. Particular caution in patients with congenital disorder of porphyrin metabolism, dehydration, directly after major surgery. If long term use necessary, monitor hepatic and renal function and blood count. Stop treatment at first signs of severe hypersensitivity reactions. Avoid use with varicella. Caution in patients with haematopoietic disorders, systemic lupus erythematosus or mixed connective tissue disease. As other NSAIDs, dexketoprofen can mask the symptoms of infectious diseases. Contains sucrose.

Interactions: Other NSAIDs, anti-coagulants, heparins, corticosteroids, lithium, methotrexate, hydantoines and sulphonamides, diuretics, ACE inhibitors, antibacterial aminoglycosides and angiotensin II receptor antagonists, pentoxifylline, zidovudine, sulfonylureas, beta-blockers, cyclosporin and tacrolimus, thrombolytics,

anti-platelet agents and SSRIs, probenecid, cardiac glycosides, mifepristone, quinolone antibiotics.

Pregnancy and lactation: Do not use in pregnancy, lactation or in women attempting to conceive.

Undesirable effects: As with other NSAIDs, the most commonly observed adverse events are gastrointestinal. Peptic ulcers, perforation or gastrointestinal bleeding, sometimes fatal, particularly in the elderly may occur. Common (1-10%): Nausea and/or vomiting, abdominal pain, diarrhoea, dyspepsia. Uncommon (0.1-1%): insomnia, anxiety, headache, dizziness, somnolence, vertigo, palpitations, flushing, gastritis, constipation, dry mouth, flatulence, rash, fatigue, pain, asthenia, rigors, malaise. Rare (0.01-0.1%): anorexia, paraesthesia, syncope, hypertension, bradypnoea, peptic ulcer, peptic ulcer haemorrhage or peptic ulcer perforation, hepatic lesion, urticaria, acne, increased sweating, back pain, polyuria, menstrual disorder, prostatic disorders, peripheral oedema, liver function test abnormal. Very rare (<0.1%): neutropenia, thrombocytopenia, anaphylactic reaction including anaphylactic shock, blurred vision, tinnitus, tachycardia, hypotension, bronchospasm, dyspnoea, pancreatitis, hepatocellular injury, Stevens Johnson syndrome, toxic epidermal necrolysis (Lyell's syndrome), angioedema, facial oedema, photosensitivity reactions, pruritus, nephritis or nephrotic syndrome. Not known: laryngeal oedema, hepatitis, acute renal failure. As with other NSAIDs the following undesirable effects may appear: aseptic meningitis, which might predominantly occur in patients with systemic lupus erythematosus or mixed connective tissue disease; and haematological reactions (purpura, aplastic and haemolytic anaemia, and rarely agranulocytosis and medullar hypoplasia).

Pack size: 20 sachets. **Legal category:** POM.

Marketing authorisation number: PA 865/2/5

Marketing authorisation holder: Menarini International Operations Luxembourg S.A., 1 Avenue de la Gare, L-1611 Luxembourg.

Marketed by: A.Menarini Pharmaceuticals Ireland Ltd Further information is available on request to A.Menarini Pharmaceuticals Ireland Ltd, 2nd Floor, Castlecourt, Monkstown Farm, Monkstown, Co. Dublin, Ireland or may be found in the SPC.

Date of preparation: November 2011.



A.MENARINI
PHARMACEUTICALS IRELAND LTD
Healthcare for Life

new

Welcome to a new layer of expertise in dentine hypersensitivity

Today you can go further than simply relieving your patients' dentine hypersensitivity.

Today you have new Sensodyne® Repair & Protect containing NovaMin® calcium phosphate technology. NovaMin® builds a reparative hydroxyapatite-like layer over exposed dentine and within the tubules¹⁻⁵

Starting to form from the first use,⁵ this reparative layer creates an effective and lasting barrier to dentine hypersensitivity⁶⁻⁸

*Explore the new layer of opportunity
with Sensodyne Repair & Protect*



Visual representation of dentine cross-section and dynamic reparative layer



Specialist in dentine hypersensitivity management

References: 1. Burwell A et al. J Clin Dent 2010; 21(Spec Iss): 66-71. 2. LaTorre G, Greenspan DC. J Clin Dent 2010; in press. 3. Efflant SE et al. J Mater Sci Mater Med 2002; 20(6):557-565. 4. Clark AE et al. J Dent Res 2002; 81 (Spec Iss A): 2182. 5. GSK data on file. 6. Du MO et al. Am J Dent 2006; 21(4): 210-214. 7. Pradeep AR et al. J Periodontol 2010; 81(8): 1167-1113. 8. Salari S et al. J Clin Dent 2010; in press. SENSODYNE® and the rings device are registered trademarks of the GlaxoSmithKline group of companies. Prepared November 2010. GSKCH/2011/0026.