

Volume 62 Number 3
June/July 2016

JIDA

Journal of the Irish Dental Association
Iris Cumainn Déadach na hÉireann


IDA
irish dental association

BABY STEPS

A systematic approach to the infant oral health visit

PROTECT YOUR MOST VALUABLE ASSET

with
**DAY 1
INCOME
PROTECTION**

Without an income, could you manage all of your costs?



CAR



PENSION



MORTGAGE



SURGERY



NURSE



INDEMNITY

As a Dentist you may have many personal and professional expenses including a mortgage, car payments, family costs, pension, surgery costs, indemnity and nurse salaries. Income Protection provides you with a replacement income should you become unable to work due to accident or ill health. If you are self-employed, Day One Income Protection covers you from the very first day - no waiting period. For those who are employed, we can work with your sick payment arrangements to provide maximum salary continuance.



Omega Financial Management
Investments • Income Protection • Pensions

REQUEST A PERSONALISED QUOTE:
www.omegafinancial.ie/dentists
1850 260 261
info@omegafinancial.ie

Freephone Omega on 1850 260 261 or email info@omegafinancial.ie



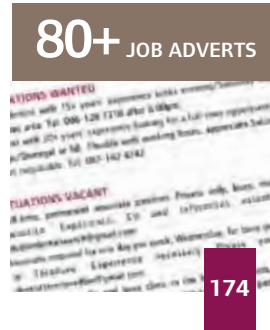
139



141



146



80+ JOB ADVERTS

174



178

133 EDITORIAL

135 PRESIDENT'S NEWS

136 LETTERS TO THE EDITOR

139 IDA NEWS
Practitioner Health Matters; IDENTEX; HSE dentists' seminar

139 QUIZ

141 INTERVIEW
IDA CEO Fintan Hourihan

146 BUSINESS NEWS
The latest in new products and services

149 PRACTICE MANAGEMENT
Understanding your practice's costs

152 Establishing expectations

153 MEMBERS ONLY | MEMBERS ONLY | MEMBERS ONLY

Response to the Programme for Government; Annual Conference 2016; Disciplinary and grievance procedures

158 CLINICAL FEATURE
Baby steps: a systematic approach to the infant oral health visit

162 PEER-REVIEWED
Clinical and radiographic assessment of maxillary canine eruption status in a group of 11- to 14-year-old Irish children
K Daly, J Nunn

167 Primary Ewing sarcoma of the coronoid process of mandible
H Sabir, S Kumbhare, S Pande, S Sachdeva, N Gajbhiye

171 ABSTRACTS

174 CLASSIFIED

178 MY IDA
Dr Neysan Chah



EDITOR	Professor Leo F.A. Stassen FRCS (J), FDSRCS, MA, FTCD, FFSEM, FFDRCSI, FICD
DEPUTY EDITOR	Dr Dermot Canavan BDentSc, MGDS(Edin), MS(UCalif)
EDITORIAL BOARD	Dr Iseult Bouarroudj BDS NUI Dr Michael Crowe BSc BDentSc DPDS (Bristol) Dr Peter Harrison BDentSc MFD DChDent Dr Mark Kelly BA BDentSc Professor Christopher D. Lynch BDS PhD MFDRCSI FDS (RestDent) RCSI FACD FHEA Ruth Moore RDN, BSc Management & Law, MIA Dip Journalism Donna Paton RDH Dr Ioannis Polyzois DMD, PhD, MDentCh, MMedSc Dr Ciara Scott BDS MFD MDentCh MOrth FFD (RCSI) Dr Seamus Sharkey BDS NUI FRACDS (Syd) MFDSRCSI DChDent (Prosthodontics) FFDRCSI Dr Simon Wolstencroft BDS FDSRCS MScD MOrth FDSOrth

IDA PRESIDENT	Dr PJ Byrne
IDA CHIEF EXECUTIVE	Fintan Hourihan
CO-ORDINATOR	Fionnuala O'Brien

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: +353 1 856 1166 www.thinkmedia.ie

EDITORIAL	Ann-Marie Hardiman, Paul O'Grady, Colm Quinn
DESIGN/LAYOUT	Tony Byrne, Tom Cullen, Niamh Short
ADVERTISING	Paul O'Grady paul@thinkmedia.ie

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 01/01/15 to 31/12/15: **3,180 copies** per issue. Circulated to all registered dentists in the Republic of Ireland and Northern Ireland.

Colgate®

WORKING TOGETHER TO DELIVER WHOLE MOUTH PROTECTION†



Colgate® ProClinical® Electric Toothbrush gives a superior* clean and is gentle on gums.

PLUS

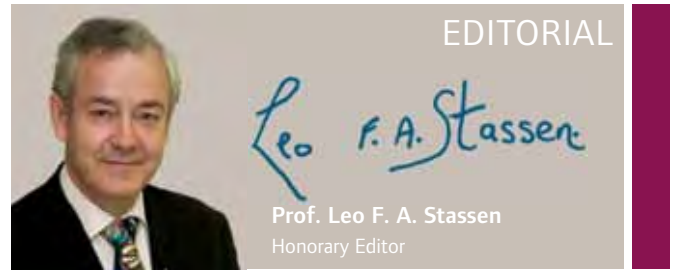
Colgate® Total® provides whole mouth protection** against plaque.

Colgate®

YOUR PARTNER IN ORAL HEALTH

* vs a manual flat - trim toothbrush ** In addition to containing 1450ppm fluoride for cavity protection, Colgate Total contains triclosan/copolymer to provide 12-hour antibacterial protection for teeth, gums, cheeks and tongue.
† Whole Mouth Protection delivered by Colgate Total

www.colgateprofessional.ie



Promises, promises

The new Programme for Government includes several references to dentistry and oral health, but what are these promises worth? We must do what we can to ensure these promises are kept.



We finally have a Government, albeit a minority one, and a Programme for Government that, fortunately, contains a number of promises with regard to dentistry and oral health. This is a very positive development. We offer our congratulations to new Minister for Health Simon Harris and Minister for Social Protection Dr Leo Varadkar, and look forward to working with them to bring these plans to fruition. Given all that has gone before, dentists could be forgiven for viewing Government promises with a degree of scepticism. The challenge therefore for all of us, is to work with the relevant authorities to make these promises a reality in a way that works for dental professionals and our patients. In our interview in this edition, Association CEO Fintan Hourihan points out that IDA members have made it clear that the State schemes as they currently exist are not fit for purpose, and that a renegotiation of the current contracts will be required to create schemes that provide patients with the highest standards of care, in particular preventive care, while respecting the professionals who carry out this care. Major changes are required, the vision is there, and we await developments with great interest.

Closing the gap

The gap between private dental care and the public schemes as they currently operate is further highlighted in one of our practice management articles. David McCaffrey of MedAccount offers advice on calculating the costs of dental practice, and his figures show the significant differences between the fees dentists need to charge to make their business viable, and the fees currently on offer from the State schemes. Our other practice management article, from Dr Martin Foster of DPL, looks at dental care for children, and the importance of managing parental expectations when designing a treatment plan for their child.

Starting with the first tooth

Dental care for our younger population is something of a theme in this edition. In our excellent clinical feature, Dr Kirsten FitzGerald and colleagues show us what a high standard of paediatric dental care can look like, with an illustrated

guide to the infant dental health check. There is no doubt that oral healthcare should start with the first tooth, and visits like this give dentists the opportunity to educate the parent while they examine the child. The clinical features have been very successful additions to the *Journal* and we welcome suggestions from colleagues on topics that they would like to see covered.

Research

Our peer-reviewed articles add to the sum of knowledge in their respective fields. The case study by Dr Husain Sabir and colleagues outlines an unusual presentation of primary Ewing sarcoma of the coronoid process of the mandible and its successful treatment. Dr Kieran Daly and Professor June Nunn's research suggests that the prevalence of potentially ectopic maxillary canines in an Irish population aged 11 to 14 years is broadly similar to that in other countries, underlining the importance of supervision and early diagnosis of eruption disturbances in these teeth. Although this topic is well researched, it needs to be highlighted again and again.

CPD

Congratulations to Dr PJ Byrne and his organising committee on another very successful Annual Conference. The lectures were an excellent source of CPD and feedback from attendees was, as ever, extremely positive.

I am delighted to note that CPD points are being awarded to referees reviewing on behalf of the *Journal*. Please contact us if you are interested in getting involved.

The Dental Council, on the recommendation of its Education and Training Committee, has also agreed to regard the online reading of and answering CPD questions on our *JIDA* peer-reviewed, clinical and management articles as verifiable CPD. A facility to answer these MCQs via the IDA's Learning Management System will be available in the near future (I am promised). This is yet another benefit to reading your *Journal*, and is a clear acknowledgment of the quality of our peer-reviewed and clinical content. The Editorial Board is indebted to the Dental Council for facilitating this.



World-class
technology,
bespoke
for every
patient.

Cerezen is an innovative, custom-made in-ear device that relieves the pain and symptoms of Temporomandibular Disorders.

As well as significant efficacy in reducing a patient's pain, Cerezen is non-invasive, comfortable and discreet enabling it to be worn day and night improving compliance.

It is easy to integrate Cerezen into your practice workflow and start helping your patients relieve their pain and symptoms through the innovation of Cerezen inserts.

"We treated a difficult patient with Cerezen and got fantastic life-changing results."

Dr. Lance Knight

Discover more about Cerezen or make an appointment to become a Provider.

1890 204 020

cerezen.eu/providers

cerezen[™]
comfortable relief



The future is bright

The excitement and positivity are back in dentistry.



'Dentistry Into The Future', our 2016 Annual Scientific Conference, is behind us already. It was wonderful to see delegates from all over the country engaging with the Conference. What made it for me was the overall positive feeling coming from the participants young and older. It was heartening to see so many young dentists attending, which added a huge sense of vibrancy to the meeting and was also a great indicator for the future of the IDA and the Annual Conference. The future lies with our young dentists, who eagerly participated at all levels in the Conference. There was a great sense of excitement in the air from the exceptionally well-attended pre-Conference courses to the very last lecture. It was encouraging to see "standing room only" in the first lecture on Saturday morning. All of this, of course, was in no small way down to our superb speakers who all delivered at such a high level. A huge thank you to all of them for sharing their time, experience and knowledge with us in Galway. There was a great buzz and vibrancy in the trade show and it was great to see so many smiling faces all over the Conference venue. People seemed to be enjoying their time in Galway and at the Conference.

This year I saw the excitement and positivity back in dentistry. Next year we go to Lyrath House in Kilkenny for our Annual Conference and hopefully we will bring that energy with us.

New Government, new challenges

We have a new Government, new opportunities and new challenges and we hope to engage with Minister Simon Harris at an early stage. We need to look at the future. The relationship of trust between the clinician and the patient needs to be fostered further. This partnership between clinician and patient is based on an understanding of what the patient needs and wants, instead of what we are allowed to do.

Our profession today is well trained and engaged with continuing professional development and further training. This greater knowledge and availability of

training fosters the drive for delivery of optimum care for our patients. Seeing so many young dentists at the Conference this year excites me for the future, and I would encourage every young dentist to undertake as much postgraduate training and education as possible. There are opportunities today to undertake postgraduate examinations and further qualifications that were not there for practitioners in the past. These are possible to undertake from practice.

The IDA CPD management system is there to help record CPD and help see what courses and meetings are coming up. I would invite you to log in and use it.

Our health matters too

A year ago the Practitioner Health Matters Programme was launched in Ireland. As practitioners we must mind ourselves and look after our physical and mental health. Last Friday I attended a very special event in the Royal College of Physicians in Kildare Street to mark and celebrate the first year of this Programme, which provides appropriate care and support for health professionals in Ireland. Our CEO Mr Fintan Hourihan is secretary/director and I would like to congratulate him and his fellow directors on putting this service in place.

Looking forward

The year ahead will be challenging but I look forward to it with renewed enthusiasm after our Conference in Galway. I look forward to engagement with the medical and other professions, and to promoting the highest standards in our profession. In late June, as President of the IDA and in conjunction with DPL, I will launch our Periodontal Risk Profile Initiative. This is to provide a more comprehensive assessment of, not just our patients' periodontal health, but also their general health. This more holistic view of dentistry is in my view the way of the future. I look forward to meeting you all during the next year.

Dear Editor,

The controversy around the use of amalgam in restorative dentistry still goes on, I see.

Amalgam is a truly horrible material. It looks awful, discolours teeth, and incorporates the dreaded mercury in its make-up. It is a dreadful material, which possibly should not be used by dentists in the 21st century.

However, the alternative modern materials, of which there are a plethora available, and which are all of a plastic type make-up, are extremely difficult to handle and are hydrophobic in nature. In other words, they must be kept completely dry or they will not stick to the dental enamel of the tooth, and this in an extremely wet and uncontrolled environment.

They must also be 'matriced' properly to be correctly contoured using special instruments. They do not adhere to dentin or cementum when the carious lesion goes deep into the sulcus, etc. On and on the controversy goes!

There is a great quote in one of the textbooks: "If you are not using the rubber dam routinely you should stop reading at this point. You should NOT be using composite materials". However, in Denmark I believe, having been so informed by one of my former students, the use of the rubber dam is considered "over treatment" and one can get in trouble for using it.

A question I always ask the newly qualified when we meet is: "When did you stop using the rubber dam routinely?" – just for devilment! They were all very familiar with its use the day they left the Dublin Dental Hospital.

A survey of dentists in the UK¹ in 1990 noted that 1.4% of them used the rubber dam for all operative procedures, while 93% said they never or seldom used it. One wonders what a survey of patients would elicit were they properly informed of this practice.

This much I do know: I have a few amalgams in my own teeth since the late 50s, and that amalgam has been a great restorative material. It is also cheap and cheerful. Even carelessly used, it has been a superb restorative material, renowned for its longevity, and has helped to save a number of generations of teeth.

This much I also know: I shall not be replacing my amalgams with composites. In spite of the alleged confusion between the IDA, the detail of the Minamata Treaty, the position of the Council of European Dentists and the UN treaty convention, I am still feeling quite healthy.

Yours truly,

Dr Gearoid McKenna

Burlington Dental Clinic (retired)

1. Marshall, K., Page, J. The use of rubber dam in the UK. A survey. *Br Dent J* 1990; 169 (9): 286-291.

REPLY FROM FINTAN HOURIHAN:

Dear Editor,

There is no doubt that some confusion has arisen relating to the implications for Ireland of the UN treaty convention on the use of mercury.

A detailed briefing note explaining the detail of the Minamata Treaty and the position of the Council of European Dentists, to which the IDA is affiliated, can be supplied to members on request.

It is important to emphasise that the Minamata Treaty, which has been signed by the Irish Government, does not provide for a phasing out of the use of dental amalgam. It does, however, call for a reduced usage, or phasing down.

To achieve this goal, the 139 signatory governments are called on to undertake a number of initiatives such as caries prevention and health promotion work, setting national objectives to minimise the use of amalgam, promoting the use of alternatives, encouraging dental schools and bodies to educate dentists on alternatives, etc.

In recent times, we became aware from members that they were being invited to regional meetings being organised by dental education representatives (formerly Post Grade Medical and Dental Board representatives) where the subject for discussion related to the use of dental amalgam. Reports have also been received from members suggesting that the HSE was planning to pilot projects in certain parts of the country where dental amalgam would not be used.

In the absence of any communication being received from the Department of Health or the HSE, I contacted the Chief Dental Officer, Dr Dymphna Kavanagh, to seek clarification. She advised me that there is no plan to seek to ban the use of dental amalgam, or to introduce pilot schemes that would prohibit its use. She explained that these meetings were being organised merely to discharge the Government's requirement to educate dentists on alternative materials that could be used.

Dr Kavanagh explained that Ireland would be required to show how it is complying with the specific educational, health promotion and other tasks detailed in the Minamata Convention by 2019. The organising of regional meetings should be seen in this context. She also confirmed that there was no intention to introduce new rules as regards materials to be used for DTSS patients. Neither is there any plan to introduce new rules for patients treated by HSE dentists. So, in summary, there is no reason to believe that dentists would be obliged to provide only composite fillings to DTSS patients, or indeed any group of patients, whether funded privately or publicly.

Yours sincerely,

Fintan Hourihan

Chief Executive, Irish Dental Association

Mouth Cancer Awareness Day 2016

Mouth Cancer Awareness Day (MCAD) 2016 will take place this year on Wednesday September 21. The day has been a fantastic success since its inception in 2010 with over 20,000 patients availing of the free mouth cancer exams and 26 cancers being detected as a direct result of the day.

As in 2015 the format of MCAD 2016 is slightly different! We are not asking dentists to offer free mouth cancer exams on the day, or indeed to set aside a specified period of time to carry out free mouth cancer exams. Instead, all

that we ask is that any patient, for whatever treatment it might be, who comes into your surgery on Wednesday, September 21, is made aware that it is Mouth Cancer Awareness Day, given a mouth cancer exam and told that they are receiving this exam. You don't have to register this year to take part. So only the patients that you are scheduled to see on Mouth Cancer Awareness Day will be given the mouth cancer exam. Make sure to tell them that it is Mouth Cancer Awareness Day. Patient information on mouth cancer for your surgery is available from the Irish Cancer Society on www.cancer.ie.

Sir,

The publication of a recent piece in the Practice Management section of the Journal by Dr James Foster of Dental Protection Limited, outlining scenarios in the provision of adult orthodontics is timely (Foster, J. There's no such thing as a quick fix. *JIDA* 2016; 62 (2): 87-88). Parallels can be drawn in many other areas of dental practice, but specifically in implant and restorative dentistry.

The piece highlights the new phenomenon associated with the emerging digital technologies in the provision of complex dental clinical treatments, specifically in the absence of invested clinical education. While new technology is to be welcomed and integrated into the arena of clinical practice at all levels, we also appear to have entered an era of 'dental toolism'. New technologies appear to provide a sense of empowerment, through digital processes, which transfer a degree of diagnostic and prescriptive control from the clinician, to sometimes remote operations and manufacturing centres. The appropriateness and feasibility of the specific patient prescription is overlooked in many incidences and the direction of data and digital workflow is assimilated into the technology processes, circumventing the expert clinician.

The most salient question in this new era of evolving dental practice remains, however, merging clinical qualification and digital technology. Clinical guidelines recognise and categorise complexity in patient presentations. Guidelines establish acceptable treatment parameters, within which therapies can progress, with a degree of predictability. Workflow technologies can follow, once

clinicians have directed all aspects of treatment progression. Ignorance of guidelines or poor understanding of diagnostic complexity leads to unfavourable patient outcomes and raises significant, very worrying issues with respect to the governance of the profession. Technology is not, and never will be, a substitute for a lack of understanding or an unwillingness to accept clinical complexity.

Published complexity indices and guidelines in various dental disciplines exist and have done so for quite some time now (*Prosthodontic Diagnostic Index* – www.prosthodontics.org). Dental education and professional competencies are at the centre of the management of complex clinical presentations in patients. Delegation through outsourcing of diagnostic and prescriptive responsibilities through emerging technology is both unprofessional and unacceptable in the presence of guidelines for clinical practice. To date it seems as if our medico-legal colleagues are left to spearhead dialogue on these issues.

Concerns around clinical scope of practice, the introduction of generic digital solutions masking complex clinical presentations, along with an ongoing failure of the profession to address these issues are very critical matters. Governance of the profession should not ideally be evidenced in the courts. Open and honest debate on these matters is required and would benefit all dental professionals and the patients we treat.

Yours sincerely,

Dr Ed Owens BDentSc MSD FACD

The Beacon Dental Clinic, Sandyford, Dublin 18

MORE THAN DEFENCE

DENTAL WORKSHOP PRESENTERS

Dental Protection 

Prestigious role presenting risk management and communication training programmes, suitable for full or part-time dentists

As part of our commitment to provide world-class education to support safe practice and help dentists avoid problems, Dental Protection is seeking dentists to join our group of dental presenters on a self-employed contractual basis. Being a presenter is an exciting and prestigious role, presenting Dental Protection's workshops to colleagues. Workshops range from two to three hours in duration and are designed to be interactive, challenging and entertaining.

Successful candidates must:

- Be dental graduates with significant postgraduate experience
- Have experience in training or education activities and/or presenting experience
- Be able and willing to undertake some travel and overnight stays throughout the UK and Ireland
- Be available to work a minimum of ten days a year
- Have extensive experience in at least one of the following areas: Dental education | Communication skills training | Risk management or dentolegal experience.

A position description is available at medicalprotection.org/uk/careers.

To apply, please email a full CV with covering letter to Lynne Watson, Project Coordinator at facultypositions@medicalprotection.org.

Closing date for applications: **30 June 2016**.

Dental Protection Limited is registered in England (No. 2374160) and is a wholly owned subsidiary of The Medical Protection Society Limited (MPS) which is registered in England (No. 56342). Both companies use Dental Protection as a trading name and have their registered office at 33 Cavendish Square, London W1G 0PS.

Dental Protection Limited serves and supports the dental members of MPS with access to the full range of benefits of membership, which are all discretionary and set out in MPS's Memorandum and Articles of Association. MPS is not an insurance company. Dental Protection® is a registered trademark of MPS.

Colgate®

**The only† sensitivity toothpaste
that delivers...**



Instant relief*

Long-lasting relief

**Recommended cavity
protection** (1450ppm F)**

Bring it on!

Now you can treat dentine hypersensitivity without compromise. Colgate® Sensitive Pro-Relief™ toothpaste works instantly for on the spot relief;* delivers long-lasting results for ongoing sensitivity relief and contains 1450ppm fluoride for maintaining healthy teeth.

Three benefits all at once

Clinically proven protection,
Irish Dental Association approved



Colgate®

YOUR PARTNER IN ORAL HEALTH

www.colgateprofessional.ie

† Available in the UK and Ireland. * When toothpaste is applied to each affected tooth for one minute.

Reunion: UCD 1966

At the reunion in the Clanard Court Hotel were (from left): Bernie and Dr Michael O'Brien, Dublin; Anne Dolan, Dublin; Dr John and Maura Sheridan, Dublin; Dr Desmond Fortune, Dublin; Dr Bernard Vaughan, Drogheda; Gloria and Dr Laurence Gordon, New York; Dr John Duggan, Ennis; Dr Laura and Dr Peter Fletcher, Tipperary; Dr Tom and Dr Ena Brennan, Wexford; and, Pamela and Dr Patrick Ring, Southsea, UK.



Photograph: Marius Vaitkus

IDENTEX 2016

The IDA is delighted to partner with the IDTA (Irish Dental Trade Association) once again this year for IDENTEX 2016. IDENTEX will take place at the Citywest Hotel, Dublin on Friday and Saturday, September 16 and 17 next. A full programme of lectures, workshops and hands-on courses will be available this year at IDENTEX as part of the IDA Autumn CPD Programme.

Half-day hands-on courses will take place on compeoneers by Dr Garry Heavey in conjunction with Coltene, and on endodontics by Dr Lynda Elliott, endodontist in Dublin, in association with Sybron Endo/Kerr.

A further half-day practical workshop on medical emergencies will be given by Survival Linx on both Friday and Saturday. These workshops proved very popular during our Annual Conference in Galway and will provide core CPD training for all dental team members.



Diary of events

The IDA's Annual Tennis Day 2016 will take place on June 24 in the Fitzwilliam Lawn Tennis Club in Dublin. Tea will be served from 1.15pm. Play commences at 2.00pm, and will be followed by a bbq. Please contact Mena or Marie in IDA House to register for this terrific social and sporting event.

The HSE Dental Surgeons Annual Seminar will take place on Thursday and Friday, October 6 and 7 next at the Sheraton Hotel, Athlone. The full programme for this event will be announced shortly.

QUIZ

Submitted by Dr Gillian Smith

- Which two of the following precludes a patient from having IV conscious sedation in a primary care setting:
 - well-controlled hypertension;
 - a BMI >35;
 - a smoking habit;

New affinity scheme with 3 Mobile for IDA members

The IDA is delighted to announce a new preferred supplier in 3 Mobile for all calls and texts. As well as excellent rates for IDA members of €24.60 per month, team members and family members can also avail of a €28.91 rate. For further information call 01-202 1662.

Making practitioner health matter

The Practitioner Health Matters Programme, a confidential service for health professionals experiencing problems with mental health or addiction, recently celebrated its first anniversary with a fantastic musical evening in the Royal College of Physicians in Ireland. The Programme can be contacted by calling 01-297 0356, or via email at confidential@practitionerhealth.ie.



At the first anniversary celebrations for the Practitioner Health Matters Programme were (from left): Mr Fintan Hourihan; Prof. Jim Lucey; Dr Ide Delargy; Dr Camillus Power; and, Mr Hugh Kane.

- poorly controlled type I diabetes;
 - a history of IV drug abuse; and,
 - asthma: well controlled with daily medication.
- The IDC definition of conscious sedation mandates three requirements to ensure a wide margin of safety: what are they?
 - A pulse oximeter is essential for monitoring a patient during all forms of conscious sedation. What reading of SpO₂ requires cessation of the dental procedure and immediate action to ensure patient safety?

Answers on page 172

For all major
implant systems¹

ATLANTIS™

Beyond CAD/CAM

ATLANTIS™ patient-specific suprastructures



Angulations up to
30 degrees

290

Compatible implant
connections



>500,000

ATLANTIS suprastructures connections
sold globally

2005

ATLANTIS suprastructures
are introduced

The proof is in the numbers. Delivering the best patient-specific solutions requires restorative versatility, workflow efficiency and flexibility, and design options that are as individual as each patient.

Integrating ATLANTIS suprastructures into your practice or business gives you all this and a solution that goes beyond CAD/CAM, for:

- **Profitability you can count on**
- **Function and esthetics you can rely on**
- **Simplicity you can use**
- **Comprehensive warranty for your peace of mind**



STEPPS™



SIMPLANT™



SYMBIOS™



ANKYLOS™

ASTRA TECH
IMPLANT SYSTEMS

XIVE



ATLANTIS™

1. Refer to ATLANTIS abutments implant compatibility chart.

www.dentsply.com/en-uk

DENSPLY
IMPLANTS

When the *Journal of the IDA* last interviewed CEO Fintan Hourihan, he had been in the job just six months, economic clouds were gathering, and a new Dental Act was imminent. Now, eight years later and having (we think) come through a horrendous period of uncertainty and austerity, many things have changed, but some have not. For example, there's still no Dental Act. It's edging closer, says Fintan, despite not making it onto the legislative agenda with the last Government.

"Eighteen months ago we were told it would probably not be published in the lifetime of the Government. We understand that most of the preparatory work is done, so the question is where it is on the priority list. We won't know until we meet the Minister." (The Association is due to meet new Minister for Health Simon Harris in June.)

A new dispensation

The Dental Act is just one of a number of issues the Association would like to discuss with the Minister. At the time of writing, the new minority Government is in its infancy, and its stability remains an issue, but the IDA will waste no time in trying to meet Minister Harris, and also Dr Leo Varadkar in his new portfolio as Minister for Social Protection. The Programme for Government contains a number of specific promises with regard to dental care, oral health and public service pay and conditions (see panel), all of which are high on the agenda for the IDA/IDU. Fintan welcomes the references to dentistry, but the devil will most certainly be in the detail, not least in terms of how the two State schemes – and the contracts dentists hold to implement them – will evolve in future.

"We've been campaigning since 2009/2010 for changes to the State schemes. We are very interested in speaking to Dr Varadkar in particular. His previous brief in Health would have given him some understanding of and familiarity with the schemes, and as Minister for Social Protection he now has responsibility for the PRSI Scheme."

(On the day of our interview, Fintan received a letter from Minister Varadkar confirming that he would like to meet with the Association, and that he would be very open to negotiating restoration of treatments in the Scheme "albeit in a reformed format". We await further developments.)

Unfit for purpose

IDA members have been very clear about their unhappiness with the State schemes in their current form, and the document 'Unfit for Purpose', launched at the Annual Conference, is the Association's distillation of both the problems with the two schemes, and a description of the kind of scheme the profession would like to see introduced. Fintan elaborates: "Members want us to assist them to move away from reliance on third-party schemes, particularly State schemes. There's always a danger when any profession has an unhealthy reliance on State schemes that when times turn bad, or if it's politically expedient, changes will be made and, as we've seen in recent times, the State has no reticence about setting aside contracts or agreements with representative bodies.

"We are at a crossroads with the two State schemes and there are two roads we can travel. One is to work in a mutual-gains collaboration with the State, looking at new ways to provide care and treatment, including expanding treatment for vulnerable groups. The other road (and we won't shy away from it if this is what materialises) will see fewer dentists involved in schemes, waiting lists, overcrowded HSE clinics, a decline in the range of treatments and care provided, and a period of dispute, conflict and political agitation at a local, regional and national level".

Agenda setter

Almost eight years since our first interview with the IDA CEO, and despite catastrophic changes (and some things that haven't changed at all), the future is finally brighter for dentistry in Ireland.

Most people would agree that the first road seems the rational one to take, but as is so often the case, it's not that simple.

"The State and the HSE must take cognisance of the huge damage done to goodwill among dentists in the last number of years. We've been in the courts, fighting and defending our members' interests, so a lot of remedial work is required. The onus is on the HSE to make good the damage."

The Association, in particular the GP Committee, has begun to prepare for these negotiations, studying the results of member surveys so as to reflect members' views on what type of contract would be acceptable. The IDA is also currently supporting a number of dentists being subjected to probity investigations by the HSE, which are outside the terms of the current contract, and Fintan is acutely aware of issues for dentists employed by the Public Dental Service also, particularly with announcements about possible reorganisation of the HSE and what form that might take: "We are currently in discussions on implementation of the 2011 agreement. We will also be in the Workplace Relations Commission in early June, along with other health service unions, to look at the implications of the proposed community healthcare organisations. It's undoubtedly going to be a time of change for members working in the HSE".

A thriving organisation

Despite the challenges faced by the profession, the IDA is in rude health. Its 1,800-strong membership represents a 31% increase over the last four years, which Fintan says makes it one of the fastest growing professional organisations around, something of which he is justly proud: "Rising membership numbers bring their own challenges, not least the challenge of having more members to assist, but these are good challenges to have".

Things are also good on the financial front, although the recent loss in the Supreme Court will have an impact. "We know there may be a large legal costs bill coming and we have to brace ourselves for that and make contingency plans. We have built up significant surpluses each year in the last six years, because we need to have reserves, and because we see it as important that we're there to assist, represent and defend members, particularly where changes are made to contracts. We have had discussions at Board level and this is high on the list of concerns for the organisation. I have no doubt, though, that we'll weather it and come out bigger and better."

Even with more members and no increase in staff numbers, the IDA is in expansionary mode, increasing the number and variety of services and benefits it provides to members, from the Dental Complaints Resolution Service, to the new Learning Management System, and the mentoring scheme. This is over and above the day-to-day assistance offered to members who require it.

On the Programme

The new Programme for Government contains a number of references to dentistry and oral health, including:

- ▶ extending the PRSI Scheme to reimburse some routine treatments;
- ▶ improvements to the medical card scheme;
- ▶ a package to provide free dental care for under sixes;
- ▶ a commitment to look at tax relief for dentists;
- ▶ a levy on sugar-sweetened drinks; and,
- ▶ dentists employed by the HSE will be included in negotiations with regard to public service pay and conditions.

"The reason we have large numbers of members is down to the service we offer. People want access to a professional, friendly, easy-to-use, flexible service – whether here in the office or going to events that we organise."

There are also significant financial savings to be gained from membership.

"We've tried to ensure that there is a financial benefit to IDA membership. With our deals on practice laser machines, with Dental Protection discounts, our member discounts for conference attendance, etc., members could easily save up to €3,000 a year." And the Association doesn't intend to rest on its laurels. "We're not standing still – no organisation can afford to. That's the view of the Board, of myself and all the staff here. We're in the third year of our strategy plan and that will be reviewed and updated in time. We've also undertaken a review of governance, and we've sought to modernise the structures we have in place. There are many services that we'd like to offer to members and there will be more offerings in the coming years."

Fintan is proud in particular of the calibre of member becoming involved in the Association, from committee membership to service on the Board and Council. "We now have a very engaged Council, which is a terrific indicator that you're in a healthy state. We have more female Council members, and a better spread with regard to age, nationality and speciality. We are doing better at ensuring that our representative structures – our leaders and officers – reflect the changing nature of the profession."

In order to maintain this trend, Fintan recognises the need to invest in what he calls "our volunteer leaders".

IDA members can save up to €3,000 a year.

"We need to do more to bring people through as the next generation of volunteer leaders, and to assist them in the roles they take on. I would strongly encourage people to get involved. People who have overwhelmingly say that it's a great experience that they have benefited hugely from."

One of the most important services the Association provides to members is its extensive CPD offering. Again, it's an area where Fintan feels there is a need to constantly evaluate and evolve.

"We regard ourselves as the primary providers of CPD, but there are more groups looking to provide CPD, and that poses a challenge for us. Our new President, Dr PJ Byrne, feels that it would be opportune to have a formal review of our CPD provision and policy, and I think that's well overdue. That would involve an 'environment scan' to see what's going on. What are dentists interested in? What does the Dental Council require in terms of core competencies? What facilities or structures does the IDA have to provide CPD? Are there collaborations we could look at with other organisations? Who are the competition and what are they doing? The Dental Council expects all dentists to engage in CPD and the Dental Act will make it mandatory. It's a critical part of what we do so I think the idea of a formal review is timely."

Partnerships and advocacy

The idea of collaboration is one that the Association has already embraced on several fronts, with a number of longstanding partnerships, e.g., with Dental Protection, the National Oral Health Forum and IDENTEX, and this is something Fintan is keen to continue and expand. "We've also been reaching out to other professions in order to build stronger connections between oral and general health. We're working closely with the representative bodies for doctors,

PLAQUE CONTROL: 'GOOD' CAN BE BETTER



THE PROVEN ORAL CARE COMBINATION

A combined analysis of 29 clinical studies on essential oils has been published in the *Journal of the American Dental Association*.

This showed that after 6 months of using **LISTERINE®**, after brushing and inter-dental cleaning, **37%** of patients had at least half their mouth free from plaque, compared with only **5.5%** of those who just brushed and used inter-dental cleaning.¹

LISTERINE® contains a unique anti-plaque agent, 4 powerful essential oils. These penetrate the plaque biofilm to kill **97%** of bacteria left behind after brushing.² For some patients 'good' can be better.

To see the full study visit [http://jada.ada.org/article/S0002-8177\(15\)00336-0/abstract](http://jada.ada.org/article/S0002-8177(15)00336-0/abstract)

Johnson & Johnson
FAMILY OF CONSUMER COMPANIES

www.listerineprofessional.co.uk

©2015 Johnson & Johnson
1. Research: Mink, et al., J Am Dent Assoc 2012; 143:1030-1032.
2. Johnson & Johnson. Data on file.

10/12/15-10/15

BRING OUT THE BOLD™



pharmacists, nurses and teachers. I think that's something we'll see more of. It's about looking outwards. Everyone gains when you go about these things properly." The Association will continue to engage in advocacy, with a number of campaigns planned for the coming months (see panel). Fintan mentions two initiatives in particular.

"Dr Anne Twomey was very successful in her work on food labelling and sugar, in particular in the *Sugar Crash* documentary. This highlighted the need for a considered application of any legislation. We plan to publish a detailed position paper before the year's end on diet and sugar, and we've commissioned a nutritionist to work with us on this. Reducing sugar intake is an essential goal, but we accept that a sugar tax won't be a silver bullet in terms of oral or general health."

The National Oral Health Forum also merits particular mention. The Forum brings together representatives from all areas of the dental profession, as well as the dental schools, to highlight areas of focus in oral health.

"I think some of the work that the Forum did, along with the advocacy of the Association and some others, explains to some extent the fact that we're seeing more reference to dentistry in the new Programme for Government. All of these things take time, but we see advocacy as critically important and working with other organisations is critical to building support for whatever the priorities are." Alongside these initiatives, the Association continues to lobby Government, and

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

Make sure your practice is profitable in 2016

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

MedAccount Services

96 Lower Georges Street
Dun Laoghaire
Co Dublin

Tel: 01 280 6414

Email: info@medaccount.ie



FIRST
CONSULTATION
FREE

First consultation FREE OF CHARGE with no obligation to engage

Upcoming advocacy campaigns

Sugar: Ongoing advocacy by members, and the publication of a position paper on sugar intake and nutrition.

Mouth cancer: Mouth Cancer Awareness Day has been a great success and is recognised as such.

Ageing population: "More people are remaining dentate into older age and this has implications for the provision of care for older people. We've met with a number of agencies to discuss those concerns. We have a campaign planned, which our Employment & Communications Officer, Roisín Farrelly, and Dr Anne Twomey are leading on."

Risk profiling: This is a priority for new Association President Dr PJ Byrne, and will create further links between the dental profession and other health professionals.

meetings have already taken place with opposition health spokespersons. Fintan points out that the current situation gives opposition parties more power than they've ever had before, so there is an additional need to engage with them. The IDA also nominated a candidate in the recent Seanad elections. Although Linda O'Shea Farren was not elected, Fintan feels that the Association got value from the experience, and Linda will address Council on this shortly.

"We need to think about what we need to do to position ourselves to have a presence in the Oireachtas in the future."

The future is bright

As the IDA moves closer to its one hundredth anniversary in 2022, Fintan feels things are definitely on the up.

"I'm an optimist by nature, but I believe the future is very bright for Irish dentistry. There has been a marked increase in household spending on dental care over the last two decades. If you look at the extent to which people are voting with their wallets, they certainly put a value on good oral health."

This is proof of what Fintan calls a "subterranean change", and the result of years of advocacy and education by the profession and its representatives.

"Children and adults see value in good oral health at a very high level. Their experience of and trust in dental care is much more positive now too, so if the economic recovery continues the future should be bright."

At the same time, he is acutely aware that many dentists had an extremely difficult time in recent years, and that not all practitioners are feeling the 'recovery'.

"The role of the Association in continuing to support these members is more important than ever. Through our mentoring scheme, our helplines, and the Practitioner Health Matters scheme, we have made every effort to assist dentists and their families. It's some of our most stressful and important work. It has been difficult, and for many dentists it continues to be. Week to week we are still hearing from dentists who are distressed. I hope they will always feel free to contact us confidentially – for prompt, friendly service and a listening ear."

Running man

Fintan is married to Helen and they have one daughter, Molly. To help unwind from busy days lobbying ministers, he is a keen runner and an active member of Dundrum South Dublin Athletics Club, both as a runner and volunteer, helping to organise races and events.

PLANdemo

DMI is bringing our mobile showroom to your practice front door!

Call or email DMI today to arrange your visit



INSIDE THE MOBILE SHOWROOM YOU WILL:

DISCOVER

- Our high-tech dental unit and imaging solutions
- Scan, Design and Mill your own restoration



LEARN

- The digital workflow
- Understand practices like CBCT and their clinical advantages



CONNECT

- Connect with fully functional products
- Get live demonstrations and hands-on training

You can also check out www.plandemo.co.uk for more info!



Call DMI now on 1890 400 405 to arrange your visit or email info@dmi.ie and we will call you back.

Come and see digital dentistry in action at the DMI, Lisburn open weekend
 For more information call : 028 9260 1000
 Friday 1st (8am to 8pm) &
 Saturday 2nd July (8am to 4pm)

Colgate's new timed colour-changing toothpaste

Two minutes is the recommended amount of time people should



brush their teeth for according to Public Health England.

According to Colgate, its new toothpaste Total Proof changes colour and this change is optimal after two minutes of brushing, allowing the user to know when they've brushed for long enough.

Colgate said the importance of establishing a good oral hygiene routine was underlined by a study looking at the effect of brushing time on plaque removal. According to the company, this study revealed that optimum plaque-removing efficiency time was two minutes. The company also claimed that six further studies demonstrated that the duration of toothbrushing is consistently correlated with the amount of plaque removed. One study demonstrated a plaque score reduction of 27% after brushing for one minute, increasing to 41% after two minutes. Colgate Total Proof is a variant of the Colgate Total toothpaste range and Colgate says it adheres to soft and hard tissues and gives whole mouth protection against plaque.

Dr Roise Kelly wins Omega draw

At the recent IDA Annual Conference in Galway, Omega Financial Management held a draw for the chance to win a weekend away for two at the Mount Juliet Hotel, Co. Kilkenny. Dr Roise Kelly from Galway was the lucky winner.

The weekend away will include two nights' bed and breakfast, and dinner at the Michelin Star-winning Lady Helen restaurant.

An Omega spokesperson said that there was great interest in the draw during the Conference.

The winning ticket was drawn by IDA Assistant Chief Executive Elaine Hughes at IDA Head Office a few days after the Conference. Dr Kelly was presented with her prize in Galway by Omega FM Managing Director John O'Connor. Dr Kelly works at the Galway Clinic in prosthodontics. Congratulations to her on her win.



Dr Roise Kelly receives her prize from John O'Connor, MD of Omega FM.



Irish Dental Credit Union Ltd

A Credit Union run by dentists for dentists since 1978
A member of the Irish League of Credit Unions

Loans of
up to €39,000

Interest rate on
new loans 5.9%

For more information go to

www.irishdentalcreditunion.ie

Terms and conditions apply

Wrigley's support grants

The Irish Dental Association, in association with Wrigley Company Foundation, is delighted to announce the approved dental support grants for 2016. The dental support grants offer funding for worthwhile oral healthcare projects around the country. This year five projects have been approved for funding.

PROJECT 1: Dental treatment for the Dublin homeless – Capuchin Day Care Centre

Applicants: Drs Brendan Fanning and Pat Cleary Grant approved: €15,000
A dental clinic was set up a few years back in the Capuchin Day Care Centre (a residential and day care centre for the homeless) and is run by volunteer dental professionals. The project will assist with the provision of routine oral healthcare services such as dealing with pain, dental extractions, fillings, periodontal treatment and the provision of dentures.

PROJECT 2: Dental services for homeless accessing residential rehab services – Tiglin Centre, Co. Wicklow

Applicant: Dr Johnny Fearon Grant approved: €5,000
Tiglin rehab services support both men and women affected by homelessness with drug and alcohol addictions. A new dental clinic will offer primary dental care services for all at the centre.

PROJECT 3: An oral health promotion programme delivered via health professionals – Cork

Applicant: Dr Evelyn Crowley Grant approved: €5,000
The programme will develop and distribute oral health resource packs for use by public health nurses and non-dental professionals when giving oral healthcare advice to parents of young children aged typically between seven and 24 months.

PROJECT 4: Dental Hygiene into the West – Kerry

Applicant: Dr Marcus MacDomhnaill Grant approved: €2,500
An oral healthcare programme offering a screening service and oral education to four primary schools in the remote areas of the Kerry Gaeltacht

PROJECT 5: Promotion of oral health on Tory Island – Donegal

Applicant: Dr Gerald Roarty Grant approved €2,500
An oral healthcare programme for the people of Tory Island including a fissure sealants programme for the children of Tory and fluoride application. Tory is one of the most remote islands off the coast of Donegal.
On behalf of Council of the IDA we would like to congratulate all recipients of the grants for 2016. Thank you also to all those IDA members who applied for a grant through the scheme.

Planmeca's mobile showroom

DMI will bring its mobile showroom to dentists' front doors from June 27-30, to display digital dental solutions from Planmeca. If you'd like the showroom to visit your practice, call DMI on 1890 400 405, email info@dmie.ie or log on to www.plandemo.co.uk. There will also be an open weekend at DMI Lisburn on July 1 and 2. For more information call (NI) 028 9260 1000 or (ROI) 048 9260 1000.

New SCD Business Development Manager



Southern Cross Dental (SCD) has appointed Nathan Stewart, left, as Business Development Manager for Ireland. According to SCD, Nathan will improve the SCD experience for existing customers, and help new customers to become familiar with SCD's services. Nathan previously worked with Radox Laboratories and EMIS Health.

DPL Roadshow 2016

The Dental Protection Managing Clinical Risk Roadshow will tour the country in late June/early July. IDA President Dr PJ Byrne will host a lively interactive session with DPL's Drs Sue Boynton and Stephen Henderson. Chief Executive of the IDA Fintan Hourihan will also speak. Attendance is free for IDA members (€75 for non-members) and will be rewarded with three CPD points and three hours of risk credits. Attending will give you a better understanding of risk management, record keeping and the consent process. The roadshow will start in Cork in the Maryborough Hotel on June 28, move to the Castletroy Park Hotel, Limerick, on June 29, then to the Clayton Hotel, Galway, on June 30. The Dublin roadshow on July 1 is already fully booked but dentists can register for the waiting list.

Dentanet Ltd.

DENTAL LABORATORY SERVICE

Probably the best Quality
Crowns and Bridges
available in Ireland



22 Tralee Road Castleisland
Co. Kerry

Tel : 066 7143964 Mob:087 3324779

Email: dentanet@eircom.net
www.dentanet.ie

RISK

FREE
TO DENTAL
PROTECTION
MEMBERS

**How to manage it,
not take it.**

Managing Clinical Risk Roadshow 2016

Dental Protection is delighted to be hosting another series of the popular evening Roadshows taking place throughout Ireland this summer.

Renowned international speaker Dr PJ Byrne will team up with Dental Protection's Dr Sue Boynton and Dr Stephen Henderson to present a lively and interactive session designed to provide a wealth of information which can help you to practice more safely and manage your risks more effectively. Places are limited so don't miss out on this must attend event!

FIND OUT MORE
dentalprotection.org/roadshow



DON'T MISS OUT, BOOK TODAY

Call +44 20 7399 2914 | Email events@dentalprotection.org

€75 to non-Dental Protection members

28
JUNE CORK

29
JUNE LIMERICK

30
JUNE GALWAY

01
JULY DUBLIN

**Earn CPD
and
RiskCredits**

Understanding your practice's costs

It's time to look again at how overhead costs and treatments impact dental practice income.



A lot has changed within the dental field since I first wrote an article on practice costs in 2007. Most notably there have been reductions in DTSS and PRSI services, reductions in fees per item of service, the economic downturn, and changes in the way associates and hygienists operate in practice. The question asked in 2007 as to whether practice owners know the real cost of offering treatment to patients is more pertinent than ever. Inflation is at its lowest level in many years, but wage pressure is increasing and there are wide variations on loan and lease finance costs offered by financial institutions. Dental practices should pay attention to their overhead costs and attempt to understand the impact of cost increases on treatments offered to patients.

There are several methods of establishing a practice's overhead rate per hour. Many dentists ask: where do I start in trying to review the cost and profitability of my practice? The simplest approach to analysing the cost of treatments is to establish the overhead rate per hour through a three-stage process:

- establish the practice's costs;
- calculate hours worked; and,
- calculate the overhead rate per hour.

Once the overhead rate per hour is established attention can be focused on treatment times in order to calculate the profitability per treatment.

TABLE 1: Calculating the overhead rate per hour

Practice costs excluding lab.	€	Hours	€ per hour
Dental consumables	25,600	1,805	14.18
Staff wages (incl. PAYE/PRSI)	67,000	1,805	37.12
Property lease/insurance/rates	30,000	1,805	16.62
Energy costs	3,500	1,805	1.94
Promotional costs	3,000	1,805	1.66
Waste disposal	2,000	1,805	1.11
Small equipment	2,000	1,805	1.11
Computers	4,000	1,805	2.22
Other office expenses	12,000	1,805	6.65
Equipment lease	3,500	1,805	1.94
Loan repayments	14,000	1,805	7.76
Total costs	166,600	1,805	92.31

Establishing your practice costs

By reviewing your practice's accounts, your overheads can be broken down into what are termed variable and fixed costs. Variable costs are those that change with the number of patients seen by a dentist. Fixed costs tend to be more structural and usually only change when there is a step change in the activity of the practice.

VARIABLE COSTS:

- ▶ dental consumables;
- ▶ dental laboratory;
- ▶ hygienist wages (if paid by the hour/patient);
- ▶ office expenses; and,
- ▶ cross infection costs.

FIXED COSTS:

- ▶ staff wages (fixed amount per week);
- ▶ insurance;
- ▶ energy;
- ▶ mortgage or lease costs;
- ▶ rates;
- ▶ loan interest;
- ▶ lease costs;
- ▶ promotional costs; and,
- ▶ small equipment.

The mix of costs will depend on the age of the practice, the number of dentists working there and whether or not there is a hygienist working in the practice.

Calculate hours worked

Once the costs have been compiled, the next step is to calculate the number of hours dentists will practice in a year. For example, if a practice sees patients chairside for 44.32 hours a week between the principal and associate for 47 weeks in the year, this gives 2,083 practice hours a year. Chairside hours need to be reduced to take account of time taken for cleaning and sterilisation of equipment between patients. In this example, we will estimate eight minutes per chairside hour worked. This reduces the number of treatment hours to 1,805 a year.

Calculate the overhead rate per hour

Following the establishment of chairside hours worked the average overhead rate per hour is calculated (Table 1). In the example practice, the total costs

TABLE 2: Treatment profitability analysis

	PATIENT FEE INCOME			Average treatment in minutes	Overhead cost of treatment	Lab. costs and extras	Amount dentist earns per treatment		
	Private	PRSI	DTSS				€	€	€
Examination/x-ray	55	32	33	20	31		24	1	2
Prophylaxis	60		31	30	46		14		-15
Amalgam restoration	85		50	25	38		47		12
Composite restoration	95		52	25	38		57		13
Extraction	85		40	25	38		47		1
Surgical extraction	143		75	35	54		89		21
Endodontic treatment	433		195	90	138		295		56
Whitening	250			20	31	30	189		
PROSTHETICS									
Partial	353		239	60	92	95	166		52
Full upper or lower	490		326	60	92	100	298		134
Full upper and lower	856		479	60	92	200	564		186
Chrome cobalt	1,000			80	123	150	727		
Reline	180		131	30	46	65	69		19
Denture repair	80		63	15	23	30	27		10
CROWN AND BRIDGE									
Porcelain fused metal	750			90	138	110	502		
Gold crown	800			90	138	125	537		
Veneer	500			90	138	120	242		
Maryland	904			90	138	170	596		

TABLE 3: Treatment price increase impact on practice profitability

	€'000	€'000	% Increase
Sales	320	352	10%
Lab.	30	33	
Fixed	191	191	
Income	99	128	29%

are €166,600. This is divided by 1,805 chairside hours to give an overhead rate per hour of €92.31.

The overhead recovery rate per hour indicates that the practice must earn a minimum of €92.31 per hour before generating any profit. Laboratory costs relate uniquely to the treatment being offered and are therefore excluded from the calculation of the overhead recovery rate per hour. They are added in at a later stage when calculating the specific cost of treatments.

The range of treatments carried out by a clinic and time taken for each treatment can be obtained through an analysis of your practice's computer system. This is dependent on how your practice records patient information. Having established the fees charged per treatment, chairside hours worked, the practice overhead costs and treatment times, the standard income per treatment can be obtained for private, PRSI and DTSS patients (Table 2). The prices referred to in Table 2 for treatments originate from a survey carried out in January 2016. As can be seen, there is a wide variation in the profitability across private, PRSI and DTSS treatments.

Where a number of single treatments are combined into a treatment plan, the overhead cost will vary depending on the length of treatment. There are a

number of other factors, such as variation in the mix of treatments offered, that can influence practice profitability, but further analysis is beyond the scope of this article.

Once the cost of treatments has been established the dentist is now in a position to try to maximise hourly income. There are several ways to do this. You can:

- ▶ review overheads;
- ▶ review treatment times and downtime between patients;
- ▶ review treatment types offered and internal marketing;
- ▶ review the mix of treatments; and,
- ▶ review treatment prices.

With a large fixed overhead base, a percentage increase in treatment prices can lead to a disproportionate increase in the practice's percentage profit (Table 3). If treatment prices were increased by 10% and overhead costs remained static, there would be a 29% increase in practice income.

In conclusion

The analysis of the profitability of dental treatments is complex and once derived, the interpretation needs to be carefully worked through. Ceasing to offer a potentially loss-making treatment will reduce, rather than increase, practice profitability if overhead savings cannot be made, or the time taken to carry out loss-making treatments is not replaced by more profitable treatments. There are various pricing models that can be used, from a simple cost plus profit required model to more complex activity- and value-based methods. If dentists are to maximise their revenue per hour it is essential that they understand the cost of the treatments that they are offering and the factors that underlie those costs.



Dental Business Solutions



We take care of the health of your business, so you can take care of the health of your patients.

Overhead Reduction

- Clinical waste
- Reduced lab costs
- Reduced recruitment costs

SAVE UP TO 40% on your clinical waste costs

Marketing Services

- Video marketing production
- Website/social media and print production
- Dental Beauty TV

Market your practice **EFFECTIVELY** from stationery to social media, website design and videos

Practice Analysis

- Practice analysis report
- THRIVE business consultancy
- EXACT V12

IMPROVE PRODUCTIVITY Implement solutions to increase chairtime revenue

Practice Transitions

- Practice valuation service
- Practice sales service
- Practice appraisals

EXCLUSIVE 10% DISCOUNT from the specialist team who'll offer you advice on any aspect of your business

HR, Accountancy and IT

- IT solutions
- HR solutions
- Health and safety solutions
- Accountancy services

TAKE AWAY THE STRESS of administration, accountancy, HR, IT support and health and safety

Consultancy Services

- Connect Dental - digitalisation consultancy
- Horton Consulting

INCREASE PROFITABILITY ON AVERAGE OF 20% in the restorative category

Training Services

- Henry Schein Ireland Education and Development
- Dental Tubules

GAIN CPD and training on courses

Visit us online at www.hsbusinesssolutions.ie or contact your local Henry Schein consultant today

Dublin: 01 456 5288 | Cork: 021 429 7818 | info@hsbusinesssolutions.ie

hsbusinesssolutions.ie

Establishing expectations

When it comes to dealing with families, it's important to have a communication strategy that will encourage the parents of young children to share their views about their child's treatment.



Whenever you are treating children, it is important to establish the expectations of the parents before you do anything else. You need to clarify just what the parent of the child is hoping the dentist can achieve. Any disparity between their expectation and what can actually be provided is one of the first things that must be identified.

The best way to do this is simply to ask the parent what their expectation of treatment actually is, rather than making an assumption or taking a guess. Asking some basic questions can be very helpful in clarifying their view.

Potential for disappointment

Parents or carers can have over-inflated, sometimes unrealistic and unreasonable, ideas about what might be possible. The potential for disappointment can be surprisingly high unless these expectations are carefully managed.

It is worth taking the time to make some basic enquiries so that both the clinician and the parents or guardian of the patient have a shared understanding of the situation. A parent who brings in a small child with widespread caries may not have any accurate understanding of what their treatment might involve or of how many visits it may take.

Neither dentists nor parents are mind readers, so in order to avoid any misunderstandings it is essential to ask what they might think about the proposed treatment. For example:

- "What are you expecting to achieve from this treatment?";
- "What are you hoping for?";
- "How would you like me to help you?"; and,
- "What would you like to see happen?", etc.

Although you may feel you understand the parent's perspective without needing to make such enquiries, it does no harm to confirm that your understanding is correct. It can also be surprising to learn exactly what the other person's view actually is. After all, very few members of the public have the same level of understanding about dental treatment as a dentist does!

Clarification for better understanding

Having clarified the parent's viewpoint you will then be better placed to



understand where they are coming from and how likely they are to keep the appointments required and follow your advice. Once you have established this, it is a good idea to summarise the situation with them to check that both parties now see the situation in the same way.

If there are any issues or you have concerns that the parents still have an unrealistic or otherwise inaccurate view of the position or of what can be done, then some further discussion and explanation may be required. Treatment should only begin once there is complete clarity as to what treatment is available and what this can achieve. This is particularly important if the parent does not fully understand what treatment might be available for their child under contractual arrangements, and what might be provided privately.

Going to the trouble of checking the facts and documenting them when a clinician feels the situation is all rather obvious, may seem unwarranted, but in a surprising number of cases the parent's unrealistic expectations are frequently not identified until the clinician is confronted with some unexpressed wishes that have not been met. This situation can arise for almost any parent, who will have an understandable connection to the patient they have brought to your surgery, and for whom they are not only responsible, but with whom they have a strong emotional attachment.

People may forgive a perceived failing if it affects them but they will rarely forgive a clinician who 'fails' their child.

Implementing simple checks at an early stage and then continuing to confirm that the relevant individuals are on the 'same page' throughout treatment will go a long way to preventing the build-up of any misunderstandings.

Dr Martin Foster BDS MPH DipHSM LLM MA

Martin is a Dentolegal Adviser and part of Dental Protection's team serving members in Ireland. He is also registered as a specialist in paediatric dentistry.





SUMMER CLASSICS.

Join us in June or July to **save 30%**
on your first **three** crowns*.

Visit scdlab.co.uk or call 048 8772 7100 (ROI) or 028 8772 7100 (NI).

*T&Cs: 1. Offer applies to new customers only who open a new account after the 1st of June 2016 to 31st July 2016. 2. The 30% discount will be applied against the list price (at time of order) of the first 3 crowns ordered. 3. Single crown orders only. 4. If the case is for more than one crown, the 30% discount will only apply to the lowest priced crown. 5. Excludes semi and high precious alloy, implant crowns. 6. This offer cannot be used in conjunction with any other offer. 7. All three crowns must be redeemed before the 31st October 2016.

Baby steps: a systematic approach to the infant oral health visit

With the right approach, the infant oral health visit can be a positive experience for dentist, parent and baby.

Photographs by Orla Murray, Ark Photography



FIGURE 1: Some simple toys in the waiting room, and some well-timed distraction, can go a long way to making the visit pleasant for all.



FIGURE 2: The risk assessment and educational components of the visit should be carried out early in the session.

Introduction

For practitioners who wish to offer the infant oral health visit in their practice, some new knowledge and skills may be needed, and it is hoped that the following advice and systematic approach will facilitate both practitioner and family.

The visit should include a formal caries risk assessment, which is generally best achieved with the aid of a tool such as the Caries Risk Assessment Checklist (CRAC),¹ which is suitable for all children, or a specific tool aimed at the 0-3 age group, such as the American Academy of Pediatric Dentistry's (AAPD) Caries-risk Assessment Tool (CAT).²

The dental team should be adequately prepared and the practice suitably set up to receive young children and their accompanying siblings, buggies and other needs. Some simple toys in the waiting room, and some well-timed distraction, can go a long way to making the visit pleasant for all (Figure 1). If there is paperwork to be completed, it may be preferable to send this by post or email prior to the visit. A simple written explanation of the aims and objectives of the visit and a description of the techniques for examination and preventive care may be useful so that parents know what to expect.



Dr Kirsten FitzGerald
BDentSc MS(Texas) FFD(RCSI)
Consultant Paediatric Dental Surgeon
Our Lady's Children's Hospital, Crumlin and
Dublin Dental University Hospital

Dr Eleanor McGovern
BDS MFD MDentCh (Paediatric Dentistry)
Consultant Paediatric Dental Surgeon, The
Children's University Hospital, Temple Street

Corresponding author:

Dr Kirsten FitzGerald Email: kirsten.fitzgerald@olchc.ie Tel: 01-409 6549

Dr Aifric Ní Chaollaí
BA BDentSc MDentSc(Leeds) MPaedDent(RCPSG)
Paediatric Dentist at Dental Care Ireland,
Cabinteely and the Northbrook Clinic, Ranelagh

Dr Brett Duane
BDS MAM (Health) MPH PHD
Associate Professor, Dental Public Health, Dublin
Dental University Hospital



FIGURES 3a-d: Examination is best carried out in the knee-to-knee position, and should include examination for caries, trauma, and dental, soft tissue and anatomical disturbances.

Minimising stress

It is recommended by the authors that the risk assessment and educational components of the visit are carried out early in the session, and that the clinical examination is left as close as possible to the end (Figure 2). This way, if baby and parent are relaxed, transfer of information between the parent and the dental team is easier. Examination in the knee-to-knee position is advised for efficient examination of the oral cavity, and for the parent’s and baby’s comfort and stress reduction. A dental chair is not needed, but an adequate light source is required. Some babies get upset at the time of examination: this is entirely normal and developmentally appropriate.

Practical advice

Demonstration of the appropriate method of tooth brushing is valuable, and although routine use of 1,450ppm fluoride toothpaste is not suggested for most children in Ireland until age two, showing the correct amount of paste on the brush can be helpful, particularly if there are older siblings in the family. It should be emphasised that there is greater benefit from fluoride toothpaste if it is not rinsed off after brushing. Fluoride varnish application should follow the clinical examination. Only a very small amount is needed, allaying concerns around toxicity. Discussion of dietary practices should be in line with other

healthcare professionals’ current advice, particularly around breastfeeding and weaning to solid food in this age group. Current advice is widely available via the HSE’s baby and child health website – www.hse.ie/eng/health/child/.

History

The medical, dental and social history for an infant should include the following:

- the child’s perinatal and ongoing medical history;
- caries risk assessment (CRAC or AAPD);
- trauma;
- systemic and topical fluoride status (water, formula and toothpaste);
- feeding practices (use of bottles while asleep, snacks between meals); and,
- non-nutritive sucking habits (thumb/soother).

Examination

Examination is best carried out in the knee-to-knee position, and should include the following key features:

- examination for caries, trauma, and dental, soft tissue and anatomical disturbances (Figures 3a-d);
- “lift the lip” demonstration (Figure 4); and,
- tooth brushing demonstration (Figure 5a-c).



FIGURE 4: Teach parents to examine the maxillary incisors using the “lift the lip” technique.



FIGURE 5a-c: A tooth brushing demonstration should form part of the examination.



FIGURE 6: 5% NaF fluoride varnish should be applied to erupted teeth, by drying first with some gauze and applying the varnish with a gloved finger.



FIGURE 7: The infant oral health visit allows early establishment of a dental home and results in increased awareness of issues that will have an impact on the child's oral health.

Preventive care

Basic preventive care is best carried out in the knee-to-knee position at the time of examination, provided the parent is prepared and consent is achieved before beginning:

- remove any soft and hard deposits; and,
- apply 5% NaF fluoride varnish to erupted teeth, by drying first with some gauze and applying the varnish with a gloved finger (Figure 6).

Treatment of severe early childhood caries (SECC)

If any evidence of smooth surface caries is encountered in a child under three years of age, by definition, this is severe early childhood caries. Preventive interventions in the first year of life are critical. The following treatments are suggested according to the level of caries seen:

White spot lesions

Apply fluoride varnish, and educate about oral health and diet. Advise home use of a smear of 1,450ppm toothpaste twice daily, without rinsing after brushing.

Cavitated lesions in upper incisors

Manage as above, and consider interim therapeutic restoration (ITR) with glass ionomer as a preventive and therapeutic approach.

Large cavitated lesions in incisors

Manage as above, and consider use of full coverage restorations (e.g., stainless steel crowns +/- white facing), particularly if compliance for prevention is an issue.

Extensive disease with/without pulpal involvement

Manage as above, and consider referral to a specialist provider for definitive care.

Establishing the dental home and periodicity of review

The dental home is an ongoing relationship between the dental team and the patient and family. The infant oral health visit allows early establishment of a dental home and results in an increased awareness of all issues that will have an impact on the child's oral health (Figure 7). Once the first visit is accomplished, the relationship begins, and this is continued as follows:

- determine the interval for periodic review (three, six or 12 months) based on risk; and,
- if needed, refer to a specialist provider, with arrangements for follow-up at the dental home.

The infant oral health visit can help to build a family-friendly practice, and could be included as part of a visit for another family member, or can be offered and billed as a stand-alone visit. Education and preventive advice is best offered in a non-judgemental way, with an understanding of the values and motivating factors held by the family. A communication style known as motivational interviewing is particularly useful in this setting. Advice and preventive interventions go hand in hand, and the application of fluoride varnish is an evidence-based, operator-applied caries-preventive intervention that results in a 37% reduction in dmft in children under five. Parents who value this effect will usually be happy to return periodically for fluoride varnish application and clinical review.

With adequate planning, a team approach, some enthusiasm and a little practice, the infant oral health visit can be a very rewarding experience for all.

References

1. Irish Oral Health Services Guideline Initiative. Strategies to prevent dental caries in children and adolescents: evidence-based guidance on identifying high caries risk children and developing preventive strategies for high caries risk children in Ireland (Full guideline). 2009 [undated; cited May 4, 2016] Available at: <http://ohsrc.ucc.ie/html/guidelines.html>.
2. American Academy of Pediatric Dentistry. Guideline on Caries-risk Assessment and Management for Infants, Children, and Adolescents. [Internet] Chicago: American Academy of Pediatric Dentistry; 2015 [undated; cited May 4, 2016] Available from: http://www.aapd.org/media/policies_guidelines/g_cariesriskassessment.pdf.

A winning partnership for implant success

The importance of choosing an implant partner that can really make a difference to the success of your implant practice cannot be overestimated. With this in mind, Marcos White explains why he couldn't be happier that he has partnered with BioHorizons.

Let me say this first – I am a big fan of BioHorizons implants and their restorative components. Now I'll tell you why. I love the simplicity of the system and with BioHorizons you only need one kit to place their current range of Tapered implants and Laser-Lok 3.0. Choosing the right implant for the surgical site is really straightforward. In addition, as a big proponent of digital dentistry, I am delighted with the great support and ongoing innovation from BioHorizons looking to achieve a total digital solution for their customers.

All-round support

And BioHorizons isn't just about getting dentist to use their products. I've found that they are really committed to education. I was recently fortunate enough to be invited to one of their international training programmes and was truly blown away on all fronts. The training was to a high level and well-tailored to all delegates. BioHorizons' staff attending were approachable, generous and open to feedback. All in all, it was really humbling to see a company with a focus truly on engaging with – and supporting – their customers.

Indeed, the longer I have spent as a BioHorizons partner the more staff I have met and the more of the 'family' approach I have seen in action. Whether it is the reps, the marketing team, or research and development, they are all totally approachable, generous with their time and assistance, and nothing is ever too much trouble. I think this aspect is a real credit to the BioHorizons brand and they have done incredibly well to engender this.

In a class of its own

Every implant dentist considering trying a new system will be looking for value and results. BioHorizons is well priced in the marketplace, making it an affordable implant system that then impresses with its design, kit and simplicity of use. Next come results; both in terms of initial integration statistics and subsequent crestal bone levels, I have found BioHorizons to deliver superior results in my hands. Recent studies have backed my observations, with the Laser-Lok® design feature serving to retain more crestal bone than other systems that have been compared.



Finally, there is the customer service element. I have found BioHorizons able to deliver that fine balance of knowledgeable support and advice without ever feeling oppressed or pressurised.

Since partnering with BioHorizons, I can honestly say I have never been more confident about the implant dentistry our practice is providing, or the science, innovation and support behind the implants we place. We are proud to display the BioHorizons brand on our website, as the only implant system we need.



Dr Marcos White

Marcos White is the principal dentist at The Courtyard, an award-winning practice in Huddersfield. Marcos enjoys caring for his loyal patient base and having the confidence to provide solutions to whatever restorative issue he is presented with.

SPMP15414GB REV A DEC 2015

Please visit www.biohorizons.com to see the entire range of dental implant products and biologics.

BIOHORIZONS®

WHATEVER YOUR CLINICAL NEED,
BIOHORIZONS HAS THE SOLUTION

Clinical and radiographic assessment of maxillary canine eruption status in a group of 11- to 14-year-old Irish children

Précis

In this study of 480 11- to 14-year-old Irish schoolchildren, 1.1% of the maxillary canines reviewed showed a potentially ectopic eruption position.

Abstract

Objective: The aim of this study was to investigate the prevalence of potentially ectopic maxillary canines and associated dental features in a group of 11- to 14-year-old children.

Participants: Examination took place of a normal distribution of Irish schoolchildren aged between 11 and 14 years in order to record the number of subjects with indications for radiographic investigation of potentially ectopic maxillary canines.

Methods: Those subjects identified subsequently underwent radiographic examination and the number of subjects with potentially ectopic maxillary canines was established. Correlations within the latter sub-sample with anomalous or missing laterals, type of occlusion and female:male ratio were investigated.

Results: A total of 480 children were screened. Of the children aged 11 to 14 years, 32 (6.6%) had clinical indications for radiographic examination of potentially ectopic maxillary canines according to the criteria that had been set out. There were 11 maxillary canines, in 10 subjects, that had an unfavourable position for eruption and were considered to be potentially ectopic, and so 1.1% of the maxillary canines reviewed in this study showed a potential ectopic eruption position.

Conclusions: The prevalence of potentially ectopic maxillary canines and associated dental features in an Irish population was found to be similar to those in other countries, and the practice of careful supervision and early diagnosis of any eruption disturbances of the permanent maxillary canines continues to be considered important due to the risks associated with their eruption.

Journal of the Irish Dental Association 2016; 62 (3): 162-166.



Dr Kieran T. Daly
BDentSc MDentSc MFD MOrth FFD

Correspondence

Dr Kieran T. Daly
HSE Orthodontic Department, Portlaoise Hospital, Block Road, Portlaoise, Co. Laois
T: 087 132 5343 E: kieran Daly2001@hotmail.com

Professor June Nunn
Dublin Dental University Hospital,
Lincoln Place, Dublin 2

Introduction

Careful supervision and early diagnosis of any eruption disturbances of the permanent maxillary canines is considered important due to the risks associated with their eruption.¹⁻⁶ The problems associated with eruption disturbances are: retention of the primary canines; and, ectopic eruption with a palatal or sometimes buccal position. Ectopic eruption may also be associated with resorption of the adjacent incisor root.¹

Many authors have advocated palpation of the buccal surface of the alveolar process distal to the lateral incisor to investigate the position of the maxillary canine.⁷ A bulge of the alveolar process in the buccal sulcus in the region of the canine indicates a normally erupting canine and should be present from eight years,^{2,5,8} or at least at nine to ten years of age.^{1,6}

Ericson and Kurol, in a longitudinal study, investigated clinical methods for supervising the eruption of maxillary canines.⁹ It was found that positive palpation meant a good prognosis for eruption. The same authors found that in children aged ten years and younger, attempting to determine the path of eruption radiographically was generally of little value.⁹ In children aged 11 years and older, clinical signs of delayed or ectopic eruption were confirmed radiographically.

The frequency of maxillary canine impaction varies between 0.9% and 5.9%.^{10,11} It has been supposed that there are certain differences in the frequency of this anomaly between races. Montelius *et al.* found incidences of 1.7% for Chinese races and 5.9% for Caucasian races.¹¹

Ericson and Kurol carried out a clinical examination of 3,000 10- to 15-year-old children. A prevalence of 1.5% of ectopically erupting maxillary canines was found. Ectopically erupting canines were seen more frequently in girls than in boys. Some 20% of the crowns of ectopically positioned maxillary canines were situated buccal to the adjacent lateral incisor, and 80% were situated either in the line of the arch or palatal to the adjacent lateral incisors.¹²

Aims and objectives

The aim of this study was to investigate the prevalence of potentially ectopic maxillary canines and associated dental features with the objectives of:

1. Identifying the number of children from the sample with indications for radiographic examination of potentially ectopic maxillary canines.
2. Identifying the number of subjects who had potentially ectopic maxillary canines.
3. Investigating any correlation between potentially ectopic canines and:
 - I) anomalous and missing laterals;
 - II) female:male ratio; and,
 - III) type of occlusion.

The null hypotheses were stated as:

1. There is *not* an unusually high incidence of anomalous or missing lateral incisors in subjects with potentially ectopic maxillary canines.
2. There is *not* an unusually high incidence of potentially ectopic maxillary canines in female subjects.
3. There is *not* an unusually high incidence of Class II div 2 malocclusion in patients with potentially ectopic maxillary canine teeth.

Materials and methods

The sample

The subjects were all primary schoolchildren aged between 11 and 14 years from an area in the midlands of Ireland. This area was chosen as it was

considered to have an even socioeconomic mix of Caucasians, predominantly of Irish descent.

Ethical approval was granted from the Health Sciences Faculty of Trinity College Dublin. An information and positive consent form was given to a parent or legal guardian of each child in advance of the initial screening examination.

Screening examination

Screening examinations were carried out at either the schools or within an orthodontic department in a local hospital. A data collection sheet was filled out to include the subject's age, gender and history of previous extractions. A clinical examination was carried out on the subjects, initially checking visually to see if the deciduous canines were present and if the permanent canines had erupted. Following this, there was careful palpation with the tip of a finger on the alveolar process in the canine region from both the palatal and buccal sides. The palpation of a bulge buccally was considered positive confirmation of a maxillary canine, while a smooth surface indicated an eruption disturbance. In addition, the lateral incisors were examined for:

- presence;
- state of eruption; and,
- size and morphology.

A clear plastic ruler was used to measure the mesiodistal width of the patient's lateral incisors. The maxillary lateral incisors were classified as 'small' when the mesiodistal width was equal to or smaller than that of its mandibular counterpart.

Radiographs and study models were indicated in all individuals with a non-palpable canine(s), or those with palpable canines who had a distinctive difference between left and right sides.

All subjects who were identified as having had one or both deciduous maxillary canines extracted were excluded from the study.

Radiographic examination

Radiographic examination involved the exposure of a ortho panoramic tomograph (OPT) and an anterior occlusal radiograph with the occlusal film held parallel to the maxillary plane and the tube at an angle of 60-65 degrees to the film. All radiographs were exposed using the same x-ray machines by the same investigator. The maxillary canines were then assessed as:

1. Palatal to the line of the arch.
2. Central to the line of the arch.
3. Buccal to the line of the arch.

This was done by using a combination of the information gathered clinically, and the principle of vertical parallax between the OPT and the anterior occlusal radiograph.

From the radiographs, the maxillary canines were then classified as having an unfavourable path of eruption if they were considered to be in the line of the arch or palatal to the line of the arch, and if they exhibited one or both of the following criteria:

1. The tip of the maxillary canine was mesial to the long axis of the adjacent incisor.
2. The angle formed between the long axis of the canine and the vertical axis of the OPT was greater than 30 degrees.

In the classic studies of Ericson and Kurol, the authors did not give details of the criteria they used to classify the path of eruption as favourable or unfavourable.^{12,15} The classification system adopted for this study was

TABLE 1: Age range of subjects who underwent screening examination

Age range	Male	Female	Total
11.1-12	37	29	66
12.1-13	176	174	350
13.1-14	33	28	61
14.1-15	2	1	3
Total	248	232	480

TABLE 2: Clinical status of eruption of permanent maxillary canines at initial examination

	Male N=248			Female N=232			Total N (%)
	Left	Right	N (%)	Left	Right	N (%)	
Erupted	196	192	388 78%	195	200	395 85%	783 81.6%
Bucally palpable	44	48	92 18.5%	28	28	56 12%	148 15.4%
Palatally palpable	1	5	6 12%	2	1	3 1%	9 0.9%
Not palpable	7	3	10 2.1%	7	3	10 2%	20 2.1%
Total	248	248	496 100%	232	232	464 100%	960 100%

developed from a review of the literature, which attempted to highlight those features that have been shown to influence the process of eruption of maxillary canines. For the purpose of this study, those canines considered to have an unfavourable path of eruption are described as being potentially ectopic maxillary canines.

The process of identifying radiographically the bucco-palatal position of the maxillary canines, and determining if their position was favourable or unfavourable, was tested by a second clinician and the inter-examiner agreement was evaluated.

Study models

Study models were obtained using irreversible hydrocolloid impressions. With the aid of these study models, the incisor relationship was classified and the maximum mesio-distal diameter of the upper and lower lateral incisors was measured with a pair of dividers and a stainless steel millimetre ruler. The upper lateral incisors were classified as:

1. Absent
2. Peg-shaped, with the mesio-distal width greatest at the cervical margin.
3. Small, with the mesio-distal width equal to or smaller than that of its mandibular counterpart.

Data collection and statistical analysis

The data were recorded in the SPSS 12 statistical programme file. The

TABLE 3: Maxillary canine position in the dental arch in the subjects who underwent radiographic investigation

	Palatal		In the line of the arch		Buccal		Erupted		Total	
	N	%	N	%	N	%	N	%	N	%
Maxillary canine – right	8	(13)	11	(18)	11	(18)	1	(2)	31	(50)
Maxillary canine – left	6	(10)	8	(13)	9	(15)	8	(13)	31	(50)
Total	14	(23)	19	(31)	20	(33)	9	(15)	62	(100)

programme was used to carry out measurements of variability, compile appropriate descriptive tables and carry out analysis of variance. Categorical variables were computed using chi-squared tests. A p-value of <0.05 was considered to be statistically significant.

Results

Sample size and age range

Four subjects were identified at initial examination as having had one or both of their deciduous maxillary canines extracted as a consequence of dental caries and were excluded from the study. Subsequently, a total of 480 subjects underwent the initial screening examination. Some 248 males and 232 females were examined. The ages ranged from 11 to 14 years, with a mean age of 12.6 years for males and females (Table 1).

Of the 480 subjects who underwent the initial screening examination, a total of 32 (6.6%) had clinical indications for radiographic examination according to the criteria that had been set out. Of the 32 subjects, 12 (37.5%) were female and 20 (62.5%) were male.

Clinical status of eruption of permanent maxillary canines at initial examination

A total of 783 (81.6%) of the permanent maxillary canines were erupted at the time of examination. Twenty (2.1%) were not palpable at initial examination. Nine (0.9%) were palpable palatally and 148 (15.4%) were palpable buccally. The distribution of clinical eruption status of canines between males and females was statistically significant (p = 0.001) (Table 2).

Maxillary canine position in the dental arch in subjects who underwent radiographic investigation

One of the subjects who underwent radiographic examination was found to have aplasia of both maxillary canines. A total of 32% of the canines examined radiographically were buccally positioned as determined clinically and radiographically, 30.5% were in the line of the maxillary arch and 22.5% were palatally positioned (Table 3).

Distribution of favourable/unfavourable maxillary canine position in the subjects who underwent radiographic investigation

One of the 32 subjects who underwent radiographic investigation had aplasia of the maxillary canines. Of the remaining subjects investigated, 21 had maxillary canines that were considered to have a favourable position for eruption.

There were 11 maxillary canines, in 10 subjects, that had an unfavourable

TABLE 4: Distribution by sex of favourable/unfavourable maxillary canine position

		Male	Female	Total
Eruption position	Favourable	17	9	26
Left	Unfavourable	2	3	5
Eruption position	Favourable	17	8	25
Right	Unfavourable	2	4	6
Total		38	24	62

position for eruption and were considered to be potentially ectopic. Excluding the case with aplasia of the maxillary canines, 1.1% of the maxillary canines showed a potential ectopic eruption position. Six of the ten subjects with canines identified as unfavourable were female and four were male. This was considered not to be statistically significant ($p = 0.091$). We therefore can accept the null hypothesis that there is *not* an unusually high incidence of potentially ectopic maxillary canines in female subjects.

Three of the maxillary canines with an unfavourable position were in subjects aged 11 years and seven were in subjects aged 12 years (Table 4).

Inter-examiner agreement

The process of identifying the buccopalatal position of the maxillary canines and determining if their position was favourable or unfavourable was tested by a second clinician using the criteria set out under 'Radiographic examination' in our materials and methods, and the inter-examiner agreement was evaluated. There was 100% agreement on the buccopalatal position of the maxillary canines. There was 98% agreement on the favourable/unfavourable position of the maxillary canines, with an initial disagreement over one of the maxillary canines in the 32 subjects who underwent radiographic examination.

Clinical status of permanent maxillary lateral incisors at initial examination

Of the maxillary lateral incisors in the 480 subjects examined, 12 (1.25%) were missing, 108 (11.25%) were peg shaped and 67 (6.9%) were small. The distribution of lateral incisor anomalies was not statistically significant between males and females (p value = 0.25).

Clinical status of permanent maxillary lateral incisors in those subjects with potentially ectopic maxillary canine(s)

In subjects identified with potentially ectopic maxillary canines, none had missing maxillary lateral incisors, but in the 10 subjects identified, 10 out of the 20 lateral incisors (50%) presented as small, or peg shaped (anomalous). Six of the 11 (55%) maxillary lateral incisors adjacent to potentially ectopic canines were small or peg shaped (anomalous).

The prevalence of missing or anomalous maxillary lateral incisors adjacent to potentially ectopic canines was not significantly greater than the prevalence in those without ectopic canines ($p=0.45$). However, due to the small numbers in the subgroup with potentially ectopic canines, the power to detect a significant difference between the groups was only 11%.

We are therefore unable to reject the null hypothesis that there is *not* an unusually high incidence of anomalous or missing lateral incisors in subjects with potentially ectopic maxillary canines (Table 5).

TABLE 5: Clinical status of permanent maxillary lateral incisors in subjects with potentially ectopic maxillary canines.

	Male			Female			Total	
	Left	Right	N	Left	Right	N	N	(%)
Missing	0	0	0	0	0	0	0	
Peg-shaped	2	2	4	0	0	0	4	(20%)
Small	1	1	2	2	2	4	6	(30%)
Normal	1	1	2	4	4	8	10	(50%)
Total	4	4	8	6	6	12	20	(100%)

Distribution of incisor classification

The distribution of incisor classification in patients with potentially ectopic canines did not differ significantly from the distribution in those without ectopic canines ($p = 0.43$). However, due to the small numbers in the subgroup with potentially ectopic canines, the power to detect a significant difference between the groups was only 25%.

We are therefore unable to reject the null hypothesis that there is *not* an unusually high incidence of Class II div 2 malocclusion in patients with potentially ectopic maxillary canine teeth.

Discussion

In this study of Irish schoolchildren aged between 11 and 14 years, 783 (81.6%) of the permanent maxillary canines were erupted at the time of examination. One of the 480 subjects was found to have aplasia of both the maxillary canines.

Radiographic investigation was indicated in all individuals with a non-palpable canine(s), or those with palpable canines who had a distinctive difference between left and right sides. Of the 480 subjects who underwent the initial screening examination, a total of 32 (6.6%) had clinical indications for radiographic examination according to the criteria that had been set out.

Compared to similar studies, the smaller number of subjects who underwent radiographic examination in the present study may be explained by the fact that the mean age was higher in the sample compared to the Ericson and Kurok study.¹² It is therefore more likely that some of the sample would have reached a stage of dental development that would have precluded the need to have radiographic examination at the time of clinical examination.¹³

The greater number of peg-shaped and small maxillary lateral incisors detected in our study may be explained by the fact that the teeth were measured with a clear plastic ruler. Brin and Becker used a sliding calliper or, when access was difficult, a pair of dividers and a ruler.¹⁴ This method of examination is likely to have been more accurate and less likely to overestimate the numbers of anomalous lateral incisors.

In this study, the maxillary canines were classified as having an unfavourable path of eruption if they were considered to be in the line of the arch or palatal to the line of the arch, and if they exhibited one or both of the following criteria:

1. The tip of the maxillary canine was mesial to the long axis of the adjacent incisor.
2. The angle formed between the long axis of the canine and the vertical axis of the OPT was greater than 30 degrees.

There were 11 maxillary canines, in 10 subjects, that had an unfavourable

position for eruption and were considered to be potentially ectopic. Excluding the case with aplasia of the maxillary canines, 1.1% of the maxillary canines in this sample showed a potentially ectopic eruption position.

Ericson and Kurol carried out a clinical examination on 3,000 10- to 15-year-old children.¹⁵ A prevalence of 1.5% of ectopically erupting maxillary canines in the subjects was found. Ectopically erupting canines were seen more frequently in girls than in boys.

The smaller number of potentially ectopic maxillary canines in our sample may be due to the fact that canines that were determined as being positioned labial/buccal to the line of the arch were not included, as it was considered that these buccally displaced maxillary canines were likely to erupt, albeit delayed, in a buccally displaced position. This is unlike the findings in the Ericson and Kurol studies where maxillary canines that were determined to be positioned labial to the line of the maxillary arch were included in the group of potentially ectopic maxillary canines.^{12,15}

In the current study, six of the ten subjects with canines identified as unfavourable were female and four were male. This was considered not to be statistically significant (p value = 0.091). Although significant associations between the incidence of potentially ectopic canines and gender were not confirmed in this population, the results are not conclusive due to inadequate power. Likewise, significant associations between the incidence of potentially ectopic canines and anomalous or missing adjacent maxillary lateral incisors or incisor classification were not confirmed in this population due to a lack of power.

Conclusions

In this cross sectional survey of a sample of Irish schoolchildren aged between 11 and 14 years, 1.1% of the maxillary canines showed a potentially ectopic eruption position. The prevalence of potentially ectopic maxillary canines and associated dental features in this study were found to be similar to those in other studies and the practice of careful supervision and early diagnosis of any eruption disturbances of the permanent maxillary canines continues to be considered important due to the risks associated with their eruption.¹⁻⁶

Acknowledgements

I wish to thank all the staff of the HSE Orthodontics Department for their help in organising and executing the screening of almost 500 children. I would like to thank Dr Alan Kelly for his statistical advice, and Ann Marie Boon for her help with data entry.

References

1. **Leivesley, W.D.** Minimising the problem of impacted and ectopic canines. *J Dent Child* 1984; 51: 367-370.
2. **Rayne, J.** The unerupted maxillary canine. *Dent Pract* 1969; 19: 194-203.
3. **Bergstrom, K.** *Rontgenorthopantomogram av skolbarn.* Tandlakartidningen 1976; 68: 1201-1207.
4. **Lind, V.** Overkashorntandens eruptionsproblem. *Ortodontisk bettvård* 1977; 81: 1066-1075.
5. **Williams, B.H.** Diagnosis and prevention of maxillary cuspid impaction. *Angle Orthod* 1981; 51: 30-40.
6. **Becker, A., Smith, P., Behar, R.** The incidence of anomalous maxillary incisors in relation to palatally displaced cuspids. *Angle Orthod* 1981; 51: 24-29.
7. **Kettle, M.A.** Treatment of the unerupted maxillary canine. *Transactions of the British Society for the Study of Orthodontics* 1957: 74-87.
8. **Becker, A., Zilberman, Y.** Root length of lateral incisors adjacent to palatally displaced maxillary cuspids. *Angle Orthod* 1984; 54: 218-225.
9. **Ericson, S., Kurol, J.** Longitudinal study and analysis of clinical supervision of the maxillary canine eruption. *Community Dent Oral Epidemiol* 1986; 14: 172-176.
10. **Dachi, S.F., Howell, A.** A survey of 3874 routine full mouth radiographs. *Oral Surg Oral Med Oral Path* 1961; 14: 1165-1169.
11. **Montelius, G.A.** Impacted teeth. A comparative study of Chinese and Caucasian Dentitions. *J Dent Res* 1932; 12: 931.
12. **Ericson, S., Kurol, J.** Radiographic assessment of maxillary canine eruption in children with signs of eruption disturbance. *Eur J Orthod* 1986; 8: 133-140.
13. **Thilander, B., Jacobsson, S.O.** Local factors in impaction of maxillary canines. *Acta Odontol Scand* 1986; 26: 145-168.
14. **Brin, I., Becker, A.** Position of the maxillary permanent canine in relation to anomalous or missing lateral incisors, a population study. *Eur J Orthod* 1986; 8: 12-16.
15. **Ericson, S., Kurol, J.** Radiographic examination of ectopically erupting maxillary canines. *Am J Orthod and Dentofacial Orthop* 1987; 91: 483-492.

Primary Ewing sarcoma of the coronoid process of mandible

Abstract

Ewing sarcoma (ES) is a rare, primary malignancy of the bone that occurs mainly in childhood and early adolescence. ES usually occurs in long bones of the axial skeleton. Although uncommon in the jaws, ES at this site is most likely to occur in the posterior mandible. The outcome for patients with localised disease has improved over the decades, due to better combination chemotherapies and better methods of local control. We present the clinicopathologic features and management of a case of ES that developed in the left coronoid process of the mandible of a 31-year-old male. Chemotherapy and, later, a segmental mandibulectomy were used to achieve local control. A fibula-free flap repair was performed with good aesthetic results. This case elucidates the importance of the interdisciplinary approach required for the evaluation and treatment of this aggressive neoplasm.

Keywords: Ewing sarcoma; mandible; round cell tumour; immunohistochemistry.

Journal of the Irish Dental Association 2016; 62 (3): 167-170.

Introduction

James Ewing first described Ewing sarcoma (ES) in 1921 as a tumour of endothelial origin.¹ At present, it is considered to have a neuroectodermal origin, since it shares the same reciprocal 11:22 translocation as primitive neuroectodermal tumours and exhibits some histologic and immunohistochemical similarities with these tumours.² ES comprises 4% to 15% of all primary bone tumours³ and 1% of all malignant tumours in children.⁴ The lower skeleton accounts for about two-thirds of all cases.⁵ The facial skeleton is involved quite rarely⁶ (0.74% of incidence), with the mandible being the most commonly affected facial bone.⁵ In this anatomic location, the most

frequent initial clinical manifestation is local swelling with or without pain.⁵ We report a case of a 31-year-old male with a primary ES localised at the coronoid process of the mandible. After undergoing the standard protocol with multi-agent high-dose chemotherapy, segmental mandibulectomy was used to achieve local control. A fibula-free flap repair was performed with good aesthetic results.

Case report

A 31-year-old male presented with a three-month history of intermittent low-grade fever, sharp intermittent pain in the right mandibular teeth, and



Dr Husain Sabir MDS
(Oral Medicine and Radiology)

Dr S Kumbhare MDS
(Oral Medicine and Radiology)
Government Dental College &
Hospital, Nagpur (MS), India

Dr S Sachdeva MDS
(Oral Medicine and Radiology)
Surendera Dental College and
Research Institute,
Sriganganagar (Raj), India

Dr S Pande MDS
(Oral Medicine and Radiology)
Government Dental College &
Hospital, Nagpur (MS), India

Dr N Gajbhiye MDS
(Oral Medicine and Radiology)
Government Dental College &
Hospital, Nagpur (MS), India

Corresponding author:

Dr Husain Sabir MDS (Oral Medicine and Radiology)
Bhabha College of Dental Sciences & Research Centre, Bhopal (MP), India
T: +91 (9644) 577753 E: husain.sabir2000@gmail.com



FIGURE 1: Well-defined swelling on the right parotid region.



FIGURE 2: Intraoral examination showing multiple root pieces.



FIGURE 3: Panoramic radiograph revealing multiple root pieces and impacted 13.

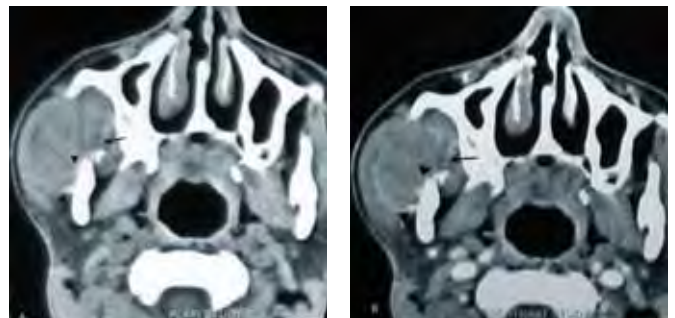


FIGURE 4: Axial contrast-enhanced CT scan of right mandibular lesion. Note the large, heterogeneous mass involving the ramus and coronoid process (arrow) with sunburst type of periosteal reaction (arrowheads) and near complete destruction of the coronoid process.

progressively enlarging facial swelling. Physical examination revealed facial asymmetry, with a tender and swollen mass on the right parotid region of his face (Figure 1). The swelling was firm, well defined and fixed on palpation. There was no history of trauma and bilateral submandibular lymph nodes were noted to be enlarged, soft, mobile and tender. His past medical history was unremarkable, and there was no family history of note. There was no sign of paraesthesia or facial nerve weakness. The overlying skin appeared normal in colour and texture. Intraoral examination showed multiple root pieces in both arches (Figure 2). The clinical findings prompted a provisional diagnosis of right masticatory space infection or benign salivary gland tumour. Panoramic radiograph demonstrated multiple root pieces in both arches with no other significant findings (Figure 3). The patient underwent plain and contrast computed tomography (CT) of the maxilla and mandible, which revealed a lytic expansile lesion with moderately heterogeneously enhancing soft tissue involving the ramus and coronoid process of the right hemimandible of

approximately $3.8 \times 5.1 \times 6.9$ cm in size, with sunburst type of periosteal reaction and near complete destruction of the coronoid process (Figure 4). The features and extension suggested a malignant neoplastic lesion of the mandibular coronoid process. Differential diagnoses included osteosarcoma, ES, rhabdomyosarcoma, Hodgkin's lymphoma and metastatic diseases. Haematological and biochemical investigations (serum lactate dehydrogenase, alkaline phosphatase) were within normal limits, except for mild thrombocytosis.

Fine needle aspiration cytology (FNAC) from the lesion showed cells with round to oval nuclei, scanty cytoplasm with mild anisonucleosis and coarsely granular chromatin. Nuclear moulding was also seen. Basement membrane material was absent. The features suggested round cell tumour. After this, the patient underwent an open incisional biopsy under local anaesthesia. Histologic examination showed sheets of small round cells with scanty cytoplasm, separated by a fibrovascular stroma (Figure 5). Areas of haemorrhage and

necrosis were seen. Tumour infiltration was seen in the muscle and bone. Sections from the lymph node showed reactive hyperplasia with no evidence of metastasis. The cell cytoplasm was positive for periodic acid-Schiff stain and diastase labile, which demonstrated glycogen content (Figure 6). The cells were positive for CD99 and vimentin (Figures 7 and 8) and were negative for synaptophysin, chromogranin, cytokeratins, desmin, myogenin, and CD45. The histologic diagnosis was most consistent with ES. Fluorescence in-situ hybridisation (FISH) analysis using EWSR1 break apart probe confirmed ES. Cells demonstrated positivity for rearrangement by FISH analysis; a split signal was noted in 88.7% of the cells.

Subsequently, the patient was referred to a specialised oncology centre for further evaluation and treatment. Staging revealed no distant metastasis. Chest radiographs showed no abnormal findings. Positron emission tomography – computed tomography (PET-CT) revealed increased fluorodeoxyglucose uptake at the site of the primary mandibular lesion with no evidence of lung or other metastases. No evidence of bone marrow metastases was found on bilateral bone marrow biopsies. An initial chemotherapeutic regimen of vincristine, doxorubicin and cyclophosphamide, alternating with ifosfamide and etoposide (three cycles of VDC/IE) was started following the Children's Oncology Group protocol for localised ES AEWS0031. CT follow-up after nine weeks showed an excellent response to this treatment. Following this, segmental mandibulectomy under general anaesthesia was done with the coronoid process removed, taking adequate margins medially. A fibula-free flap repair was performed with good aesthetic results. The postoperative recovery was uneventful. The histologic examination of the resected mandible showed no viable tumour cells, and all the margins were negative for tumour. Hence postoperative radiotherapy was not considered. The patient's chemotherapy protocol was continued for eight months (10 cycles of VDC/IE) after the operation. Currently two years post treatment, the patient is free of any residual or recurrent disease, with no evidence of metastasis as noted by physical examination, incisional biopsy, local imaging, chest x-ray and whole body magnetic resonance imaging (MRI). On oral examination, occlusion is nearly perfect. The patient reported normal mastication without trismus, and is able to eat a regular diet.

Discussion

ES are malignant small, round, blue cell tumours that primarily arise in bone and soft tissue with limited neuroepithelial differentiation.⁷ It is the second most common primary bone malignancy in childhood and adolescence. ES is rare before the age of five and after 30 years of age.^{8,9} The disease is uncommon in black people.⁵ The male:female ratio is 2:1.⁴ The most common location for ES is in the long bones of the extremities and pelvis, which accounts for 58% and 20% of all the documented cases, respectively.³ Lungs and bones are the most common sites for the metastasis,¹⁰ and it rarely spreads to lymph nodes.⁸ Only 3% arise in the skull and 7% in the ribs.³ Although the mandible is the primary site for this disease in the head and neck, its occurrence is very rare (0.7% of all sites).⁶ Only 10% of mandibular ES are metastatic lesions; the other 90% are primary tumours.^{2,3} To the knowledge of the authors, this is the first reported case of primary ES involving the coronoid process of the mandible.

The most common first clinical manifestation is a slow-growing, firm, enlarging mass with or without pain. Systemic symptoms such as fever may also be present.^{8,9,11} In the oral cavity, swelling of the affected area is seen along with pain, loosening of teeth, and paraesthesia.^{5,12} Radiographically, ES presents as

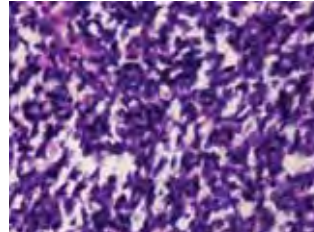


FIGURE 5: Photomicrograph showing sheets of uniform undifferentiated small round cells with scanty cytoplasm separated by fibrovascular stroma. Uniformity of nuclei and absence of nucleoli is noted (Hematoxylin-eosin x400).

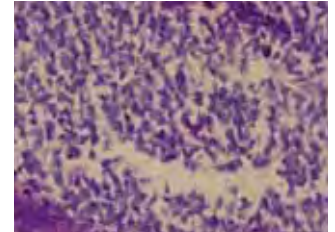


FIGURE 6: Photomicrograph showing cell cytoplasm positive for periodic acid Schiff stain (PAS x400).

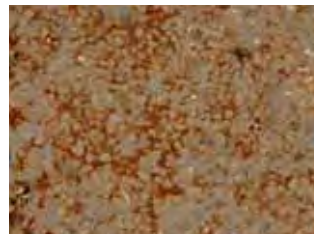


FIGURE 7: Ewing sarcoma with diffuse, membranous CD99 immunostaining (CD99 x200).

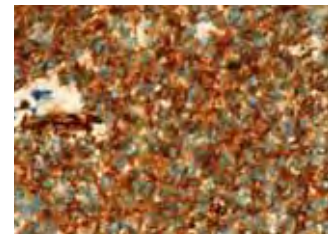


FIGURE 8: Ewing sarcoma with diffuse vimentin immunostaining (vimentin x200).

a poorly defined, lytic, permeative lesion. However, “onion skin” periosteal reaction, commonly seen in long bones, occurs rarely in the mandible.³ In the current case, no radiographic abnormality was detected on orthopantomogram (OPG), as the coronoid process is masked by the soft tissue shadow of the tongue. CT is necessary for assessing tumour calcification and bony involvement, destruction, or invasion. At the same time, it allows three-dimensional reconstruction, indispensable for planning surgical treatment and radiation therapy. MRI is necessary for delineation of medullary bone involvement and demonstration of soft tissue extension. The absence of artifacts created by teeth, which may hamper tumour assessment by CT, is a further advantage of MRI in this anatomic location.¹³ It is also a good imaging technique for monitoring the effects of therapy, since it can help to identify the presence of a recurrent or residual tumour.¹⁴ However, the medical literature reports no specific MRI feature that distinguishes ES of the mandible from other mandibular tumours, such as osteosarcoma or malignant lymphoma, in a conclusive manner. Hence, definitive diagnosis relies on histology, as the mandibular intramedullary signal intensity alteration (due to neoplastic invasion of the bone marrow) is similar in all these tumours.¹⁵

Histologically, ES is composed of small round cells with oval or round nuclei and scarce clear cytoplasm, arranged in sheets, with a differential diagnosis that

includes small cell osteosarcoma, malignant lymphoma, neuroectodermal tumours, and metastatic neuroblastoma.^{4,11} Although not specific, most ES express transmembrane protein CD99, in a membranous staining pattern.⁹ Non-random translocation, leading to the fusion of the EWS gene with one of the members of the erythroblast transformation sequence (ETS) family, is molecularly the defining characteristic of ES. The most common translocation is t (11;22)(q24;q12), which juxtaposes a portion of the EWS gene on chromosome 22q with the FLI-1 gene on 11q.^{8,9}

Patients with localised ES are treated with systemic chemotherapy in combination with local therapy. The local therapy can be radiotherapy versus surgical resection versus combination, but without cytostatic chemotherapy patients will eventually succumb to distant metastases.^{13,16} All current trials employ three to six cycles of initial chemotherapy after biopsy, followed by local therapy and another six to ten cycles of chemotherapy, usually applied at three-week intervals. Treatment duration is thus 10–12 months. Agents considered most active include doxorubicin, cyclophosphamide, ifosfamide, vincristine, dactinomycin and etoposide. Virtually all active protocols are based on four- to six-drug combinations of these substances. Despite lively debate, complete surgery, where feasible, is regarded as the best modality of local control, given the higher risk of local recurrence when radiotherapy is used as sole treatment for the primary tumour.¹⁷ Radiotherapy alone should be applied if complete surgery is impossible or as a neoadjuvant therapy, and chemotherapy to suppress potential micrometastasis and reduce the size of the tumour prior to surgery.^{17,18} Postoperative radiotherapy should be given in cases of inadequate surgical margins and discussed where histological response in the surgical specimen is poor (i.e., >10% viable tumour cells). In the case presented, combination therapy consisting of chemotherapy and surgical excision was planned, as the patient showed no signs of metastasis and no viable tumour cells in the resected specimen.¹⁷ Targeted therapies for ES are currently under research. Clinical trials for targeted monoclonal antibodies in combination with chemotherapy are being studied based on ES expression of insulin-like growth factor receptors.^{8,19}

Follow-up should include both a physical examination of the tumour site and an assessment of the function and possible complications of any reconstruction. Local imaging and chest x-ray/CT should be the norm. Recommended intervals for follow-up after completion of chemotherapy are: every six weeks to three months for the first two years; every two to four months for years three to four; every six months for years five to ten; and, thereafter every six to 12 months according to local practice.¹⁷

The prognostic factor for ES includes age, tumour size and location, with the presence or absence of metastasis at the time of diagnosis being the most important.^{7,8,19} Approximately 25% of patients with ES present with clinically detectable metastases in the lung, in bone, and/or in bone marrow at initial diagnosis.¹⁹ Exact figures for metastases from the mandible are unavailable given the rarity of ES in this primary site.^{11,19} However, the five-year survival rate of ES with metastases at presentation is approximately 20%, while in the absence of metastasis survival improves to around 60% to 75%.⁷ Younger children have a better prognosis than older adolescents and young adults.^{16,18}

A tumour volume of greater than 100ml at the time of diagnosis has been associated with a poor outcome. Interestingly, high tumour volumes also correlated with increasing age and metastatic disease.¹⁶ Tumours arising in jaw bone have a better prognosis than those located in long bones.^{16,18} Clinical features such as systemic symptoms (fever, anaemia), high erythrocyte

sedimentation rate, elevated serum lactate dehydrogenase levels and thrombocytosis are related to poor prognosis.¹⁸

Our case adds an additional report of ES, but in the peculiar location of the coronoid process of the mandible. In our case, clinical features, the conventional radiography (OPG) and age were suggestive of a benign salivary gland tumour. This case illustrates the interdisciplinary approach required for the evaluation and treatment of this aggressive neoplasm.

References

1. Ewing, J. Diffuse endothelioma of bone. *Proc NY Pathol Soc* 1921; 21: 17–24.
2. Berk, R., Heller, A., Heller, D., Schwartz, S., Klein, E.A. Ewing's sarcoma of the mandible: a case report. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 1995; 79: 159–162.
3. Wang, C.L., Yacobi, R., Pharoah, M., Thorner, P. Ewing's sarcoma: metastatic tumor to the jaw. *Oral Surg Oral Med Oral Pathol* 1991; 71: 597–602.
4. Da Fonseca, M.A., Abrams, R.B. Ewing's sarcoma of the mandible in a young patient: case report. *Pediatr Dent* 1992; 14: 402–404.
5. Wood, R.E., Nortje, C.J., Hesselting, P., Med, C., Grotepass, F. Ewing's tumor of the jaw. *Oral Surg Oral Med Oral Pathol* 1990; 69: 120–127.
6. Dahlin, D.C., Unni, K.K. Introduction and scope of study. In: Dahlin, D.C., Unni, K.K. (eds.). *Bone tumors. General aspects and data on 8,542 cases*. Springfield, IL: Charles C Thomas; 1986: 3–17.
7. Tsokos, M., Alaggio, R.D., Dehner, L.P., Dickman, P.S. Ewing sarcoma/peripheral primitive neuroectodermal tumor and related tumors. *Pediatr Dev Pathol* 2012; 15: 108–126.
8. Ludwig, J.A. Ewing sarcoma: historical perspectives, current state-of-the-art, and opportunities for targeted therapy in the future. *Curr Opin Oncol* 2008; 20: 412–418.
9. Khoury, J.D. Ewing sarcoma family of tumors. *Adv Anat Pathol* 2005; 12: 212–220.
10. Grier, H.E. The Ewing family of tumors: Ewing's sarcoma and primitive neuroectodermal tumors. *Pediatr Clin North Am* 1997; 44: 991–1004.
11. Vaccani, J.P., Forte, V., de Jong, A.L., Taylor, G. Ewing's sarcoma of the head and neck in children. *Int J Pediatr Otorhinolaryngol* 1999; 48: 209–216.
12. Arafat, A., Ellis, G.L., Adrian, J.C. Ewing's sarcoma of the jaws. *Oral Surg Oral Med Oral Pathol* 1983; 55: 589–596.
13. Schultze-Mosgau, S., Thorwarth, M., Wehrhan, F., Holter, W., Stachel, K.D., Grabenbauer, G., et al. Ewing sarcoma of the mandible in a child: interdisciplinary treatment concepts and surgical reconstruction. *The Journal of Craniofacial Surgery* 2005; 16: 1040–1146.
14. Van der Woude, H.J., Bloem, J.L., Hogendoorn, P.C. Preoperative evaluation and monitoring chemotherapy in patients with high grade osteogenic and Ewing's sarcoma: review of current imaging modalities. *Skeletal Radiol* 1998; 27: 57–71.
15. Van der Woude, H.J., Bloem, J.L., Pope, T.L. Magnetic resonance imaging of the musculoskeletal system. *Clin Orthop* 1998; 347: 272–286.
16. Ganjoo, K.N., Patel, S. The treatment outcome for adult patients with Ewing's sarcoma. *Curr Oncol Rep* 2013; 15: 372–377.
17. Athanasou, N., Bielack, S., De Alava, E., Dei Tos, A.P., Ferrari, S., Gelderblom, H., et al. Bone sarcomas: ESMO clinical practice guidelines for diagnosis, treatment and follow-up. *Annals of Oncology* 2010; 21: 204–213.
18. Brazao Silva, M.T., Fernandes, A.V., Faria, P.R., Cardoso, S.V., Loyola, A.M. Ewing's sarcoma of the mandible in a young child. *Braz Dent J* 2010; 21 (1): 74–79.
19. Ko, E., Brouns, E.R.E.A., Korones, D.N., Pochal, W.F., Philipone, E.M., Zegarelli, D.J., et al. Primary Ewing sarcoma of the anterior mandible localized to the midline. *Oral Surg Oral Med Oral Pathol Oral Radiol* 2013; 115: e46–e50.

Immediate occluding definitive partial fixed prosthesis versus non-occluding provisional restorations – four-month post-loading results from a pragmatic multicenter randomised controlled trial

Heinemann, F., Grufferty, B., Papavasiliou, G., Dominiak, M., García, J.J., Trullenque-Eriksson, A., et al.

Purpose

To compare the clinical outcome of dental implants restored with definitive occluding partial fixed prostheses within one week after implant placement, with immediate non-occluding provisional restorations, which were to be replaced by definitive prostheses after four months.

Materials and methods

A total of 50 partially edentulous patients treated with one to three dental implants, at least 8.5mm long and 4.0mm wide, inserted with a torque of at least 35Ncm, were randomised into two groups of 25 patients each, to be immediately loaded with partial fixed prostheses. Patients in one group received one definitive screw-retained metal-ceramic prosthesis in occlusion within one week of placement. Patients in the other group received one non-

occluding provisional acrylic reinforced prosthesis within 24 hours of implant placement. Provisional prostheses were replaced after four months by definitive ones. The follow-up for all patients was four months post loading. Outcome measures were prosthesis and implant failures, any complications, peri-implant marginal bone level changes, aesthetic evaluation by a clinician, patient satisfaction, chair time and number of visits to the dental office from implant placement to delivery of definitive restorations.

Results

No patient dropped out. Two immediately occlusally loaded implants with their related definitive prostheses (8%) failed early (difference in proportions = 0.08; 95% CI: -0.03 to 0.19; P = 0.490). Four complications occurred in the occlusal group versus one in the non-occlusal group (difference in proportions = 0.12; 95% CI: -0.04 to 0.28; P = 0.349). Four months after loading, patients subjected to non-occlusal loading lost an average of 0.72mm of peri-implant bone versus 0.99mm in patients restored with occluding definitive partial fixed prostheses. There were no statistically significant differences for marginal bone level changes between the two groups (mean difference = -0.27mm; 95% CI: -0.84 to 0.30; P = 0.349). The differences for aesthetic scores showed no statistical significance (8.26 versus 7.58; P = 0.445); the same was seen for aesthetics evaluated by



NORTHBROOK CLINIC X RAY

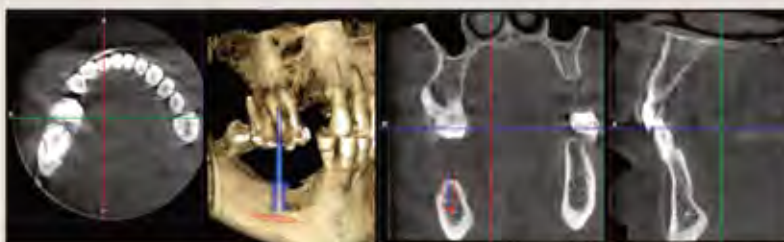
Make quality of life a reality with our services.

OUR X-RAY DEPARTMENT NOW HAS THE LATEST PLANMECA SOFTWARE AND HARDWARE TO DELIVER THE HIGHEST QUALITY X-RAYS AND LOWEST RADIATION EXPOSURE EVER.

- CT quality doubled for half the radiation.
- Latest endo programme allows mapping of internal tooth/root anatomy to visualise extra canals, etc.
- Unique OPG technology produces a 10-layered image that can be scrolled through for the clearest layer to print.
- Walk-in service for OPG and Cephs during opening hours.
- CT appointments can usually be arranged same day or within 24 hours.
- All x-rays available in hard copy, email or disc.
- Optical scanning service in open STL format available for implant/Surgiguide construction.
- Referral forms can be emailed – all patients for x-rays must have a referral letter.
- Free course for referral on CT reading and interpretation.

X-RAY DEPT.
NORTHBROOK CLINIC,
NORTHBROOK RD.
RANELAGH
DUBLIN 6
D06 CH04

T 01-496 7111
F 01-496 7100
E NORTHBROOKXRAYDEPARTMENT@GMAIL.COM



patients (Mann-Whitney U test: $P = 0.618$). Patients in the non-occlusal group were significantly more satisfied with the function of their implant-supported prostheses (Mann-Whitney U test: $P = 0.039$). Significantly less chair time (mean difference = -28.4 min; 95% CI: -48.82 to -7.99 ; $P = 0.007$) and fewer visits (mean difference = -1.88 ; 95% CI: -2.43 to -1.33 ; $P < 0.001$) were required for the immediate definitive prosthesis group.

Conclusion

This study did not provide a conclusive answer but may suggest that provisional prostheses non-occlusally immediately loaded may increase patient functional satisfaction, and reduce chair time and the number of visits, with respect to definitive prostheses immediately loaded in functional occlusion.

Eur J Oral Implantol 2016; 9 (1): 47-56.

Effect of maternal use of chewing gums containing xylitol on transmission of *Mutans streptococci* in children: a meta-analysis of randomised controlled trials

Lin, H.K., Fang, C.E., Huang, M.S., Cheng, H.C., Huang, T.W., Chang, H.T., et al.

Background

Mutans streptococci (MS) are the major causative bacteria involved in human dental decay. Habitual consumption of xylitol has been proven to reduce MS levels in saliva and plaque.

Aim

To evaluate the effect of the maternal use of xylitol gum on MS reduction in infants.

Design

This was a structured literature review and meta-analysis. A random effects model was used to assess the relative risks of the incidence of MS in the saliva or plaque of children who were six, nine, 12, 18, and 24 months old.

Results

We reviewed 11 randomised controlled trials (RCTs) derived from five research teams that included 601 mothers. Our results indicated that the incidence of MS in the saliva or plaque of the infants was significantly reduced in the xylitol groups (risk ratio: 0.54; 95% confidence interval: 0.39-0.73, at 12-18 months) and (risk ratio: 0.56; 95% confidence interval: 0.40-0.79, at 36 months)

compared with the control groups. The long-term effect of maternal xylitol gum exposure on their children’s dental caries was controversial.

Conclusion

Habitual xylitol consumption by mothers with high MS levels was associated with a significant reduction in the mother-child transmission of salivary MS.

Int J Paediatr Dent 2016; 26 (1): 35-44.

EFP Delphi study on the trends in periodontology and periodontics in Europe for the year 2025

Madianos, P., Papaioannou, W., Herrera, D., Sanz, M., Baeumer, A., Bogren, A., et al.

Aim

The aim was to assess the potential trends in periodontology and periodontics in Europe that might be anticipated by the year 2025 using the Delphi method.

Material and methods

The opinion of 120 experts was sought through the use of an open-ended questionnaire, developed by an advisory group, containing 40 questions concerning the various trends in periodontology.

Results

The experts (113 responders) expect a stabilisation of the prevalence of periodontitis, both for the chronic as well as the aggressive cases, but an increase in implant-related diseases up to the year 2025. Concurrently, the importance of implants is seen to be increasing. The experts foresee an increased demand for postgraduate periodontology and implantology training. This is mirrored in an increase in publications on implant dentistry and an increase in the demand and need for training. Concerning the patients, better-informed individuals seeking more routine check-ups are expected.

Conclusion

A continued need for specialised periodontists, but also for well-trained dental practitioners, is foreseen for the next decade in Europe. Apart from periodontology, they will be increasingly exposed to, and trained in, implant dentistry.

QUIZ ANSWERS

Questions on page 139

1. Answers b) and d) preclude a patient from having IV conscious sedation. A BMI greater than 35 and/or poorly controlled diabetes would mean the patient is ASA III and not suitable for treatment in a primary care setting. Only patients who are ASA I or II are suitable for treatment at this level. A history of IV drug abuse is not a contraindication but is relevant, as cannulation is likely to be difficult and the patient may have a higher tolerance to benzodiazepines.
2. The IDC’s three requirements for a wide margin of safety during conscious sedation are:
 - a) verbal communication at all times;
 - b) intact pharyngeal and laryngeal reflexes; and,
 - c) patient breathes spontaneously without respiratory obstruction.
3. A reading of 92% SpO₂ requires immediate cessation of the dental procedure and action to ensure patient safety. Actions:
 - check for visual signs of respiratory failure;
 - ensure that finger probe is still *in situ*;
 - open airway and ensure that the patient is breathing well (no breath holding);
 - administer supplemental O₂ if no recovery or persistently low readings; and,
 - proceed to reversal agent if required.

OBTURATION
INNOVATION

BioRoot™ RCS

Root Canal Sealer

Superior seal and so much more



We know that failure of a root canal treatment can have severe consequences for you and your patients.

With BioRoot™ RCS, move to a new generation of mineral obturation offering you an innovative combination of features:

- Outstanding Seal
- Antimicrobial properties
- Promotes peri-apical healing
- Easy obturations and follow-up

ACTIVE
BIOSILICATE
TECHNOLOGY

BioRoot™ RCS. **Succeed.**

For more information call
Gerry Lavery on:
+44 (0)7836 255274
+44 (0)1622 695520
www.septodont.ie



SITUATIONS WANTED

Irish dentist with 15+ years' experience seeks evening/Saturday work in the Galway area. Tel: 086-128 7318 after 6.00pm.

Dentist with 20+ years' experience looking for a full-time opportunity in either Sligo/Donegal or NW. Flexible with working hours, appreciate Saturdays also, start negotiable. Tel: 087-142 4742.

SITUATIONS VACANT

Full-time, permanent associate position. Private only, busy, modern Dublin practice. Experience, CV and references essential. Email dublindentalsearch@gmail.com.

Associate required for one day per week, Wednesday, for busy general practice in Terenure. Experience necessary. Please email CV to dentistterenured6w@gmail.com.

A beautiful, friendly and busy clinic in the heart of Swords, Co. Dublin, is looking for an enthusiastic dental associate committed to patient care and to learning new skills. The successful candidate should have three years' clinical experience. Email eoinoneill101@gmail.com.

Full- and part-time associate position available in new multi-surgery practice in Dublin 2. Email hello@dentalhouse.ie.

Cork City practice looking for part-time associate. Flexibility essential. Four sessions a week with some Saturdays and holiday cover. Email corkcityassociate@gmail.com.

Co. Clare (Ennis and Kilrush). Motivated, friendly associate required three days a week initially. Option of expense sharing (if desired) after a short period. Established 20 years, computerised, OPG, digital x-rays. Email niallmcrty@gmail.com.

We are looking for a team player to work part-time as an associate dentist. Some years' experience in practice is preferable. Private practice located in southside Dublin. If interested please forward your CV to tfbc16@gmail.com.

A busy Co. Meath practice requires a part-time/full-time associate dentist. Fully computerised private practice. Minimum of three years' experience. Please contact piersdentaltrim@gmail.com or call 086-336 9415 for more information after 6.00pm. Email CVs to piersdentaltrim@gmail.com.

Associate required for established practice in Ranelagh within a primary care centre. Modern surgery, computerised, full dental and administrative support. Candidates should be quality driven, have good communication skills, be productive. Minimum two years' experience. CV to andrewcox204@gmail.com. Part-time associate required for very busy South East practice. Fully computerised. Full support staff. Private and GMS mix. Reply to catriona7339@gmail.com.

Friendly, hardworking associate needed to join us for part-time work in our small, longstanding practice in Glasnevin. Days currently available are Thursday and Friday. Please send CV and cover letter to glasnevindental@gmail.com.

Full-time associate wanted for busy practice in Letterkenny. Experience preferable. DTSS/DTBS and private practice. Contact Leona on 074-912 2409, or email ldohertymcgee@hotmail.com.

Experienced associate required to join modern practice in east Cork commuter town. Fully computerised, digital x-ray, digital OPG. Initially two to three days/week, including Saturdays/late evenings with scope to expand. Opportunity to cover holiday period of existing dentist. Email npdent@gmail.com.

Full-time associate required for a busy practice in Co. Mayo. Full book, OPG, hygienist and excellent support team. Monday – Friday 9.00am to 5.00pm. Minimum two years' experience. Email CV to dentapplication340@gmail.com.

Ireland northeast – one hour from Dublin. Full/part-time experienced associate for long-established seven-surgery, award-winning, multi-disciplinary practice in Cootehill and Monaghan town. Visiting consultant orthodontist, specialist oral surgeon, full-time hygienist and excellent support staff. Email resum @drcolmsmith@gmail.com.

Dental associate to see medical card and private patients part-time in busy, modern, three-surgery dental practice in Dublin 13. Digital OPG. Fantastic surgery and dental team including treatment co-ordinator. Please email your CV to Subahu.shah@smartdentalcare.co.uk.

Dental associate required Dublin south west two days per week from July 16. Preferably with more than one years' post-qualification experience. Digital x-ray/experienced support staff. PRSI/private:medical card 60:40. Please contact wsfoster@eircom.net.

Dental associate required for mixed practice private/PRSI/GMS practice in Co. Wicklow one to two days per week. Practice fully computerised, digital x-rays and OPG. Locum required three to four days per week, June 7-24 and July 25 to August 8. Email ldental99@yahoo.ie.

Experienced associate required to join south Dublin private practice. One to two sessions per week with a view to more. Please email info@terenuredental.ie.

Dublin city centre practice requires full-time associate. Fully computerised, digital x-ray, OPG. Excellent support team and enthusiastic demographic of patients. Please send CV to jobsdental2@gmail.com.

Dental associate required Saturday and evening sessions. Cavan Town. Email frances@railwaydentalsurgery.com.

Full-time associate position available – Wexford Town. Replacing a colleague departing in September. Modern, purpose built, multi-surgery practice, digital x-ray, SOE software. Full book, full clinical freedom, support from three other colleagues. Please email rwfoyle@gmail.com with CV if interested.

Locum dentist required for three/four weeks to start end of June. Three years+ clinical experience requested. Fully computerised, modern, two-surgery practice, hygienist. Sunny southeast town of Tramore. Email bridcantwelldental@gmail.com.

Full-time associate required to join private Limerick City dental practice. Experience not essential though enthusiasm a must. Email Info@shieldsdentalcentre.ie.

Locum dentist required for busy general practice, second week of July 2016.

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, July 15, 2016**, by cheque made payable to the Irish Dental Association. 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

The maximum number of words for classified ads is 40.

If the advert exceeds 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
- ▶ Practices for Sale/To Let
- ▶ Equipment for Sale/To Let
- ▶ Positions Vacant
- ▶ Practices Wanted

Classified adverts must not be of a commercial nature. Commercial adverts can be arranged by contacting Paul O'Grady at Think Media.

Mid-west area. Minimum three years' experience. Tel: 086-287 1468, or email judyomeara@eircom.net.

Dublin Sundays – Smiles Dental is looking for a passionate dentist to join our well-established, busy Grand Canal Square practice in Dublin 2. Practice offers modern facilities and is fully computerised. Must be IDC registered. Day required Sundays. Email joanne.bonfield@smiles.co.uk.

Luxmed Dental Clinic in Blanchardstown Village, Dublin 15, looking for a dentist and hygienist to join our dental practice. Practice offers digital OPG and modern facilities. Full-time and part-time positions available. Please contact practice manager Dr Andrew Zimny, email: office@luxmed.ie, skype: andrewzimny.

Sw London. Lovely private practice in nice area requires dentist part-time, initially two to three days a week, lots of scope to expand. Must be friendly, caring, skilled with experience. Position open immediately for the right candidate. CV and covering letter only please. Aoifeboland@hotmail.co.uk.

Full-time, experienced, friendly GDP to join modern, well-established practice, computerised with excellent support team, OPG/CBCT x-rays. Candidates must be IDC registered with relevant experience and excellent communication skills. Please email CV to info@southgatedental.ie.

Motivated, friendly GDP required two days a week to join modern, well-established practice on outskirts of Galway City. Computerised, hygienist, digital x-rays, OPG. Email CV to galwayassociate2@gmail.com.

Experienced dentist required to cover maternity leave for busy west Cork practice from mid-June to mid-September with the possibility of staying on part-time thereafter. Email john@bantrydental.ie.

Enthusiastic friendly dentist wanted for practice in south Co. Dublin for extended holiday cover and thereafter one to two days per week. Computerised, digital x-rays, hygienists. Email CV to dentalassoc993@gmail.com.

Dublin – Smiles Dental is looking for a passionate dentist to join our well-established, Busy Grand Canal practice in Dublin 2. Practice offers modern facilities and is fully computerised. Must have experience and be IDC registered. Five days per week. Email joanne.bonfield@smiles.co.uk.

Kilkenny. We are looking for an ambitious dentist to join one of Kilkenny's top practices. This is a fantastic opportunity to take over a fully developed book. Mentorship provided. Long-term view essential. Email: kilkennydentaljob@gmail.com.

Dentist required on a part-time basis to join a modern, computerised, expanding dental practice in the west Dublin area. Two days initially with a view to more. Please email your CV to westdublandental@gmail.com.

Full-time dentist required for busy north east dental practice. Full-time self-employed. Immediate start. Minimum of three years' experience essential. Please forward CV along with references to bfeedental@hotmail.com.

Enthusiastic motivated dentist required for part-time position (two/three days per week) in a busy, fully computerised practice in Malahide, Co. Dublin. Minimum three years' post qualification practice experience desirable. Reply with CV to info@malahidedentalcare.ie.

Full-time dentist required for busy north Dublin dental practice. Modern, vibrant and friendly clinic with excellent remuneration for a motivated associate. Min two years' experience with immediate start. Please forward CV to dentistnorthsidedublin@gmail.com.

Hard-working, ethical dentist, two years+ experience for part/going to full-time position, in a relaxed, bright and spacious environment. Practice well established, fully computerised, digital x-rays/OPG. Friendly atmosphere and patients. Mentorship provided. Email castlemilldental@gmail.com.

Donegal. full/part-time dentist required to replace departing colleague in busy medical card/PRSI practice. Immediate start with long-term view. Experience essential. CV to Adrian.millen@tiscali.co.uk.

Dentist required with minimum of two years' experience to join a well-

established specialist practice one to two days/week. Send applications to dentalspecialist8@gmail.com.

Exciting opportunity for an enthusiastic general dentist to join our team in Rathfarnham. We are fully computerised, private and GMS mix. Email management.kbmdental@gmail.com.

Part-time dentist required three days per week in Limerick. Well-equipped surgery would suit conscientious and detail-oriented person. Private fee for service practice. To commence June 2016. Email dentistlimerick@gmail.com.

Smiles Dental is looking for a passionate dentist to join our well-established, busy Waterloo Road practice in Dublin. Practice offers modern facilities and is fully computerised. Must have experience and be IDC registered. Five days per week. Email joanne.bonfield@smiles.co.uk.

Limerick – exciting opportunity for an enthusiastic general dentist to join our modern, well-equipped Smiles Dental practice in Limerick. Position offers five days per week. Candidates must be IDC registered. Email joanne.bonfield@smiles.co.uk.

Dun Laoghaire – Smiles Dental is looking for a passionate dentist to join our new state-of-the-art practice in Dun Laoghaire. Practice offers modern facilities and is fully computerised. Must have experience and be IDC registered. Full-time. Email joanne.bonfield@smiles.co.uk.

Co. Wexford – exciting opportunity for an enthusiastic general dentist to join our modern, well-equipped, well-established Smiles Dental practice in Enniscorthy. Initially on a three to four days basis. Candidates must be IDC registered. Email joanne.bonfield@smiles.co.uk.

Schull, west Cork. Dentist required to cover summer period, July and August. Minimum three years' experience. Practice is fully computerised with digital x-ray and OPG. Apartment in Schull with sea views provided. Email seamusodonoghue@gmail.com.

Award-winning dental practice – Winchester, Hampshire. Fantastic opportunity for experienced dentist to work with supportive team, replacing outgoing dentist of six years. Practice also offers specialist endodontics (accepting outside referrals), implants and facial aesthetics. Email CV to brendamacmillan@btinternet.com.

General dentist and implant specialist required for new surgery. Must be friendly, motivated and dedicated to quality and efficiency, with good communication and chair-side skills. Location: Naas, Co. Kildare. Email dentistsurgeoncv@gmail.com.

The Ishsko Centre in Westport is looking for a part-time implantologist. We are looking for a team member that has a special interest in metal-free dentistry. Applicants can contact us by email at ishskoinfo@gmail.com.

We are looking for a visiting registered implant specialist for a busy Dublin 12 practice. Please email info@clear dentalcare.ie.

Specialist orthodontist required to join our state-of-the-art multidisciplinary specialist practice. Well-established referral practice in Dublin 4. Exceptional equipment and support staff. Initially one day per week to replace departing colleague. Email Kieran.davitt@dentalcareireland.ie.

Endodontist required to join a well-established, newly extended multidisciplinary specialist team in north Dublin. Contact Mags at mags@ncdental.ie.

Periodontist required to join a well-established specialist practice in Dublin. Applications can be sent to dentalspecialist8@gmail.com.

Motivated hygienist required for two days per week in busy, fully-computerised practice in Navan, Co. Meath. Position available from the end of April. Experienced staff, Kavo scaler, chair/fibreoptics. Contact meathdentists@gmail.com.

Hygienist required full-time for award winning multi-surgery practice, computerised, clinical freedom, excellent conditions, to take over from departing colleague. Working week includes a mixture of early mornings and late evenings. Email sinead@portbellodental.com.

Specialist orthodontist required for busy Cork suburban general practice – two GDPs, practice computerised with digital OPG. Please contact corkdentalsurgery99@gmail.com.

Caring locum hygienist needed April-July every Tuesday and one Saturday per month; may become permanent position after July. See us at wq dental.com. Email wq dental@gmail.com.

Part-time hygienist required in Kilkenny City. Two days a week to cover maternity leave July-December 2016. Please forward CV to maeveoflynn@hotmail.com.

Part-time hygienist required in Drogheda. Initially one day per week. Email dentistindrogheda@gmail.com.

Dental hygienist required for lovely southside practice. The position is initially for one day a week, other hours will be available. Ideally looking for a bubbly personality and great team player. Immediate start. Email tfbc16@gmail.com.

Full-time dental hygienist required for large, friendly and relaxed north Dublin practice. Good salary guaranteed for working a four-day week (not including Saturday) with flexible hours. Please email your CV to balbriggandentalcare@mail.com.

Part-time hygienist required one day per week in the first instance to work in Letterkenny, Co. Donegal. Email responses please to adrian.millen@tiscali.co.uk.

Dental hygienist required one day per week. Orthodontic practice Blackrock, Co. Dublin area. Please contact or send email to shlemasney@yahoo.com.

Hygienist required to cover maternity leave from August. Minimum of three days between two modern practices in Swords and Balbriggan with scope for more sessions. Email colinpatricklynam@hotmail.com.

We are looking for a motivated, friendly dental hygienist for Saturday appointments in an expanding clinic in Dublin 12. Please email info@clear dentalcare.ie.

Dental hygienist required for busy family practice in Co. Waterford. Two and a half days a week initially with a view to expansion. Email sorchawhite@hotmail.com.

A beautiful family clinic in the heart of Swords, Co. Dublin, is looking for a qualified hygienist to work three or four days a week (including weekends). The clinic is busy, has a fantastic reputation and is very well equipped. Email eoinoneill101@gmail.com.

Swords Orthodontics is looking for a qualified, enthusiastic dental nurse to join our team. Maternity leave cover until August/September; however, there is scope to join our practice at the end of this cover. Ortho experience not essential. Email swordsothoinfo@gmail.com.

Dental nurse required for busy general/ortho practice in Walkinstown. Tuesday 8.30am-8.00pm and some holiday cover. Experience preferred but not essential. Immediate start. Email walkinstowndc@eircom.net.

Dental nurse required for general practice in Terenure. Full-time/part-time. Experience preferred. Please email CV to dentistterenured6w@gmail.com.

Dental nurse position available for Dublin 14 practice. Monday/Tuesday. Immediate start. Experience essential. Also dental nurse position available for holiday cover. Wednesday/Thursday/Friday. Immediate start. Experience essential. Enquiries: Kat/Ann, Tel: 01-296 0376. Please forward CVs to bellavistadental@eircom.net.

Positive, friendly nurse receptionist for top-class busy progressive practice in the south east. Must be professional, enthusiastic, caring, empathetic team player with excellent people skills. IT skills crucial. Experience helpful. Good remuneration. High job satisfaction. Immediate start. Email info@oc dental.ie.

We are looking for an experienced and highly motivated dental treatment coordinator/dental nurse for evenings and weekends to cover maternity leave, based in Dublin with some reception skills. Please email your CV to Michelle.Teeling@smartdentalcare.co.uk.

Part-time and full-time positions – Dunboyne. Trainee/qualified dental nurse required on Saturday and two evenings a week. Good hourly rate. Start July. Email dunboyneclinic@gmail.com.

Full-time experienced, friendly receptionist to join modern, well-established practice, computerised with excellent support team, OPG/CBCT x-rays. Candidates must have relevant experience and excellent written and verbal communication skills. Please email CV to info@southgatedental.ie.

Receptionist wanted for full-time position in fully computerised general practice in Dun Laoghaire. Candidate must have friendly manner, fluent English, good organisational and IT skills. Competitive salary. Email 99uppergeorgesstreet@gmail.com.

Experienced DSA required in Clare. Duties to include reception, chairside and courier to labs (own car required). Flexible hours to include late evenings/Saturdays. €20 p/hour for suitable candidate. Replies to claredentalvacancy@outlook.com.

A friendly family practice in the heart of Swords is looking for a part-time nurse to join their clinical team and to perform light reception duties. Applicants should be available to work on Saturdays. Email eoinoneill101@gmail.com.

Experienced dental nurse required to cover maternity leave starting mid-June to December 2016 in Dublin 18. Possibility of part-time hours from January 2017. Email admin@cdpractice.com.

PRACTICES FOR SALE/TO LET

For sale/to let. Modern and spacious two-chair practice in Carndonagh, Co. Donegal. Full book, good mix of private/medical card. Principal moving abroad. Serious enquiries only. Good opportunity for someone with a view. Email donegaldental@yahoo.ie.

Dental practice for sale, long-established, Tralee, Co. Kerry, Ireland. Modern, progressive, busy, fully private since 2000. Good equipment, excellent support staff. Ideal opportunity for well-qualified dynamic personality. Email: germannix@gmail.com.

For sale – south east Munster. Three-surgery (two in use) well-established practice, with designated OPG room, decontamination room, computerised (SOE), staff and patient WCs, staff canteen, waiting room. Excellent equipment. Good patient mix. Interested parties may apply in confidence to steven@medaccount.ie.

For sale – midlands/west. Long-established, busy, full-time general practice in primary care centre. Busy town. Large catchment area. Many schools. Good loyal staff. Low overheads. Immediate profits. Great potential for growth. Ample room. Principal retiring. Priced for speedy sale. Contact: niall@innovatedental.com.

For sale – west Cork. Long-established general practice, central location in major town. Freehold premises with three surgeries, laboratory and separate compressor/suction area. The practice is mixed private/medical card/PPS. Owner retiring. For further information email pfsdental@gmail.com.

For sale. Dublin North. Very busy, well-established high-profile location – superb footfall. Excellently equipped, walkinable. HSE compliant – computerised. Single surgery within PCC, expansion possible. Great potential for income growth. Low medical card. Good profits. Priced for speedy sale. Contact niall@innovatedental.com.

Fingal area, north Dublin. Busy practice for sale/lease from July 2016. Established over eight years, low overheads. Digital x-ray, computerised. Potential to expand. Long/short-term lease available. May consider selling the property. Email drenzlova30@yahoo.com.

EQUIPMENT/ITEMS FOR SALE

OPG for sale. Kodak 8000 Digital Panoramic System. Excellent condition and full working order. Please contact Grace on gracefrayne@gmail.com.

For sale – antique dental chair (Sterling London), 70 years old. Reupholstered green leather, ideal for reception area. Cork City. Tel: 087-988 2386.



SENSODYNE



IDA

journal of the irish dental association
Iris Cumainn Déadach na hÉireann



WILL YOU BE IRELAND'S MOST SENSITIVE DENTIST OR DENTAL TEAM IN 2016?

The search for the
2016 Sensodyne Sensitive Dentist and Dental Team of the Year
is underway.

This awards programme showcases the marvellous work of Irish dentists and
dental teams – and all through the words that mean most: those of your patients.

Please note the closing date is September 30 and that the Gala Awards Ball is on December 3.
Nomination packs are available from Sensodyne (GSK).

For more information and for full terms and conditions
visit www.sensodynesensitivedentist.ie



More than a professional body

For this edition we spoke to Dr Neysan Chah, an avid hiker and movie buff, who runs the Roscam Family Dental Practice in Galway City.

What led you to first get involved with the IDA?

I joined the IDA when I graduated from the Dublin Dental University Hospital and to be entirely honest I wasn't sure what membership entailed. But looking back now I can safely say that it was one of the best decisions I've ever made.

What form did that involvement take and how did it develop?

Over the years I became more active in my involvement and attendance at IDA events. Initially my involvement started with attending annual conferences. It was not long before I came to realise that the IDA plays a valuable role as a professional association promoting dentistry as well as fostering friendships and professional ties within the Irish dental community. I began attending some branch meetings and other IDA events. It was at one of those events that one of our former presidents and fellow Galwegian dentist Dr Peter Gannon suggested that I give serious thought to the idea of serving as a member of the GP Committee. I have to say it has been a learning curve but also a great privilege to be able to serve my peers in this capacity, as part of a body that does so much for our profession in Ireland.

What has your involvement with the IDA meant to you?

It is a privilege to serve my peers as part of the IDA. For me the IDA is much more than just a professional body. Dentistry is a noble profession and the IDA is unique in that it strives to safeguard that nobility through practical and tangible assistance. As a newly qualified young dentist the IDA provided a sense of belonging and community in a profession where much of our day-to-day work is spent with small groups of people. As a not so young dentist now, I find the IDA to be a valuable resource, not just in terms of networking and professional development but also as a support system for any colleagues who may have questions or require any advice.

What has been the single biggest benefit of IDA membership for you?

Having access not only to a network of esteemed colleagues but also the invaluable resources at IDA Head Office. In this way we are able to enjoy the best of both worlds, which can only be conducive to making us better dentists.

How would you like to see the Association progress into the future?

I would love to see more and more new blood in the Association. But apart from that, I firmly believe that each of us has something unique to bring to the table and the IDA will only go from strength to strength as it benefits from new talent, ideas and input, especially when it is coupled with the experience many of our active members have to offer.



In his spare time, Neysan is an avid reader and enjoys watching movies. He keeps active and particularly enjoys hiking and hill walking (weather permitting) and firmly believes that there is nowhere quite like Galway on a sunny day. He met his wife Sahar in Galway and is a proud father to his daughter Amelia (who already knows how to say floss!) and loves nothing more than spending time with his family and friends.

*Photo courtesy:
Mike Shaughnessy*

True evolution

Take advantage
of current offers!*

Now also
as a Flow!



THE FIRST CERAMIC FOR DIRECT FILLINGS

- The worldwide first purely ceramic-based restorative material
- Lowest polymerisation shrinkage (1.25 % by volume) and particularly low level of shrinkage stress**
- Inert, so highly biocompatible and extremely resistant to discolouration
- Meeting highest demands in anterior and posterior regions
- Excellent handling, simple high-lustre polishing procedure coupled with high surface hardness guarantee first-class long-term results
- Compatible with all conventional bonding agents

*Find all current offers on www.voco.com or contact your local VOCO dental consultant. For more information please contact: Tel. 085 725 6078 - info@voco.com

** in comparison to all conventional restorative composites



WHEN YOU SEE GUM PROBLEMS IT'S TIME FOR ACTION...

...SO IT'S REASSURING TO KNOW YOU HAVE CORSODYL®



Chlorhexidine digluconate

CORSODYL® DELIVERS GOLD STANDARD EFFICACY¹

KILLS:

Bactericidal action¹

LASTS*:

Around the clock substantivity¹

REPELS:

Protective antibacterial layer over teeth and gums¹

CORSODYL® 0.2% W/V MINT MOUTHWASH HELPS TREAT DISEASED GUMS²⁻⁵

- After 6 weeks of using Corsodyl® 0.2% w/v mint (treatment) mouthwash there is 33% less gingival bleeding when compared to brushing alone

MEAN GINGIVAL SEVERITY INDEX (GSI)⁵



For full product information, please refer to the Summary of Product Characteristics

CORSODYL 0.2% W/V MINT MOUTHWASH, CORSODYL 0.2% W/V ANISEED MOUTHWASH.

Indications: Plaque inhibition; gingivitis; maintenance of oral hygiene; post periodontal surgery or treatment; aphthous ulceration; oral candida. **Dosage & Administration:** Adults and children 12 years and over: 10 ml rinse for 1 minute twice daily or pre-surgery. Soak dentures for 15 minutes twice daily. **Treatment length:** gingivitis 1 month. **Ulcers, oral candida:** continue treatment 48 hours after clinical resolution. **Children under 12:** on healthcare professional advice only. **Contraindications:** Hypersensitivity to Chlorhexidine or any of the excipients. **Precautions:** Keep out of the eyes and ears, do not swallow. Separate use from conventional dentifrices (e.g. rinse mouth between applications). In case of soreness, swelling or irritation of the mouth cease use of the product. **Macroglycerol Hydroxystearate** may cause skin reactions. **Aniseed Mouthwash:** Azo dye Ponceau 4R (E124) may cause allergic reactions. **Side effects:** Superficial discolouration of tongue, teeth and tooth coloured restorations, usually reversible; transient taste disturbances and burning sensation of tongue on initial use; irritative skin reactions; extremely rare, generalised allergic reactions, hypersensitivity and anaphylaxis, oral desquamation and parotid swelling. **Overdose:** Due to alcohol content (7%) ingestion of large amounts by children requires medical attention. **Legal Classification:** GSL. **Product Authorisation Numbers:** PA 678/2/2 & PA 678/2/4. **Product Authorisation Holder:** GlaxoSmithKline Consumer Healthcare (Ireland) Limited, 12 Riverwalk, CityWest Business Campus, Dublin 24. **Date of Preparation:** May 2016. Further information is available on request.

REFERENCES

- Jones CG. Chlorhexidine: is it still the gold standard? *Periodontology* 2000 1997;15:55-62
- Löe H, et al. The effect of mouthrinses and topical application of chlorhexidine on the development of dental plaque and gingivitis in man. *J Periodontol Res* 1970;5(2):79-83
- Löe H, et al. Two years oral use of chlorhexidine in man. *J Periodontol Res* 1976;11(3):135-144

- Van Strydonck DAC, et al. Effect of a chlorhexidine mouthrinse on plaque, gingival inflammation and staining in gingivitis patients: a systematic review. *J Clin Periodontol* 2012;39(11):1042-1055
- Data on file, GSK. RH01561, August 2014

* When used as directed

Trade marks are owned by or licensed to the GSK group of companies

CHGBU/CHCSYL/0053/16