Journal of the Irish Dental Association

# SHINING LIGHT

An audit of the baseline dental status and treatment need of individuals referred to Dublin Dental University Hospital for a pre-radiotherapy dental and oral assessment







### IRELAND'S MOST SENSITIVE DENTIST AND DENTAL TEAM 2017 The RDS, December 2. Be there.\*



The 2017 Sensodyne Sensitive Dentist and Dental Team of the Year Awards will showcase the marvellous work of Irish dentists and dental teams – and all through the words that mean most: those of your patients.

The Gala Awards Ball is on December 2 at the RDS in Dublin.

\*If you have been nominated, you will be invited to attend - be sure to be there.

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EDITOR	Professor Leo F.A. Stassen
	FRCS (I) FDSRCS MA FTCD FFSEM FFDRCSI FICD
DEPUTY EDITOR	Dr Dermot Canavan BDentSc MGDS (Edin) MS (UCalif)
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MANAGING EDITOR JOURNALIST AND SUB-EDITOR Colm Quinn

Ann-Marie Hardiman ann-marie@thinkmedia.ie colm@thinkmedia.ie Paul O'Grady paul@thinkmedia.ie Tony Byrne, Tom Cullen, Eimear Moroney

Irish Dental Association Unit 2 Leopardstown Office Park, Sandyford, Dublin 18. Tel: +353 1 295 0072 Fax: +353 1 295 0092 www.dentist.ie



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 Recommended fluoride level (1350-1500ppm) for caries prevention in 'Delivering better oral health. An evidence-based toolkit for prevention'. 3rd edition, Public Health England, June 2014.



### Credibility and sustainability

The Editorial Board has been working at improving the circulation and governance of the *Journal*, while this edition includes a really helpful feature on starting out in dentistry.



There are two significant developments for the *Journal* to announce in this edition. As part of our normal governance, we reviewed our mailing lists. Arising from that review, we felt that the Northern Ireland section needed to be updated. Over a period of several months, we carried out that work and the *Journal* is now going to an additional 300 dentists, bringing our circulation to over 3,500. None of the other publications for dentists in Ireland can match that circulation, as evidenced by the fact that our *Journal* is the only one that has its circulation independently audited. The independent auditing is carried out annually by ABC, and provides our advertisers with a guarantee of circulation. Our ABC figure for 2017 will reflect the new circulation, but it will be 2018 before a full-year figure includes the increase for all editions.

The second development is that for the third time this year, we have increased the number of pages in the *Journal* above our standard 52. This is only possible because we choose to re-invest the funds provided by our advertisers in the service we are providing through the *Journal* to all dentists in Ireland.

These developments demonstrate that we are your *Journal*, the dentists' own publication. That ethos of dentists' own publication is reflected in the seriousness of our scientific content, and in the calibre of our feature and news coverage.

A further demonstration of our commitment to credibility is the structure of the Awards scheme we operate in conjunction with Sensodyne. These Awards are won only through the independently-verified testimony of patients about the treatment they have received from their dentists. There is no self-nomination allowed and no self-justification or self-praise required. No dentist has to 'big themselves up' and there are no vacuous categories – just meaningful stories told by patients and adjudicated by dentists who have served and continue to serve merely for the good of the profession. The stories told by patients through these Awards over the last decade have given us generally as dentists, but especially the Editorial Board of the *Journal*, great cause for pride, and faith in the future of our profession. We look forward to hearing the outcome of this year's judging at the RDS on December 2.

And, in the further interests of sustainability and good governance, we have recently welcomed several younger dentists to the Editorial Board and they are already making a significant contribution to our meetings and our contents. They have quickly and fully engaged with that ethos of a professional journal by dentists for dentists.

#### **Clinical content**

We are grateful to our many colleagues who have provided or reviewed papers for this edition. Dr Denise MacCarthy and colleagues have audited the number of patients attending the Dublin Dental University Hospital for preradiotherapy dental assessment and treatment. They found a significant increase in numbers since the opening of the Dental Oncology Treatment Centre in 1997/98, and sadly have noted the marked number of individuals in younger age groups. Meanwhile, Dr Cian Henry and colleagues have found a low level of absolute compliance with national and international guidelines on the prevention and management of medication-related osteonecrosis of the jaws.

Drs Rona Leith and Anne O'Connell have provided an excellent clinical feature on tips for splinting traumatised teeth. It is clearly written and well illustrated, and could be kept as a reference/refresher in any surgery.

### Feature content

The Association does much good work, some of it unheralded. A recent example is the excellent booklet *Starting Dentistry in Ireland* which they have compiled and published. Roisín Farrelly has brought together most of the information a new graduate in dentistry would need when setting out on their career in Ireland. It is featured on pp238-240, including commentary from three young dentists who contributed to its development. It is excellent and recommended reading for any new or prospective graduate.

# **PLAQUE CONTROL: 'GOOD' CAN BE BETTER**

![](_page_5_Picture_1.jpeg)

## 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*.

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References 1. Araujo MW, et al. J Am Dent Assoc 2015;146:610–622. 2. Johnson & Johnson. Data on file. IRE/LI/16-1891

### **BRING OUT THE BOLD**<sup>™</sup>

![](_page_5_Picture_11.jpeg)

![](_page_6_Picture_0.jpeg)

### Dentists need to be there for each other

The need for support for both established dentists and those new to the profession has never been greater, and the IDA has a crucial role to play.

### Dentists' health and well-being

The stress faced by dentists is a very real concern of mine and represents an area where the Association has a vital role to play. That is why we need to make every effort to welcome new colleagues, to provide a listening ear and a shoulder to cry on if needs be. For colleagues we haven't seen in a while, we should remember to get in touch and see how they are getting on. It's entirely possible to do so without being seen as interfering and in fact most colleagues will welcome your interest in them.

More formally, the confidential helpline service the IDA has engaged is very important. The DAS 24-hour helpline provides members and their families with confidential counselling over the phone including, where appropriate, onward referral. Call 1850 670 407 to avail of this service. Our mentoring programme, which I'm pleased to say is proving very successful for our younger colleagues, is also of real benefit to members. Both of these are important back-ups we need to remember and encourage colleagues to use.

Separately, it is particularly heartening to see the progress being made by the Practitioner Health Matters Programme, where our CEO Fintan Hourihan serves as honorary secretary. The Programme offers a confidential, independent and discreet system of medical care for dentists, doctors and pharmacists, and recently published its first annual report. However, I gather the Service has not been availed of in great numbers by dentists so far and I cannot believe this is because no problems exist within the profession.

We really need to make dentists aware of these essential supports and to look out for our friends and colleagues, and their families.

### **Oral health policy**

It's almost a quarter of a century since we had a new oral health policy. Given the pace of change in the world, and specifically in dentistry over the last decade alone, there is an urgent need for a new policy to reflect the new world we inhabit. It will be important that this new policy is accompanied by new modern regulatory legislation, which balances the needs of patients and dentists, as well as a replacement of unfit for practice dental schemes such as the DTSS. Frustratingly, I have to report that the Association has been left in the dark by those charged with preparing this new policy, and it will be one of my top priorities to ensure that the profession is fully consulted and properly engaged in the formation of a new oral health policy.

#### **HSE Seminar**

Our annual HSE Dental Surgeons Seminar took place in Kilkenny on October 12 and 13. As always, it was an excellent event with contributions from both Irish and international speakers. The two-day programme, which was put together by Dr Niall Murphy, President Elect of the HSE Dental Surgeons Group, and Elaine Hughes in IDA House, included lectures on the first dental visit, antimicrobial resistance, mental health and well-being at work, dentistry for patients with special needs, consent, composites, and dental amalgam. I would like to take this opportunity to acknowledge the hard work and enthusiasm of Dr Michaela Dalton, with whom I have worked closely on the IDA Board, as she stepped down from her role as President of the Group.

### DTBS

The scale and polish and protracted periodontal treatments will be available for eligible patients under the DTBS from October 27, 2017. This follows positive talks between the Department of Social Protection and the IDA negotiating team earlier this year. Separately, the Department is currently setting up an online claims system for the DTBS and the GP Committee is engaging with the Department to get further clarity on the new system.

#### **Forthcoming Budget**

The IDA launched our pre-Budget submission in July calling for the restoration and expansion of tax relief on dental treatments – Med 2 – for prescribed dental treatments. We called on the HSE to engage with the IDA to replace the medical card scheme, which is no longer fit for purpose.

We have also called on the Government to initiate a major recruitment drive for dentists to enable the Public Dental Service to deliver on its programme of care for children and other vulnerable groups. Due to totally inadequate staffing levels the Public Dental Service is failing children, some of whom are waiting until they are 12 years of age for their first dental screening. Currently there are 300 dentists employed in the Public Dental Service, but the IDA is calling for this figure to be increased by 50%, or 150 dentists, if the service is to deliver on its objectives.

#### Starting dentistry

I'm delighted to announce the publication of our latest resource for members, a document entitled *Starting Dentistry in Ireland*. This follows on from a very well-received document on *Human Resources for Dental Practices*, which was sent to all members in private practice on renewal of their membership for 2017.

I believe that the IDA can do more to involve new graduates and dentists newly arrived in Ireland, and this document is part of a wider initiative that we are undertaking to engage this cohort of members and examine the assistance and services we provide for them. I hope the new document will be a valuable tool for recently-qualified dentists and non-Irish graduates to help them understand the many issues, beyond the clinical, that they need to be aware of in their dentistry career.

![](_page_7_Picture_0.jpeg)

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\* Compared to a regular fluoride toothpaste – defined as non-antibacterial fluoride toothpaste.

\*\* Defined as teeth, tongue, cheeks and gums.

1. Kravaphan P, Armonchat C, Triratana T. J Clin Dent. 2013;24:20–24. 2. Fine DH, Sreenivasan PK, McKiernan M et al. J Clin Periodontol. 2012;39:1056–1064.

![](_page_7_Picture_11.jpeg)

### Metro meeting

![](_page_8_Picture_2.jpeg)

President of the Metropolitan Branch of the Association, Dr Naomi Rahman (left), with speakers Dr Ronan Perry and Dr Rose-Marie Daly at the first meeting of the 2017/18 season in the Davenport Hotel on September 21.

### Wrigley grants 2018

In partnership with the Wrigley Foundation, the Irish Dental Association will award a series of dental support grants to fund worthwhile oral healthcare projects around the country.

A request for proposals will be sent to all IDA members in early 2018. So get

### Retirement Day 2017

A successful seminar aimed at those thinking of retirement, or who have recently retired, was held in Dublin on September 29. A full-day programme of presentations took place on health issues, selling a dental practice, succession planning, pensions, wills and medical legal responsibilities on retirement. Thank you to all our speakers on the day and a special thank you to Goodbody, our sponsors.

### Save the date - May 17, 2018

The Irish Society of Dentistry for Children will hold its ASM on Thursday May 17, 2018, in the Midlands Park Hotel, Portlaoise, Co. Laois. Further details to follow.

thinking now! All IDA members are entitled to apply for a grant. Dental support grants can support a specific community project with an emphasis on improving oral health and educating participants. A project can be for a halfday or can be a more long-term project. The project just needs to have a focus on local community, and include an educational aspect.

![](_page_8_Picture_12.jpeg)

### No self-nomination allowed for real Awards

Entries closed on September 30 for the 2017 Sensodyne Sensitive Dentist and Dental Team of the Year Awards. More than 1,000 entries have been received again this year, continuing the tremendous response from patients to the care they receive from their dentists. If you have been nominated by a patient for an award, you will receive a letter inviting you to attend the Gala Ball which will take place in the RDS on December 2 where you will receive a certificate marking your nomination.

At the Ball, the winners of the regional and national awards will be announced. Judging of the Awards takes places over the next six weeks. Chairman of the Judging Panel is Dr Barry Harrington, and he is joined by Drs Jennifer Collins, Seton Menton and Anne O'Neill. These Awards are hard won and based solely

### Mouth Cancer Awareness Day 2017

Mouth Cancer Awareness Day was different in 2017. This year we didn't ask dentists to provide free mouth cancer exams to their patients; instead the emphasis was on working with those from socially-deprived communities and people who are homeless. In conjunction with Simon Dublin, Cork and Galway, the Peter McVerry Trust, and the Capuchin Day Care Centre, dentists

![](_page_9_Picture_6.jpeg)

on the independently-verified testimony of patients. There is no selfnomination allowed, and frequently winners do not know who has nominated them or why they were nominated until the night of the Awards. The realisation of the huge esteem in which their patients hold them has been a cause of joy for many dentists at these Awards. Past winners have been nominated by patients grateful for the care they have received in a huge variety of circumstances, e.g., weekend night-time care for a heavily pregnant patient, detection of mouth and other cancers, speedy and brilliant treatment of trauma, and outstanding acts of understanding and generosity.

If you have been nominated and invited, celebrate the praise of your patients by joining in the fun at the RDS.

were asked to volunteer to give free mouth cancer exams in these shelters. There was a great response, yet again, from the dental profession, who assisted us and were on hand to attend the various locations. Thank you to Colgate for sponsoring toothpaste and we also distributed toothbrushes on the day. A massive thank you to all dentists who were involved in this worthwhile initiative, without whose help this event could not take place.

### Diary of events

### OCTOBER

12-13 HSE Dental Surgeons Seminar

Hotel Kilkenny, Kilkenny

 19
 Metro Branch Supper for Learning, Branch meeting and new members' wine reception
 Alexander Hotel, Dublin 2

 Supper for Learning from 6.00pm to 7.30pm. Speaker: Dr John Lawlor
 - 'Digital orthodontics'. Reception from 7.00pm to 7.30pm.

 ALL NEW MEMBERS WELCOME.
 - Comparison of the second sec

Branch meeting from 7.30pm to 9.00pm. Speaker: Dr Rebecca Carville – 'Optimising aesthetics'.

- 20 Kerry Branch Annual Scientific Meeting Kerry Voices 2 The Europe Hotel and Resort, Killarney
- 21 Basic Life Support and Medical Emergencies Sligo Clayton Hotel, Sligo

#### NOVEMBER

- 10 Munster Annual Scientific Meeting 2017 Fota Island Resort and Spa
- 15 North Western Branch meeting Speaker: Mr Tom Barry, Consultant, Maxillofacial/Oral Surgery
- 16 Metro Branch Supper for Learning and Branch meeting with Christmas drinks Alexander Hotel, Dublin 2 Supper for Learning speaker: Dr Denise Bowe – 'Orthodontics in the mixed dentition – when to intercept'. Speaker at meeting: Dr Dermot Canavan – 'Pain, sleep and TMD – do occlusal appliances help?'

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![](_page_10_Picture_3.jpeg)

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![](_page_10_Picture_10.jpeg)

Pat Mullins

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### Taking care of everything dental

### New IDBS President

At the recent AGM of the Irish Dental Benevolent Society (IDBS), Dr Dermot Kavanagh took over as new IDBS committee President from Dr Denis Daly, who has held the position for the last three years.

The committee would like to make sure that all of our colleagues are aware that the IDBS is a registered charity. It provides financial assistance to those in need who are, or who have been, dental surgeons or dentists in Ireland, and the dependants of such persons.

If you need assistance or know of a colleague who does, do not hesitate to contact the IDBS. This can be done directly to a committee member or by way of the contact details on the website – www.idbs.ie. All matters are dealt with in strict confidence.

The IDBS relies on donations for funding, and details of how to start contributing can be found on its website. The Society would like to thank all those who already contribute.

![](_page_11_Picture_6.jpeg)

Back row (from left): Kieran Daly; Gerry Murray; David Patton; Mark Kelly; Aislinn Machesney; Ciara O'Reilly; Conor McAlister; and, David Whitaker. Front row (from left): Joan Nolan; Denis Daly; Dermot Kavanagh; and, Theo Hanley.

### IDA in the Big Apple

This November, Assistant CEO Elaine Hughes and a team of IDA representatives will travel to New York to the American Dental Association's (ADA) Greater New York Dental Meeting to invite delegates to the Association's Annual Conference, 'Old Way. New Way. Galway.' which takes place in The Radisson Hotel, Galway, from April 26-28, 2018.

The trip follows the announcement that the ADA's Commission for Continuing Education Provider Recognition has granted a licence to the IDA's CPD programmes, meaning that members of the ADA will now be able to acquire CPD credits for attending approved IDA-organised events.

The New York meeting, which takes place from

### Quiz

### Submitted by Dr Keira Malone

This is a series of three clinical extra-oral photographs, an orthopantomogram and a postero-anterior (PA) mandible radiograph (**Figures 1-5**) of a 38-yearold fit and healthy male, with a four-month history of painless right-handsided facial swelling.

### Questions

- 1. What pathology can you identify on the radiographs?
- 2. What clinical questions would you ask regarding the visible swelling in the right pre-auricular region?
- 3. What is the differential diagnosis?
- 4. What further investigations ought to be carried out to aid diagnosis?
- 5. What treatment options are available for this gentleman in terms of his mandibular finding?

![](_page_11_Picture_21.jpeg)

Assistant Chief Executive, Elaine Hughes, is leading the promotion in the US.

November 26-29, is the largest dental meeting in the United States, welcoming over 50,000 delegates from all over the world.

The IDA team will have all the information to hand about next year's event, which will include presentations from: Dr John Alonge, oral and maxillofacial surgeon, Pennsylvania, US; Dr Phil Ower, periodontist, Newbury, UK; Prof. Lars Rasmussen, Gothenburg, Sweden; and, Dr Serpil Djemal, Consultant in Restorative Dentistry, King's College Hospital, London. Pre-conference courses will include a half-day hands-on endodontics course from Drs Johanna Glennon and Paul McCabe. Visitors from the US will also be able to join their Irish colleagues in a varied and funpacked social programme including golf, the annual dinner and much more.

![](_page_11_Picture_25.jpeg)

Answers on page 278.

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### 

### Starting out in dentistry

Even with the most extensive dental education, graduates still have a lot to learn once they leave university.

Dentists graduate from university eager and ready for practice, but often with many questions. There are also dentists coming to Ireland from other parts of the world wondering what they have to

do to get registered here and how the Irish dental profession works. Because of this, the IDA felt it would be helpful to produce a document which would provide an overview of everything a dentist needs to know when starting out here. Roisín Farrelly, Employment and Communications Officer in the IDA, write the document, *Starting Dentistry in Ireland:* "I attempted to bring together most of the information you will need when starting your dentistry career in Ireland. It is intended as a concise overview, which shouldn't overwhelm our new dentists. It covers topics like CVs and interviews, the difference between being self-employed or an employee, tax, data protection, Dental Council guidelines, CPD, and so on. We intend to update the booklet each year with any new legislation or regulations that are relevant".

Roisín says there is a whole range of other issues also mentioned in the document: "There really is a huge amount of information that they need to be aware of".

### THE DENTIST IN THE PUBLIC SECTOR: Philip Mulholland

### "Consider the public sector"

Graduating from the Dublin Dental University Hospital in 2010, Philip moved to London to work in general practice. Following this, he entered the community service in the north of Scotland, before returning home to Ireland in 2015 to work in the HSE dental service. When advising dentists who are pursuing a career in the public dental service, he said: "They can expect a fairly long and rigorous recruitment procedure. They need to be either registered with Talentpool online or to keep checking the jobs section of HSE.ie".

"For any HSE job, there is an extensive application form and interview process," he said.

Applicants are selected for interview and following the process are graded/ranked in order and a panel is created. A job "expression of interest" is then sent to all candidates on the panel, the highest ranking being offered the position. Once selected for a position, checks are carried out, including Garda clearance, which can take some time, "especially if you haven't lived exclusively in Ireland; as I had addresses in Northern Ireland and Great Britain, it took a little longer".

Philip's advice to any new dentist entering the HSE is to not give notice to your current position until you have signed a contract: "From application stage to contract issue could take a few months".

On working within the HSE dental service, Philip said any new dentist should

#### **Dental Council**

Before picking up a handpiece in Ireland, she says: "All new graduates or newly-arrived dentists need to ensure that they are registered with the Dental Council. They should also make sure they are aware of their obligations under the various Dental Council Codes of Conduct".

Registering is not simply a matter of filling out an online form. It is a process that takes about three months for an Irish or European Economic Area (EEA) dentist and can take longer for a dentist coming from outside of Europe: "New dentists really need to start the registration process as soon as they graduate and in advance of travelling to Ireland if they are coming from abroad. There are a lot of documents required by the Dental Council, so dentists need to get these together as soon as possible after graduation and make sure all required documentation is included because not doing so can slow down the registration process".

#### Self-employment

One of the main areas of concern that new self-employed dentists contact the IDA about is contracts. The advice from the IDA is that: "Dentists should always take appropriate professional legal and financial advice in reviewing any

be aware that the dental service in Ireland, unlike that of the National Health Service in the UK, is structured as a targeted 'school service'. The priority groups are national school children in second, fourth and sixth class, and children and adults with special needs/complex medical histories: "I have always enjoyed treating children. I find it very rewarding and at times very challenging. Treating children with special needs can be very challenging

![](_page_13_Picture_20.jpeg)

indeed. I am very lucky to have a supportive team around me including the area management, fellow dentists and nursing staff".

Philip praises the *Starting Dentistry in Ireland* booklet: "It is a very informative, concise A to Z of dentistry in Ireland. It should be the go-to document for anyone considering starting a career in dentistry in Ireland. It includes everything they'd need to know".

His advice for any new dentists in Ireland is firstly to join the IDA: "Not just for the social network but also for the representation for the profession and the CPD. A new online tool has recently been created which is very handy for storing your CPD hours.

"Secondly, I would say to any dentist coming into Ireland to consider the public dental service. There's great opportunity for young dentists to improve clinical skill and build on experience that will lead to a fulfilling and successful career".

### THE DENTIST IN PRIVATE PRACTICE: Sally McCarthy

### "Your degree is just a starting point"

Sally graduated from UCC Dental School and Hospital in 2012 and is now working in private practice in Swords, Co. Dublin.

The change of mindset required when moving from college to work was a challenge, she says: "When you're in college, you're learning as prescribed. You're learning for exams and then suddenly you're in the workplace and you have to self assess and you have to manage yourself in terms of making sure you're at the adequate level, making sure you're not too hard on yourself and then almost doing an audit on yourself to identify what you need to improve on".

CPD courses, specifically hands-on courses, are a great resource to improve on weaker areas. While some of these are expensive, Sally finds: "You make the money back with increased competence and efficiency".

And what you liked in college may not be what you like in practice: "When you go into general practice and you're doing it on your own, you might find it's a different area that you like. From that perspective, I found general practice really good because it does broaden your mind. I was glad I didn't jump into any specialty, that I worked in general practice first to see what areas I liked more than others".

Shadowing a specialist or getting an older dentist to act as a mentor can also be helpful in figuring out which road you want to take. IDA meetings also give access to an informal social setting, where you can raise issues you have with a broad range of dentists.

Sally found becoming an IDA member

![](_page_14_Picture_9.jpeg)

easy because someone from the Association visited her class in their final year. When it came to getting registered with the Dental Council, she says: "The staff in the Dental Hospital in Cork were really helpful in getting the required documents stamped and the letter of good standing required".

Sally was asked to advise on the 'Starting Dentistry in Ireland' document and says: "It is really helpful. It gives you all the information you need to begin working as a dentist. I think it's particularly good because it breaks down in clear and practical ways the steps required for starting work and the obstacles you might encounter along the way".

![](_page_14_Picture_12.jpeg)

### Specialist dental care in the heart of Dublin 4

For over 30 years, the Northumberland Institute of Dental Medicine has been synonymous with excellence, innovation and education in specialist dentistry.

![](_page_14_Picture_15.jpeg)

![](_page_14_Picture_16.jpeg)

### **Your Specialist Team**

![](_page_14_Picture_18.jpeg)

Dr Anne O'Donoghue

![](_page_14_Picture_20.jpeg)

![](_page_14_Picture_21.jpeg)

Dr Cormac Cullinane

![](_page_14_Picture_23.jpeg)

Dr Maher Kemmoona Periodontist

**Prof Michael Carey** Consultant Anaesthetist

Dr Finn Geoghegan

Orthodontist

![](_page_14_Picture_26.jpeg)

Prof Brian O'Connell Prosthodontist

![](_page_14_Picture_28.jpeg)

**Dr Sittana Ahmed** Prosthodontist

![](_page_14_Picture_30.jpeg)

Mr Gary Leonard **Oral Surgery** 

Northumberland Institute of Dental Medicine

### THE NON-IRISH DENTIST Dina Dabic Ristic

### "Use every opportunity"

Dina was born and raised in Belgrade, Serbia, where she attended dental school, and came to Ireland in 2015. Her biggest challenge when she got here was the lack of a network and contacts: "Dentistry is definitely an individual profession but still, having a strong professional network is very important. If you've recently moved from abroad then your personal and professional contacts are very limited".

![](_page_15_Picture_4.jpeg)

She says this improves over time if you join the IDA and become active in your local branch, but there are other things to consider, like how dentistry works in Ireland in regards to indemnity insurance, the differences between being self-employed, an associate and an employee, etc.

Moving to another country and "starting over in every aspect of your life, both professional and personal is a bit of a rollercoaster. It is different from just changing a job, which alone can be very stressful. You are pretty much learning to 'walk and talk' again and do all the things you've been doing without even thinking previously".

While starting over is a challenge, she says there are advantages: "Your

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Contact: Declan FitzGerald B.Comm FCA FCPA CONTACT US FOR A FREE, NO OBLIGATION CONSULTATION info@bkrm.ie | 01-836 5522 previous experience, contacts, reputation among patients and colleagues don't count for much. You have to start over and prove yourself again, which is a great thing. It doesn't allow you to stay cocooned in your comfort zone. You have to remain focused and hard working". She found the administrative side of things actually quite

easy: "Registering with the Dental Council was not a very difficult process for me. They were quite responsive and I got my licence only a couple of weeks after I submitted the full documentation".

Dina is helping the IDA to make things easier for dentists coming here: "As a part of that project, I was asked to become more involved with the IDA, with the Council of the IDA and I'm super excited to be a part of it. I hope I'll be able to help with my experiences to provide more organised support that will allow and encourage incoming dentists to integrate quickly and successfully. "I think it's very important that the IDA is recognisable to dentists coming from different countries or even before that, to make them aware that they are not alone when they come here".

Dina's advice for new dentists in Ireland is to: "Use every opportunity to meet colleagues, to ask as many questions as they feel they need to because Irish dentists in general are very, very willing to help".

contract/agreement they are offered in order to ensure it is legally sound and that self-employment can be supported in the event of a Revenue investigation". Even if you are not self-employed, it is important that there is some contract or agreement in place between you and your employer. Roisín says: "Advice on what issues need to be included in such a contract is in the new document and IDA members also have access to template agreements available on request from IDA House. Again, we advise that independent professional advice should be taken when using the template agreements".

### The IDA

Joining the IDA is highly recommended to any new dentists. Not only does it offer the support and advice of a professional organisation, it will also save dentists money on CPD courses.

Roisín speaks of the benefits of becoming a part of the organisation: "You will be joining a community of dentists who can offer encouragement, assistance and understanding. You will also have the opportunity to attend branch lectures and social events, and it's a great way to get to know your dental colleagues".

One benefit that may be of particular interest to new dentists is the IDA's Mentorship Programme, where young dentists are paired with more experienced colleagues who can provide guidance. Membership of the IDA is free for all new graduates who are registered with the Dental Council in their first year after qualification.

### More to come

Starting Dentistry in Ireland is a key part of an important initiative from the IDA. Roisín explains: "It is part of a wider IDA strategy to look at the assistance and services we provide for members new to dentistry and for non-EU graduates practising in Ireland. Our Board and Council are keen that we reach and assist this cohort of members as best we can, from both IDA House and through our branch networks".

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![](_page_16_Picture_5.jpeg)

### An extraordinary experience in Gambia

A group of dental health professionals from Galway travelled to Gambia to help a country which has few dentists.

While working in the Oral and Maxillofacial Surgery Department in Galway University Hospital, I joined a team of dentists on a trip to Gambia to provide dentistry, oral surgery, special care dentistry and oral health promotion services. The trip was organised by the charity Humanity First, which provides assistance on the basis of need, irrespective of race, religion or politics, and has registered offices in 43 countries across six continents.

Colleagues and friends asked why we chose Gambia. The reasons were compelling. Gambia is a developing country still in its transition state and is the smallest country on the African continent, with one of its most underprivileged

![](_page_17_Picture_5.jpeg)

![](_page_17_Picture_6.jpeg)

There are only a handful of qualified dentists in Gambia, and only a small proportion of the population have the benefit of a local dentist. The rest of the people either go to witch doctors or suffer due to lack of facilities. Dentists in the country mainly provide extractions and any patient wishing to have complex treatment, whether medical or dental, has to travel to neighbouring countries such as Senegal.

Meeting with the Chief Medical Director of EFSTH and Head of Surgery (from

The team comprised three dentists, a dental hygienist and an IT engineer. In total, we fundraised around  $\notin$ 40,000 worth of equipment and donations, the majority of which was donated to EFSTH.

### Getting to work

Our visit lasted eight days during the Easter holidays, and we spent our time working at different sites in Banjul, the capital of Gambia. Day one was spent meeting the local oral surgeon at EFSTH, triaging patients in outpatient clinics, and organising sessions and workshops for the following days. Days two, three and four were mainly spent operating on patients who needed extractions, enucleation of cysts, excision of lesions, etc.

During our trip, we operated on a road traffic accident victim who had a 14day-old bilateral grossly-displaced body of the mandible fracture. We also performed surgery on a patient with Ludwig's angina, saving her life. According to the local staff at EFSTH, this condition would usually go untreated and patients would die, due partly to delay in presenting to the hospital, but more importantly due to lack of resources and expertise.

Days five and six were spent visiting a home for children with special needs, assessing and treating children, and visiting schools for oral health promotion and distribution of toothbrushes. The last two days were spent on completely digitising the hospital's library, upgrading the multidisciplinary team (MDT) room audio and video facilities, and installing teleconferencing facilities with the help of our IT engineer. We also reviewed patients operated on earlier. Being dually qualified in both medicine and dentistry, and with extensive experience in oral and maxillofacial surgery, I had the opportunity not only to

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![](_page_18_Picture_6.jpeg)

\* T&Cs: The discount will be applied against the list price of the first 3 crowns ordered (excl. implants crowns, margins, alloy, or any other associated charges). The offer applies to single unit crown orders only. If the case is for more than one crown, the discount will only apply to the lowest price crown. The offer cannot be used in conjunction with any other discounts or promotions. The offer applies to new SCD customers only who must complete a new account application form and agree to SCD T&Cs. The offer is not transferrable. Offer valid from 02 October - 30th November 2017. Orders received after that date will not be eligible for this offer.

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![](_page_19_Picture_8.jpeg)

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### FEATURE

![](_page_19_Picture_11.jpeg)

Meeting with local oral surgeon Dr Eugene Okafour.

![](_page_19_Picture_13.jpeg)

Hygienist Nadia Marmouch Lobato providing education at a home for children with special needs.

lead most of the surgeries but also to liaise with team members to co-ordinate tasks and oversee our projects. These included workshops to train local staff, assessment of children with special needs and their treatment and, whenever the time permitted, helping our team IT engineer with his work.

In general, the trip was an extraordinary experience, from being able to fundraise huge amounts in donations and equipment, and operating on lifethreatening emergencies, to treating patients with facial trauma and deformities, making a huge impact on their lives. Our involvement with children with special needs and their treatment, taking responsibility for their regular dental care, was also a very satisfying part of the trip. The ability to work with limited resources was the most important learning curve for me on this trip, as in the words of the local surgeon: "Things here don't work for you, you have to make them work by adapting". All of the team ended up going home safely, and vowing to return.

![](_page_19_Picture_17.jpeg)

Maxillofacial Surgery Department, University Hospital Galway

![](_page_19_Picture_19.jpeg)

### The road to Kathmandu

DAMIEN SMITH travelled to Nepal with a group of fellow UCC undergraduate dentistry students as part of the UCC Dental Outreach Programme.

UCC undergraduate dentistry students have a longstanding tradition of participating in the UCC Dental Outreach Programme and aiding people who need, but don't have access to, dental care.

The 2017 programme was organised by a community-based not-for-profit organisation, Around Good People (AGP). I and 10 of my classmates travelled to Nepal, where we would carry out AGP's stated mission to "deliver oral healthcare, servicing thousands of people, at no charge, throughout the mountain communities of Nepal".

### Acclimatising

Once we arrived in Kathmandu, we spent two days preparing for the clinic through lectures on dentistry and oral healthcare in Nepal, cultural sensitisation, language essentials and discussion workshops with the clinical team we would be working with. It was a lot to take in in just two days (while also acclimatising to unfamiliar surroundings); however, it was essential, and we were able to develop relationships before all the stresses and strains of life in the clinic would take hold.

![](_page_20_Picture_7.jpeg)

Our daily commute to the clinic.

Then the real work started: on day three we set off on a three-and-a-half-hour journey to the mountainous village of Tistung Palung. The journey involved us negotiating the dusty roads of Kathmandu and winding through the foothills of the Himalayas – I have promised myself never to complain about traffic on the M50 or the level of careless driving on Irish roads ever again!

Upon arrival at the village we were brought to the local primary school where our clinic would be based. When approaching the school, we received what I can only describe as a presidential welcome. The whole village came out to greet us and we were presented with traditional Nepalese scarves (khata) and indigenous flowers. It was all quite surreal and something we all agreed we had never experienced before!

With the excitement of the welcoming ceremony over, it was time to get to work. We were split into two clinical groups with a total of five dental chairs. Each group had a clinical supervisor, dental hygienist, three interpreters

![](_page_20_Picture_12.jpeg)

MELAtrace Documentation and approval software from

![](_page_20_Picture_14.jpeg)

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![](_page_20_Picture_16.jpeg)

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- MELAprint 60 barcode label printer RRP €785 FREE OF CHARGE
  - Handheld barcode scanner RRP €180 FREE OF CHARGE

![](_page_20_Picture_22.jpeg)

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### FEATURE

![](_page_21_Picture_1.jpeg)

The arrival ceremony at Tistung Palung.

![](_page_21_Picture_3.jpeg)

All eves on the dentist.

![](_page_21_Picture_5.jpeg)

Demonstrating good tooth brushing technique.

![](_page_21_Picture_7.jpeg)

The busy clinic in the afternoons.

![](_page_21_Picture_9.jpeg)

Primary school and orphanage in Kathmandu.

![](_page_21_Picture_11.jpeg)

The whole team.

recruited from the village, and ourselves. It really was dental care in a resourcepoor situation.

### Steep learning curve

Going from seeing four patients on a good day in the dental hospital in Cork to 12-18 patients was a big step up for everyone, but a challenge we were ready to accept. Throughout the week we took turns to give local schoolchildren oral hygiene instruction, toothbrushes and fluoride treatments.

As villagers turned up to the school they were screened; blood pressure and blood glucose levels were recorded and triaged, with the more urgent cases treated first. Treatments involved scaling, restorations and extractions. Anything could and did present to the clinic, but we were determined to treat our patients with respect and dignity, which showed in the satisfied reactions and thankfulness we received.

We also had to be mindful of both our level of experience and our resources. For some patients, it soon became apparent that there were underlying medical issues that we were unable to treat. Personally, I found this particularly hard to take when treating young children.

The last two days of the programme were based in Kathmandu, where we visited a primary school and orphanage to give oral hygiene instruction, toothbrushes, fluoride and emergency treatments. The orphanage visit was

![](_page_21_Picture_20.jpeg)

A very special welcome from the people of Tistung Palung.

particularly poignant for the group. Being in a room with 25-30 smiling faces and knowing that these children do not have a family to call their own really makes you realise that you can't be thankful enough for all the friends and family you have back home.

### An extraordinary experience

With the stunning lush greens of the Himalayan mountainside, our daily commute to the clinic felt more like a walk-on part on *The Chronicles of Narnia*. Every day presented its challenges, both professionally and personally, for everyone. But over the seven days on site we managed to screen and treat over 1,600 villagers, which is some going considering the resources we had available! And with that we where done! Our two-week Nepalese experience was a huge social, cultural and professional experience for everyone, and something none of us will ever forget. On behalf of everyone I would like to thank those involved in making the trip possible, especially Praj and the whole ACP group. The work they are doing is incredible and I would urge anyone who wants to help to get in touch with them. It is not until you look back that you realise the amount of resources and human effort needed to make the programme possible, from the logistics right down to the village translators, without whom communication with the patients would not be possible!

Around Good People website: www.aroundgoodpeople.com.

![](_page_22_Picture_0.jpeg)

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![](_page_22_Picture_7.jpeg)

### Tax relief from pension contributions

![](_page_23_Picture_2.jpeg)

Acuvest states that one of the best ways of getting tax relief while investing for your retirement is to make a pension contribution. The company believes that one of the most effective ways to fund a pension is to make regular contributions. Regular amounts can be topped up at the end of the tax year if your accounts allow it.

Acuvest states that another pension topic worth thinking about if you are selfemployed is whether you should consider making voluntary PRSI contributions to qualify for the State pension.

With respect to your personal pension contributions, the following tax limits apply:

#### (1) age limits -

under 30	15%	30-39	20%
40-49	25%	50-54	30%
55-59	35%	60 or over	40%

(2) €115,000 – the maximum annual earnings from which you can avail of the above tax relief.

You have until October 31 to avail of the tax relief for any contributions made in the previous tax year.

### AIB Bank merchant card services

With most patients paying by either credit or debit card in your surgery, make sure you are getting the best rate and service possible from your merchant card service provider.

AIB Merchant Services is pleased to offer a competitive and transparent pricing proposition in the form of the following Interchange ++ pricing model:

Card type	Interchange	Scheme fees	Merchant service charge
Credit cards	At cost	At cost	0.24%
Debit cards	At cost	At cost	5 cent

The table below shows the breakdown of card transactions under this new payment structure and what the end costs would be under this pricing model:

Card type	Interchang	e Scheme fees	AIBMS margin	Total cost
Personal Visa credit cards	0.30%	0.03%	0.20%	0.53%
Personal Mastercard credit cards	s 0.30%	0.05%	0.20%	0.55%
Personal Visa debit cards	0.10%	0.02%	5 cent	0.12% + 5c
Personal Mastercard debit cards	0.10%	0.05%	5 cent	0.15% + 5c
Corporate Visa credit cards	1.30%	0.04% + 2c	0.20%	1.54% + 2c
Corporate Mastercard credit car	ds 1.30%	0.0625% + 2c	0.20%	1.56% + 2c
Corporate Visa debit cards	0.20%	0.04% + 2c	0.20%	0.44% + 2c
Corporate Mastercard debit card	ls 0.20%	0.0625% + 2c	0.20%	0.46%+ 2c

### Become a surgical referral centre

![](_page_23_Picture_18.jpeg)

lan Creighton, Quintess Denta (left) and David Wilson, Causeway Dental.

There are currently three approved Neodent Surgical Referral Centres in Ireland: Ballykelly Private Hospital, Belfast; Blueapple Dental & Implant Centre, Co. Fermanagh; and, Causeway Dental in Co. Antrim, with more approved centres on the way in Galway, Dublin, Enniskillen, Belfast and Derry soon.

Quintess Denta states that it is actively looking for more strategic referral hubs throughout Ireland, and is offering support for education, training and marketing. When a dentist signs their practice up to be a referral hub, Quintess states that they can avail of a free trial of the Neodent implant system, with a dedicated clinical support mentor available to them.

Quintess states that the Neodent implant system brings affordable quality to the market. The company believes that as a Straumann Group Brand, Neodent customers receive superior clinical and marketing support. One-to-one mentoring is also available for those interested in getting started in implant dentistry, be that surgically or restoratively.

![](_page_23_Picture_23.jpeg)

Additional fees:

- No authorisation fee
- ▶ PCI validation fee: €4.35
- No set-up or joining fees
- Minimum monthly fee: €30
- Chargeback fee: €20

### **Terminal options**

The new top-of-the-range Clover Mini Terminal will be offered to IDA members.

There are two options for this terminal:

- 36-month lease agreement: €19.50 + VAT per month and £1.50 per month for a separate pin-pad (if required); and,
- upfront purchase: €425 + €40 for a separate pin-pad.

### Henry Schein at IDENTEX

Henry Schein presented its growing portfolio of products and services to dental professionals at IDENTEX 2017.

The complete A-dec product portfolio is now also available through Henry Schein in Ireland. Also showcased was more of the company's ConnectDental range. There was also an educational hub on the Henry Schein stand, which was an area dedicated to education and training. The newly-launched Henry Schein Dental Orthodontics product and service portfolio was presented to attendees.

### Supporting Irish Cancer Society

Henry Schein will support cancer awareness and research through its Practice Pink programme this autumn. In October, the company will offer customers the opportunity to join the company in the fight against cancer by

### We're off to Brum...

The *Journal of the Irish Dental Association* will be visiting Dental Showcase in Birmingham on Thursday October 19. From a business perspective, the Journal goes to more dentists, and has more credibility, than any other publication for dentists in Ireland. It is the leading publication for dentists in Ireland in every sense – content, circulation and trust.

While several appointments have already been made, if anyone wishes to

purchasing a range of pink products to help support its Practice Pink programme – an initiative designed to raise awareness and support for a cure for cancer.

A portion of sales from these pink products will be donated to the Irish Cancer Society, whose aim is to improve the lives of those affected by cancer by funding vital cancer research, and providing up-to-date information and a range of free services to support cancer patients and their families.

Now in its 13th year, the Practice Pink programme has raised more than \$1.3m for the fight against cancer. In 2016, the programme expanded to Europe, where across the continent the company teamed up with supplier partners and non-governmental organisations to positively impact the lives of people battling cancer.

Simon Gambold, Henry Schein's Vice President Marketing, EMEA Dental Group, said: "Henry Schein is proud of the terrific response to this programme across Europe in 2016. We hope that with the generosity of our customers, supplier partners and Team Schein members, we can do even better this year".

### meet with Paul O'Grady in Birmingham, please call him on +353 (0)86 2468

### Pensions save you tax

Omega Financial Management states that a major benefit of being self-employed is that you can claim pension payments as a business expense and that by setting this up, you can effectively redirect your tax payments into your pension fund.

> The company explains that because your pension contribution is an 'allowable expense' in your tax bill, writing a cheque for it is deemed to be a legitimate business cost for you. As such, even though you own the

pension fund that you are paying into, it is still treated as a business expense for you and reduces your

taxable profit in that year.

In October, if you are a self-employed dentist you will submit your income tax return for the previous tax year and pay the remainder of the tax in excess of the preliminary tax you paid last year. In addition, you will be required to pay your preliminary tax for the current year. This figure is likely to be 90% of your expected income tax liability, or 100% of last year's figure.

Therefore, if you pay €20,000 into your pension for last year's tax year, you will in effect reduce your preliminary tax obligation for this year. However, remember you must make the contribution when the time comes a year later or your balancing payment will go back up again.

### Coltene at the Dental Showcase

382, or email paul@thinkmedia.ie.

Coltene states that it has been developing world-class materials that help dental professionals improve their clinical outcomes for over 50 years.

Exhibiting at the British Dental Industry Association Dental Showcase in Birmingham, England, on stand L20, the Coltene team will be giving delegates more information about the company's range of products. This includes the full range of restorative materials, such as BRILLIANT EverGlow and Fill-Up!, as well as the latest endodontic products that Coltene has developed in cooperation with dentists. The company believes that its HyFlex EDM NiTi files – the fifth generation of Coltene's root canal files – exhibit vital properties for endodontic success.

Coltene will also be showcasing the new Biosonic UC150 ultrasonic cleaning system, which it states features a 5.7L tank capacity and a low noise level of 63dB.

The company says that its team is eager to talk to aspiring dental professionals who want to learn more about the range of dental products it has to offer, and to find our more about what the profession needs from providers.

![](_page_24_Picture_26.jpeg)

![](_page_24_Picture_28.jpeg)

### **BUSINESS NEWS**

![](_page_25_Picture_1.jpeg)

Mark Allen (left) and Nicholas O'Keeffe of Coltene.

![](_page_25_Picture_3.jpeg)

Jesse Morrow (left) and Nick McKelvie of McDowell + Service dental laboratory.

### Choice aplenty

The Irish Dental Trade Association's showpiece event returned this year with new exhibitors, technology and products for Irish dentists.

IDENTEX 2017 took place in the Citywest Hotel, Dublin on Friday and Saturday, September 15 and 16. The Irish Dental Trade Association's (IDTA) event is the largest dental trade show in Ireland and featured around 35

![](_page_25_Picture_8.jpeg)

On the Cerezen stand were (from left): George Saada; Liz Harpur; and, Sean Gannon.

![](_page_25_Picture_10.jpeg)

Dentsply Sirona's Jack Hannan (left) and Neil Rollins.

![](_page_25_Picture_12.jpeg)

On the Henry Schein stand were: Nick Olive (A-dec); Pat Bolger, Henry Schein; Pat Mullins, Henry Schein; and, Dr Elaine Guinan.

![](_page_25_Picture_14.jpeg)

The BF Mulholland team at IDENTEX (from left): Nigal Rutter; David Calvert; Lindsey Morrison; Lianne Sutton; Grainne Miskelly; Mike Connolly; Ruairi Molloy (Philips); Kiera Mulholland; Tom Corcoran; and, Noel Lucey.

companies across 60 stands. Also held on the two days was the IDA's Autumn Meeting of CPD events, which featured lectures, workshops and hands-on courses.

President of the IDTA, David Greham, said: "A very successful show was enjoyed by both exhibitors and dental team attendees; thanks to the close working relationship between the IDA and the IDTA, IDENTEX delivered a CPDapproved lecture programme which reflected the needs of the dental team. The IDTA would like to thank the IDA team for their support of IDENTEX and wish the President, Dr Robin Foyle, a successful year".

Managing Director of Henry Schein Ireland, Paddy Bolger, said: "Identex 2017 was a great event and gave us the opportunity, as a dental solutions provider, to showcase our full range of innovative equipment, digital technology, latest consumables and value-added services. Many customers who attended commented that this was a great show during which they had the opportunity to talk through their plans with our representatives and get even more helpful

![](_page_25_Picture_19.jpeg)

Jonty Bayliss of Dentisan.

![](_page_25_Picture_21.jpeg)

GC's Tim Harwood and Tracey Webb.

### BUSINESS NEWS

![](_page_26_Picture_1.jpeg)

Peter Morris of Morris Dental at the show.

![](_page_26_Picture_3.jpeg)

Jonathan Singh of NSK.

insights than expected during an industry exhibition".

### Autumn meeting

An always-popular workshop on what to do in the case of a medical emergency was held on both days by health and safety trainers, Safehands. Dr Ian Cline led a hands-on course on 'Current concepts in posterior composites' on Friday and Saturday. Dr Richard Lee Kin gave his expert thoughts on the management of periodontal disease in general dental practice in a lecture on the Saturday.

On Friday, Prof. Edward Lynch went through an array of different dental problems and solutions in his lecture 'Clinical tips to help dentists provide better, faster, more effective, easier and more profitable dentistry'.

The lecture looked at what dentists currently do and what Edward has learned in his many years in dentistry that could make things better and easier for them. He spoke about the products he prefers for a whole range of dental procedures. One of his biggest tips was that dentists should never seal in infected dentine

![](_page_26_Picture_10.jpeg)

Gerry Lavery of Septodont had much on display at IDENTEX.

![](_page_26_Picture_12.jpeg)

Omega Financial Management's Graham O'Connor.

![](_page_26_Picture_14.jpeg)

Winner of one of the four €1,000 draws Dr Daniel Collins (left) with David Greham, IDTA President.

![](_page_26_Picture_16.jpeg)

The Quintess Denta team (from left): James Hamill; Ian Creighton; and, Stephen Wilson.

without killing the bacteria first, because the infection will only be slowed, not stopped. He recommended using ozone to kill the infection, as it is a powerful antimicrobial. The ozone generator he prefers is the healOzone. He said this can deliver much larger, safer and effective doses of the gas than other systems because of its patented delivery system.

The gas can also be of benefit in endodontics. He said that if he can avoid doing a root filling, he will. For root caries, he recommended 10 seconds of ozone with the healOzone. When it comes to root canal therapy, he said all methods work and that they just have to be used correctly. The new methods are no better than the old ones, he stated.

One of his main tips was that he never cures composites with fewer than two lights. He also said there are simple methods available to dentists who are performing full-mouth restorations/rehabs and went through one-visit crowns, air polishing, luting of veneers, and many more topics across the two hours of his lecture.

![](_page_26_Picture_21.jpeg)

Paddy Hart of Red Star Medical.

![](_page_26_Picture_23.jpeg)

From Braemar Finance were Aileen Boyle and Joe Biesty.

![](_page_26_Picture_25.jpeg)

Steve Weir was manning the Zhermack stand.

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![](_page_27_Picture_6.jpeg)

### **Problems with Plaster Study Model Storage**

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### Dealing with online feedback

Negative online feedback about your practice can affect its reputation, but your response to it is an opportunity to show off your professionalism.

![](_page_28_Picture_3.jpeg)

As 87% of the Irish population is online,<sup>1</sup> the chances are that you may have to deal with negative online feedback about your professional skills at some time. You may already be enjoying the benefits of creating a profile for your practice on social media, and possibly you already have a social media strategy in place. Crucially, that strategy should include a plan for dealing with negative online feedback. No matter how good a dentist you might be, there will occasionally be dissatisfied patients who will use social media to express that dissatisfaction.

#### Feedback

Feedback can be either positive or negative. In dentistry, we tend to be very good at analysing what did not go as well as we would have wished, but we sometimes forget to share and discuss positive feedback within our dental team.

It is actually quite refreshing to receive positive feedback. Making a point of discussing what you did to impress the patient, to the extent that they provided such feedback, can be a real team builder. Thanking the patient for giving the positive feedback is a nice touch too.

While positive feedback is always welcome, it's the negative feedback that needs more careful consideration. You might want to analyse and discuss negative feedback during a practice meeting, so that any ideas to improve things can be used to develop your business.

Generally speaking, there is nothing to compel you to respond to negative feedback, so you could ignore it. However, after careful consideration you might want to make some response, since ignoring a comment may foster the perception that you don't care. It's an opportunity to manage your practice's reputation, and the way in which you respond may even enhance that

![](_page_28_Picture_10.jpeg)

- Have a strategy for adverse feedback
- Remember patient confidentiality
- You can encourage satisfied patients to post reviews
- Never post fake reviews

reputation. Feedback can be collected through one of a number of platforms, such as:

- the practice website;
- an external website, e.g., Whatclinic.ie, Yelp.ie;
- Facebook; and,
- Twitter.

### **Responding to negative feedback**

Your strategy might be to post a generic response to any negative review, perhaps hoping to demonstrate that you listen to and care about patients, while inviting the patient to contact you directly so that you can to respond to them personally, for example:

"Thank you for your comment. We take all patient comments seriously and we would invite you to contact (*add named person*) directly so that we may fully investigate and respond to your concerns".

This short form of words effectively acknowledges the issue and takes it offline.

### **Case study**

Below is an example of negative feedback that was left in an online review of a practice:

```
****
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### John Kelly

Terrible treatment. The cleaning was awful, it hurt and there was lots of blood. Then I had to pay. My gums are still sore – terrible place!

Here is an example of how a dentist should *not* respond to such criticism: "Hi Mr Kelly, you told us you had not been to a dentist for years and it showed. Your gums were in a very bad state and causing you bad breath, so your cleaning was not very nice for us either. It would be better if you spent more time cleaning your teeth and less time writing reviews like this".

Such a response from the dentist would not only be inflammatory, it's also a breach of the patient's confidentiality. In fact, confidentiality breaches are worse online than in person as they have the potential to reach a much wider audience, and the breached information is accessible more permanently. In that situation, the patient could escalate their dissatisfaction, and what was originally a simple issue could become more serious and more challenging to

resolve as a result of an unprofessional response.

The fact that a patient has chosen to identify themselves and their treatment does not waive their right to confidentiality. The Dental Council's stance on this is clear:

"10.1 All dental healthcare workers and staff within your dental practice must respect patient confidentiality. Disclosing information about a patient's attendance or any other aspect of their care should only happen with the patient's consent...

"15.3 Your use of social media (such as Facebook, Twitter and so on) should be responsible and discreet. Indiscretion in the use of social media is not acceptable and could leave you liable to fitness to practise proceedings".

A better strategy would have been to respond along the lines of the generic response mentioned earlier. That has the effect of demonstrating to that particular patient that you have considered his feedback and are open to hearing from him directly, so you can investigate and respond to him in a professional way.

It would also serve the purpose of demonstrating to anyone else who reads the feedback (and that might include current patients, potential patients and

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![](_page_29_Picture_13.jpeg)

people who know you in the local community) that you are caring and professional. It preserves your reputation, which is more than can be said of the alternative response.

In this particular situation, the practice owner apologised to the patient and invited him in to discuss the matter. She also used the issue as a learning experience for the whole team and advised the patient what she was doing. Fortunately, he accepted her apology, but the situation could have been much worse.

### Accentuate the positive

When considering how to deal with negative feedback, you might also wish to encourage satisfied patients to provide feedback. That often outweighs any negative reviews. However, you should not give in to the temptation to add fake reviews, as doing so could make a manageable situation much more serious.

It is important that any members of the dental team who are responding to comments are trained appropriately, as their comments are very likely to be regarded as coming from the clinician and ultimately their responsibility. The patient may well assume (rightly or wrongly) that the dentist has approved such comments.

It is your decision as to whether you delegate responsibility, as some would view it as potentially delegating your reputation. In some practices a member of the team is delegated to look after social media, but any responses to feedback are approved by the practice owner prior to being posted.

To be in a position to offer a timely response, you'll need to be aware that the feedback is there in the first place. You need to put in place a strategy that will allow you to regularly review your social media; after all, it is your reputation that is a stake. You might also want to set alerts, e.g., Google alerts, so that you become aware of any mentions of your practice name, as if a negative comment is left for some time without any response, anyone seeing the comment might take the view that you don't care.

#### Benefits of negative reviews

It has been said that an unintended benefit of a negative review is that they make positive reviews look even better. Any practice, or indeed any business, which has both positive and negative reviews on show appears open and honest; they have nothing to hide. Negative reviews show that all of your reviews are real. How many times have you been suspicious of online feedback for a restaurant or a hotel when it is all positive?

Generally, patients know that we are all human and no one is perfect, so they value seeing honest feedback, even if it's not all positive. They are more likely to judge you on the way you deal with the feedback than the feedback itself. Far from being destructive, negative feedback provides you with a golden opportunity to demonstrate your professionalism and re-engage with the patient to resolve the issue and re-build your professional relationship with them. You may have heard of the service recovery paradox – this occurs when a patient has had their issue resolved and then goes on to become one of the practice's greatest fans, more so than if an issue had never arisen.

Every item of feedback is an opportunity. The better your response, the more your professional reputation will grow.

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1. https://zephoria.com/insights/.

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![](_page_30_Picture_12.jpeg)

![](_page_30_Picture_13.jpeg)

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![](_page_30_Picture_15.jpeg)

### Tips for splinting traumatised teeth

There are a lot of things to consider when splinting a tooth but when done right, it is a very useful and effective technique.

A splint is required when teeth are mobile or need to be repositioned following a traumatic injury. The aim of splinting is to stabilise the injured tooth and maintain its position throughout the splinting period, improve function and provide comfort. Current best practice guidelines from the International Association for Dental Traumatology (IADT) recommend splinting for luxated, avulsed, root fractured and traumatically loosened permanent teeth.<sup>1,2</sup> Splinting of primary teeth is usually not feasible. In general, the prognosis of a traumatised tooth is determined by the type of injury rather than the type of splint.<sup>3</sup> However, correct splinting is important to maximise healing of the soft and hard tissues, and prevent further injury.<sup>1-6</sup>

An effective splint should be functional, meaning it incorporates at least one uninjured tooth on either side of the traumatised tooth or teeth. This can be difficult in mixed dentition, where there are mobile primary teeth, partially erupted teeth or no adjacent teeth. In such cases, a longer span may be required to achieve stability.

It is important that splints are flexible, allowing for physiological tooth movement. This is an important factor in healing within the periodontal ligament. IADT guidelines<sup>1</sup> recommend flexible splinting for all types of injury except alveolar fracture, where it is not specified (**Table 1**). Rigid splinting is associated with an increased prevalence of replacement root resorption and pulp canal obliteration during healing, especially when in situ for more than 14 days.<sup>4,6</sup>

### Table 1: IADT splinting recommendations

Injury type	Splint type	Splinting duration
Subluxation	Flexible	Two weeks (only if required for comfort)
Extrusive luxation	Flexible	Two weeks
Avulsion	Flexible	Two weeks (or four weeks if
		dry time >60 mins)
Intrusive luxation	Flexible	Four weeks
Lateral luxation	Flexible	Four weeks
Root fracture	Flexible	Four weeks (up to four months depending
		on fracture location)
Alveolar fracture	Not specified	Four weeks

Splints should be comfortable for the patient, allow adequate oral hygiene, and not irritate the soft tissues. A study subjectively comparing different splint types in 10 volunteers reported that composite wire splints and titanium trauma splints were the most acceptable. Bracket splints caused most interference with lips and speech.<sup>7</sup>

In addition, effective splints should:

- allow pulp sensibility testing and endodontic access;
- not interfere with the occlusion; therefore, a labially-placed splint is most common; and,
- be easy to apply and remove without causing iatrogenic damage to the tissues.

### **Splinting techniques**

Wire secured to the teeth with composite (**Figure 1**) is the most favoured and widely-used splint, and can be used in almost all types of tooth injury. A clinical step-by-step technique is depicted in **Figures 5-5d**, and the Dental Trauma Guide also provides detailed instructions.<sup>2</sup> Always protect the airway. The stainless steel wire should be pre-contoured to conform to the teeth and the diameter must not exceed 0.4mm to remain flexible.<sup>4</sup> The wire used should be passive in nature and not exert any unwanted orthodontic forces. Avoid excessive composite, which will limit the splint's flexibility.<sup>4</sup> Composite should not encroach on the embrasure spaces or the gingival margin. Contrasting shades of composite should be used in order to facilitate removal.

Alternative splints include:

- fishing line nylon is used to replace the wire and offers an inexpensive and aesthetic alternative;
- orthodontic brackets and wire splints are useful if orthodontic alignment of the displaced tooth is desired in addition to splinting;
- composite resin splints are quick to apply but can lead to gingival irritation as they can be very difficult to clean<sup>7</sup> and prone to fracture – composite splints are rigid and therefore not recommended;<sup>1-4</sup> however, a Protemp splint (Figure 2) can be useful as a temporary emergency measure;
- fibre splints (Figure 3) consist of weaved polyethylene fibres (Ribbond) or glass fibres in a polymer-resin gel matrix (EverStick) – they reportedly have

![](_page_31_Picture_20.jpeg)

Dr Rona Leith ssistant Professor, Department f Public and Child Dental Health, uublin Dental University Hospital Dr Anne C. O'Connell Associate Professor/Consultant, Department of Public and Child Dental Health, Dublir Dental University Hospita

![](_page_31_Picture_23.jpeg)

### CLINICAL FEATURE

![](_page_32_Picture_1.jpeg)

FIGURE 1: Composite and wire splint.

![](_page_32_Picture_3.jpeg)

FIGURE 4: Titanium trauma splint (Medartis).

![](_page_32_Picture_5.jpeg)

FIGURE 2: Resin splint (Protemp 3M ESPE).

![](_page_32_Picture_7.jpeg)

FIGURE 5: Step-by-step placement of a composite wire splint to stabilise a crown root fracture in tooth 11 and allow endodontic access.

![](_page_32_Picture_9.jpeg)

FIGURE 3: Fibre splint (Ribbond).

![](_page_32_Picture_11.jpeg)

FIGURE 5a: Clean and dry teeth and reposition fracture.

![](_page_32_Picture_13.jpeg)

FIGURE 5b: Isolate the teeth, then etch and bond the mid-labial surface.

![](_page_32_Picture_15.jpeg)

FIGURE 5d: Stabilise pre-contoured wire and cure composite onto adjacent uninjured teeth first, then reposition traumatised tooth and add composite to secure. Ensure that there are no sharp edges.

high strength, are very easy to adapt and are aesthetic;

- titanium trauma splints (Figure 4) are flexible titanium splints with a rhomboid mesh structure – secured to teeth with flowable composite,<sup>4,5</sup> they are easy to place and remove, but high cost is an issue;
- suture splints may be required if there are multiple missing teeth, or in the mixed dentition where conventional splinting is not possible; and,
- a removable Essix retainer splint can be of use where multiple teeth are involved.

### **Splinting duration**

Shorter splinting durations appear favourable, as prolonged and rigid splinting is thought to promote replacement resorption.<sup>3,4,6</sup> Current IADT guidelines<sup>1</sup>

![](_page_32_Picture_23.jpeg)

FIGURE 5c: Bond fracture together to stabilise and place base composite on labial surfaces.

![](_page_32_Picture_25.jpeg)

FIGURE 6: Avulsion in tooth 21 and root fracture in tooth 11 in eight year old splinted for four months. Note that the splint extends posteriorly, and partially-erupted lateral incisors are not included to avoid interference with eruption.

recommend different immobilisation times depending on the injury type and tissues involved in healing (**Table 1**). Only one week is required to obtain a strong gingival attachment following repositioning;<sup>3,4,6</sup> however, where there is an associated bony fracture, such as in lateral luxation injuries or alveolar fracture, longer splinting times are recommended. When prolonged splinting is required, extra care is required that the wire is not impeding eruption in the mixed dentition (**Figure 6**). The importance of excellent oral hygiene following splint placement must be emphasised to the patient. IADT guidelines also recommend appropriate review intervals following dental injuries.<sup>1,2</sup>

### Splint removal

Correct splint removal is as important as placement. Aggressive removal can

![](_page_33_Picture_1.jpeg)

FIGURE 7: Different composite removal techniques.

![](_page_33_Picture_3.jpeg)

FIGURE 8: Top tip! When approaching the enamel-resin interface, rub articulating paper over the tooth surface and it will mark only the residual composite, guiding your final polishing.

damage the teeth but insufficient removal favours plaque retention and decalcification.  $^{\rm 5,8}$  There is no standard protocol for the removal of composite resin materials but commonly-used techniques, including pliers, hand scalers, burs and polishing disks (Sof-Lex, 3M ESPE), are shown in Figure 7. A study reported that composite removal with abrasive discs (using progressively finer discs) and tungsten carbide burs (in a slow hand piece) result in the smoothest enamel surface, but all techniques reportedly cause some iatrogenic damage.<sup>8</sup> Hand scalers, ultrasonic scalers and diamond burs cause the most enamel surface roughness so are not recommended. Final polishing is facilitated by the use of magnification<sup>3</sup> and articulating paper is useful to mark the residual composite once the operator approaches the resin-enamel interface to prevent iatrogenic damage to the enamel (Figure 8).

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### Dental interventions in patients taking anti-resorptive medication for the treatment of osteoporosis and other bone disease: an audit of current practice in the Dublin Dental University Hospital

### ABSTRACT

Medication-related osteonecrosis of the jaws (MRONJ) is a well-established complication of antiresorptive and, more recently, anti-angiogenic therapy. The dental profession has a pivotal role to play in the prevention and management of this debilitating condition, and all dentists have a responsibility to remain cognisant of national and international best practice guidelines in the prevention of this disease process. The management of patients in the Dublin Dental University Hospital at risk of MRONJ when carrying out dental interventions was audited against nationally- and internationally-published guidelines. The results of the audit showed compliance with the national and international guidance in 5% and 0% of cases, respectively. The most common measures implemented in the management of patients at risk of MRONJ were: preoperative antibiotics in 49% of cases; preoperative chlorhexidine mouthwash in 76%; plain local anaesthetic in 51%; and, post-operative antibiotics in 80%.

In conclusion, we found a low level of absolute compliance to both guidelines included in this audit. This highlights a need to re-examine the evidence underpinning these guidelines to ensure best practice patient care. Early recommendations have been made based on the findings of this audit, which will help to maximise its impact on clinical care delivery and generate discussion to stimulate and support action planning. Guidelines that are not followed are indicative of differing clinical opinions, highlighting the need for clarification and guidance as our understanding of this pathological entity broadens.

### Journal of the Irish Dental Association 2017; 63 (5): 263-268

### Introduction

Osteonecrosis of the jaw (ONJ) is a rare but serious disease of the maxilla and mandible.<sup>1</sup> As the name suggests (osteo = bone and necrosis = death), ONJ manifests as lesions of necrotic and exposed bone in the oral cavity that persist

![](_page_34_Picture_8.jpeg)

ONJ may be associated with different predisposing conditions, with its

![](_page_34_Picture_10.jpeg)

**Dr Cían J. Henry** BA BDentSc(Hons) MFD RCS Senior House Officer, NCHD Department, Dublin Dental University Hospital.

**Dr Rory O'Reilly** BA BDentSc(Hons) DipPCD RCSI Junior House Officer, NCHD Department, Dublin Dental University Hospital. Prof. Leo F.A. Stassen FRCSI FDS RCS MA FTCD FFSEM FFD RCSI FICD Professor/Chair Oral and Maxillofacial Surgery, Frinity College Dublin, National Maxillofacial Unit St James's Hospital

Corresponding author Cian J. Henry, NCHD Department, Dublin Dental University Hospital, Lincoln Place, Dublin 2. E: henryci@tcd.ie

### Table 1: Medications predisposing to medication-related osteonecrosis of the jaw<sup>+</sup>

Generic name	Trade name	Clinical indication
Oral BPs		
<ol> <li>Alendronate*</li> <li>Risedronate*</li> <li>Etidronate</li> <li>Ibandronate*</li> <li>Clodronate</li> <li>Tiludronate</li> </ol>	Fosamax Actonel Didronel Bondronat, Bonviva Bonefos, Loron, Clasteon Skelid	Treatment of osteoporosis and corticosteroid-induced osteoporosis, Paget's disease of bone.
Intravenous BPs		
<ol> <li>Pamidronate*</li> <li>Zoledronate*</li> <li>Clodronate</li> <li>Ibandronate*</li> </ol>	Aredia Zometa, Aclasta Bonefos, Loron, Clasteon Bondronat, Bonviva	Hypercalcaemia of malignancy, osteolytic lesions, Paget's disease of bone, skeletal metastases, osteoporosis (at lower frequency and dose).
Denosumab		
	Prolia, Xgeva	Bone metastases, and osteoporosis.
Antiangiogenic r	medications	
<ol> <li>Sunitinib</li> <li>Sorafenib</li> <li>Bevacizumab</li> <li>Sirolimus</li> </ol>	Sutent Nexavar Avastin Rapamune	Treatment of neoplastic lesions and prevention of organ rejection.

+ Adapted from Brock et al.45

\* Nitrogen-containing, higher-potency bisphosphonates.

pathophysiology varying depending on these predisposing factors.<sup>4,5</sup> One such predisposing factor is the manipulation of bone metabolism by therapeutically administered drugs.<sup>2</sup>

Bisphosphonates (BPs) (pyrophosphate analogues, which share a common phosphorous-carbon-phosphorous chemical core) are considered the archetypal drug predisposing to ONJ.<sup>6</sup> Their principal action is to inhibit resorption of bone, which results in an increase in the mineral density of bone and a reduction in serum calcium.<sup>7</sup> BPs are the most clinically important, and widely used, anti-resorptive medication for the treatment of conditions with increased bone resorption caused by osteoclastic activity including osteoporosis, Paget's disease of bone, multiple myeloma, and metastatic bone disease.<sup>7</sup> **Table 1** details the current medications associated with ONJ and the conditions which they are used to treat. Indeed, ONJ was first reported in this patient cohort and the term bisphosphonate-related osteonecrosis of the jaw (BRONJ) was introduced to the literature.<sup>6</sup>

Various other drug groups which promote ONJ (including RANK ligand inhibitors<sup>8</sup> and angiogenesis inhibitors) have been identified recently. This has prompted the American Association of Oral and Maxillofacial Surgeons (AAOMS) to update the term bisphosphonate-related osteonecrosis of the jaw (BRONJ) to anti-resorptive agent-related osteonecrosis of the jaw (ARONJ) and subsequently to medication-related osteonecrosis of the jaw (MRONJ).<sup>2</sup> The term MRONJ will be used for the purposes of this audit.

Although MRONJ has been reported for well over a decade, the precise pathophysiologic mechanisms of the disease remain unknown.<sup>9</sup> ONJ is most commonly associated with procedures that stimulate the alveolar bone, and has also been described to occur spontaneously. The condition is particularly associated with dental extractions,<sup>10,11</sup> implantology,<sup>12,13</sup> and oral and

periodontal surgery, although non-interventional causes of bone stimulation such as periapical or periodontal infection may have the same effect.<sup>14</sup> This suggests that the development of ONJ may be strongly linked to local inflammation. The incidence of MRONJ, although a point of contention in the literature with conflicting evidence, is reported at 1:10,000 in patients receiving oral BPs for the treatment of osteoporosis<sup>15,16</sup> and 1:1,000 for those receiving intravenous BPs or denosumab for the treatment of metastatic cancer.<sup>17,18</sup>

Measures proposed to reduce the risk of MRONJ, where invasive dental treatment is necessary, in patients already taking anti-resorptive medication, range from the use of peri-operative antibiotics and chlorhexidine mouthwash<sup>19-21</sup> to advocating a drug holiday,<sup>2,22,23</sup> the rationale for the latter being the recovery of normal bone haemostasis to encourage healing following dento-alveolar surgery.<sup>24</sup> However, there is little evidence supporting any of these measures, and this topic remains shrouded in controversy throughout the literature.

The serum bone turnover marker C-telopeptide (CTX) level has also been suggested as a biomarker useful in predicting an individual's risk of developing MRONJ prior to dental interventions.<sup>25-32</sup> However, other publications have illustrated that serum CTX levels exhibit neither accuracy nor reliability in predicting the risk for MRONJ and advocate against routine testing.<sup>33-35</sup>

### Aims and objectives

This audit compared standard practice in the Dublin Dental University Hospital (DDUH) for the management of patients currently (or with a history of) receiving anti-resorptive medications with that suggested by nationally- and internationally-published guidelines. The audit retrospectively considered a period of six months, July 1 to December 1, 2015.

A secondary objective was to formulate recommendations, based on the findings, to more closely align DDUH protocol with that of the most recent, most reliable, evidence-based practice.

#### Materials and methods

Guidelines representing national and international protocols were used for comparison with current DDUH practice:

- guidelines published in the *Journal of the Irish Dental Association (JIDA)* for treating patients taking BPs prior to dental extractions;<sup>36</sup> and,
- American Association of Oral and Maxillofacial Surgeons Position Paper on Medication-Related Osteonecrosis of the Jaws.<sup>2</sup>

A standard of 95% strict adherence to either one of the above protocols was considered acceptable. Strict adherence to the *JIDA* protocol was considered to be implementation of every measure other than placement of sutures and a vacuum-formed splint, as the guidelines suggest that these are not absolutely necessary. The audit proposal was approved by the DDUH Audit Committee.

An algorithmic search of the DDUH electronic dental records was conducted to identify all patients using anti-resorptive medications who underwent any surgical procedures involving the manipulation of mucosal and osseous tissues in the time period considered. The information detailed in **Table 2** was extracted manually by the authors from each patient's records. The data were recorded and analysed using Microsoft Excel 2016 MSO.

#### Results

A total of 40 patients were identified that met the inclusion criteria. This translated to 41 treatment appointments, as one patient attended on two

#### Table 2: Extracted clinical information

Patient demographic	JIDA guidelines	AAOMS guidelines
<ul> <li>Age</li> <li>Procedure(s) completed</li> <li>Operator experience (recorded as the most senior clinician present during the procedure)</li> <li>Clinic</li> <li>Medication: <ul> <li>Type</li> <li>Route</li> <li>Dosage</li> <li>Duration</li> <li>Steroid use</li> <li>Diabetes</li> <li>Smoking status</li> <li>Denture wearer</li> <li>Concomitant oral disease</li> </ul> </li> </ul>	Preoperative • OHI* • Antibiotics • Chlorhexidene rinse Intra-operative • Plain local anaesthetic • Sutures Post-operative • Antibiotics • Vacuum-formed splint • Chlorhexidene rinse • Soft diet	<ul> <li>Risk</li> <li>classification</li> <li>OMFS*</li> <li>opinion for</li> <li>patients at</li> <li>high risk of</li> <li>developing</li> <li>MRONJ</li> <li>Drug holiday</li> <li>and length</li> </ul>

\*OHI = oral hygiene instruction, OMFS = oral and maxillofacial surgery, MRONJ = medication-related osteonecrosis of the jaw

occasions in the six-month period. The patients were aged from 13 to 91 years and the majority of the treatments were completed by specialists/consultants in a dental chair unit.

It was found that 20% of patients were current smokers at the time of the procedure. A further 39% wore dentures and 88% had concomitant oral disease (predominantly carious lesions and periodontal disease). The most common type of medication being used by patients were BPs, specifically alendronate. BPs were most often administered orally, although 10% of patients had received both oral and intravenous BPs. Some 7% of patients had a history of BP use, as well as alternative anti-resorptive agents. The duration of anti-resorptive therapy ranged from three months to 17 years. A further 12% of patients were simultaneously using steroids and 7% were diabetic. **Table 3** details the concomitant risk factors predisposing to MRONJ.

The preventive measures taken in the management of this patient cohort were analysed. **Table 4** details conformance to additional clinical measures to prevent MRONJ according to the AAOMS and *JIDA* guidelines. Preoperative chlorhexidine mouth-rinse, plain local anaesthetic, and pre- and post-operative antibiotics were the most frequently implemented at 49%, 51%, 76% and 80% of cases, respectively. Of the preoperative antibiotic prescriptions, 94% were as recommended by the *JIDA* guideline. Contrastingly, 30% of the post-operative antibiotic regimens complied with the guideline. Patients in 27% of cases received a drug holiday, ranging from one month to seven years' duration. Clinical recording of which measures were or were not applied varied from 100% to 49%.

During the six-month period of interest, absolute adherence to either standard was low. No clinicians (0%) implemented the AAOMS guidelines as recommended. The *JIDA* guidelines were strictly implemented, and properly documented, in 5% of cases. This translates to two of 41 cases. Of these two cases, one was carried out in a dental chair unit, the other in a day-theatre environment.

In 80% of cases reviewed, one case of MRONJ subsequently developing was reported – an incidence of 2%. This single case of MRONJ occurred in a 51-

#### Table 3: Patient risk factors

Parameter		Patient status	
	Yes	No	Not recorded
Current smoker	20%	76%	4%
Steroid use	12%	76%	12%
Denture wearer	39%	49%	12%
Concomitant oral disease	88%	12%	0%
Diabetes	7%	93%	0%

### Table 4: Preventive measures

Preventive measure		Was it applied?	2
	Yes	No	Not recorded (unknown)
Drug holiday	27%	63%	10%
OMFS opinion for patients	at		
high risk of developing MR	ONJ 66%	0%	34%
Pre-op OHI	10%	39%	51%
Pre-op chlorhexidene	49%	24%	27%
Pre-op antibiotic	76%	20%	4%
(	5% incorrect regim	ens)	
Plain local anaesthetic	51%	46%	3%
Sutures	49%	51%	0%
Post-op antibiotic	80%	20%	0%
(1	56% incorrect regin	iens)	
Splint	0%	100%	0%
Review appointment	80%	20%	0%

year-old female following extraction of a left mandibular second molar. The patient was receiving six-monthly subcutaneous injections of 60mg denosumab at the time of the procedure, and there was a history of oral BP use of five years' duration. There were no other concomitant risk factors for MRONJ development

#### Discussion

Since the introduction of the *JIDA* guidelines in 2010,<sup>36</sup> and the AAOMS position paper in 2007<sup>37</sup> (updated in 2014<sup>2</sup>) no audit of this nature has been completed in the DDUH. This is the first audit of preventive measures taken prior to invasive dental procedures in patients at risk of MRONJ published in the scientific literature. A previous retrospective audit, published in 2016, assessed whether high-risk patients about to undergo intravenous BP therapy for metastatic disease were examined by the oral and maxillofacial surgery department.<sup>38</sup> The authors of this audit reported two cases of MRONJ occurring in patients who had not undergone a dental examination prior to commencing BP therapy.<sup>38</sup> The results of the current audit highlight a range of discussion points regarding the current clinical practice in the treatment of patients at risk of MRONJ.

The most significant issue detected in the undertaking of this audit was in the area of clinical record keeping. The results highlighted a lack of standardised clinical record keeping, when performing dental interventions on the patient

population at risk of MRONJ. This information is critical when planning dental interventions, as it plays a key role is classifying those at high risk of MRONJ. This is one of the key stipulations of the AAOMS guidelines, and is mirrored in other contemporary guidelines.

Given the retrospective nature of this audit, it is impossible to determine the precise actions taken during the procedures under consideration. Therefore, the authors rely on precise clinical records to measure compliance to the standard. When this detail is omitted, particularly surrounding clear clinical steps (e.g., was a preoperative chlorhexidine rinse dispensed) it must be assumed that no such precautionary measure was taken. However, it may also be possible that clinical practice was indeed more closely aligned to the standard, but the clinical recording of measures taken was insufficient and not representative of actual practice. This may amount to an inconsistency between the recorded and actual level of compliance.

As mentioned, overall compliance with accepted guidelines did not conform to the determined standard of 95%. Additionally, none of the individual clinical preventive measures reached the accepted standard in isolation. One possible explanation for the reduced compliance is a lack of awareness of the guidelines. Time constraints also render their strict implementation difficult. This may stem from widely-differing international guidelines regarding the prevention of MRONJ,<sup>2,36,39,40</sup> and indeed an overall poor understanding of the aetiopathogenesis of MRONJ and ways to prevent it following dental intervention.

Specifically, in relation to the AAOMS guidelines, a drug holiday and consultation with an oral and maxillofacial surgeon is only advocated for those patients deemed to be 'at risk' of developing MRONJ - not simply for those taking anti-resorptive medications. It highlights several factors other than medications that are thought to be related to risk of MRONJ, such as coexisting metastatic disease, concomitant steroid therapy, rheumatoid arthritis, diabetes and others.  $^{\scriptscriptstyle 41\text{-}43}$  As detailed above, there was no drug holiday in 63% of cases, which was considered to be non-compliance with the guidelines. However, if some of these were considered 'low risk' for developing MRONJ, a drug holiday would not be appropriate according to AAOMS guidance. This could be a significant confounding factor when assessing compliance to these guidelines. Currently, there is no facility to quantify or record 'MRONJ risk status' in the DDUH electronic record. This is an important observation. An assessment of risk could highlight the patient groups that would benefit most from additional measures and allow more cost- and time-efficient use of resources.

While 27% of patients did have a drug holiday prior to treatment, none were of the appropriate length – some being too long and some too short. The AAOMS guidelines advocate a drug holiday of two months prior to invasive dental treatment and four months post-operatively in high-risk patients.

The longest duration of BP therapy recorded in this audit was 17 years and this highlights an important point meriting further discussion. Current literature suggests that the therapeutic benefits of BPs in the treatment of osteoporosis potentially plateau at approximately three to five years.<sup>44</sup> In those patients deemed to be at low risk of fragility fractures, cessation of BP therapy after this time would theoretically reduce the risk of MRONJ.

### **Recommendations and conclusion**

In conclusion, this audit highlighted a need to update and revisit the guidelines available when treating patients at risk of developing MRONJ following dental

### APPENDIX: MRONJ CHECKLIST

Patient name:		
Date of birth:		
MRN:		
Date of procedure:		
Questions	YES	NO
PREOPERATIVE		
<ol> <li>Is this patient at high risk of MRONJ?         <ul> <li>previous diagnosis of MRONJ</li> <li>taking a bisphosphonate as part of the management of a malignant condition</li> <li>other non-malignant systemic condition affecting bone (e.g., Paget's disease)</li> <li>under the care of a specialist for a rare medical condition (e.g., osteogenesis imperfecta)</li> <li>concurrent use of systemic corticosteroids or other immunosuppressants</li> <li>coagulopathy, chemotherapy or radiotherapy</li> </ul> </li> <li>If high risk, has a consultation from OMFS been obtained?</li> </ol>		
3. Has the patient undertaken a two-month drug holiday?		
4. Has the patient received preoperative OHI, and one-week preoperative chlorhexidine rinse twice daily?		
INTRA-OPERATIVE		
5. Has the patient been given a loading dose of 3g amoxicillin (600mg clindamycin if allergic) orally?		
6. Was local anaesthetic without vasoconstrictor used?		
7. Was the surgery atraumatic?		
8. Were sutures placed? If yes, were they placed without tension?		
POST-OPERATIVE		
9. Was a soft diet advised?		
10. Was the patient instructed to rinse twice daily with chlorhexidine and three times daily with saline until the socket heals?		
11. Was the patient prescribed 500mg amoxicillin (or clindamycin 450mg QDS) TDS for seven days?		
12. Was a pull-down splint constructed to protect the soft tissues?		
13. Was a review appointment arranged to ensure mucosal healing?		

extractions and other oral surgical procedures. It is clear that neither the *JIDA* nor the AAOMS guidelines have been strictly adhered to during the study period.

It would be instructive to consider the establishment of a specific committee that would examine the current evidence related to the prevention of MRONJ, and prepare revised guidelines for clinicians in this area. As international best practice is in a state of flux, robust, clear, and evidence-based policy will aid in the provision of care to patients susceptible to the development of MRONJ, both in hospital and community-based dental practice. Until such time as a policy is drafted, the authors propose the utilisation of the MRONJ checklist (**Appendix 1**) when treating patients at risk of developing this condition. This will improve compliance with current guidelines and will aid clinical audit of this nature in the future.

#### Recommendations

- In-depth review of current evidence-based practice in this area and subsequent preparation of a specific hospital protocol for the treatment of patients deemed to be at risk of MRONJ after dental interventions.
- Emphasis on this protocol during undergraduate and postgraduate training (achieved by inclusion within the relevant curricula, and highlighted at the beginning of each clinical year) and staff induction.
- Implementation of the MRONJ checklist, and attachment of this document to the patient's clinical record.
- Risk assessment of each patient susceptible to MRONJ and stratification according to the Scottish Dental Clinical Effectiveness Programme (SDCEP) criteria.<sup>39</sup> This would include precise records regarding the nature of antiresorptive and anti-angiogenic therapeutic regimes:
  - underlying medical condition;
  - drug type, formulation, dosage, route of administration, and frequency; and,
  - date of commencing (and ceasing if relevant) treatment.
- Clear displaying of the accepted hospital protocol in all clinical areas.
- Re-audit the compliance of clinicians in this area, subject to a new hospital policy guideline to ensure sustained improvements in compliance with best practice.

MRONJ is a rare but devastating condition affecting the oral cavity, with a significant impact on patients' quality of life. It is imperative, as dental clinicians, that we remain informed on current best practice when treating patients at risk of MRONJ and act accordingly in line with contemporary evidence-based guidelines. It is hoped that the recommendations put forward in this audit will help to maximise impact on clinical care delivery, and generate discussion to stimulate and support action planning.

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### An audit of the baseline dental status and treatment need of individuals referred to Dublin Dental University Hospital for a pre-radiotherapy dental and oral assessment

### PRÉCIS

Increasing numbers of patients are referred for pre-radiotherapy dental assessment. Advice and support regarding prevention of dental disease will maintain oral health and reduce the need for surgical intervention in the future.

### ABSTRACT

Objectives: The objectives of this audit were to establish the baseline dental status and treatment need of pre-radiation head and neck cancer patients in Ireland.

Material and methods: A review was carried out of the dental status and treatment need of 746 adult patients who were scheduled to commence radiation therapy for head and neck cancer. These patients were referred to the Dental Oncology Treatment Centre and there were 76% male and 24% female individuals.

Results: The numbers attending the clinic increased from 20 in 1998 to 239 in 2013. The age range was 17 to 89 years, with a mean age of 57.4 years, standard deviation (SD) = 13.0 years. The diagnosis was of squamous cell carcinoma in 85% of cases and the main subsites were the larynx and tongue. Some 51% of patients smoked or had very recently quit smoking, and 25% had never smoked. A total of 97% were dentate, of whom 65% had more than 16 remaining teeth. Of the dentate patients, 66% had dental decay. Some 12% had vertical mouth opening of less than 30mm, complicating access for dental care. Moderate to severe chronic periodontitis was noted in 21%. Dental treatment need was as follows: (1) oral health instruction (OHI), diet and dry mouth advice, and jaw exercises – all dentate patients; (2) periodontal and caries preventive treatment – 86%; (3) dental extractions – 72%; (4) restorative dental care – 59%; and, (5) radiation stents – 5%.

Conclusion: This study highlights the increasing numbers of referrals for dental assessment and treatment prior to radiation treatment. The group was dentate but its oral health was generally poor. A significant number of individuals required dental extractions, and restorative and periodontal care, to render them dentally fit prior to radiation treatment. Pre-radiation dental assessment and necessary care must be provided without delay to prevent delay with the start of radiotherapy.

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Dr Denise MacCarthy BDS NUI FDS RCS (Edin) MDentSc Head of Division of Restorative Dentistry and Periodontology, Dublin Dental University Hospital FFDRCSI FDSRCPS MDentCh (OS) Dip Con Sed Oral Surgeon/Lecturer in Conscious Sedat

Dr Myra O'Regan PhD Associate Professor of Statistics, Department of Statistics, Room 142 Lloyd Institute, Trinity College, Dublin 2

Dr Denise MacCarthy, Head of Division of Restorative Dentistry and Periodontology, Dublin Dental University Hospital, Lincoln Place, Dublin 2. Email: denise.maccarthy@dental.tcd.ie

### Introduction and literature review

Malignant tumours of the head and neck account for 2-3% of all cancers diagnosed in Europe. An average of 411 head and neck cancers were registered in Ireland annually between 1994 and 2009. The broad category of head and neck cancer included 17 separate subsites in the mouth, pharynx, larynx, paranasal sinuses, nasal cavity, middle ear and salivary glands. The larynx was the most common site, with 127 cases annually, followed by tongue with 62 cases. All head and neck cancers were more common in men.<sup>1</sup> The World Health Organisation (WHO) has recently included oral cancer as a priority for action.<sup>2</sup> Associated risk factors include alcohol consumption and tobacco use,<sup>3</sup> human papilloma virus<sup>4</sup> and dietary factors.<sup>5</sup> A modest association has been found between periodontal disease and head and neck squamous cell carcinoma (SCC) risk;<sup>6</sup> however, this association has been debated by other authors.<sup>7,8</sup>

Radiation to the head and neck can have a dramatic effect on the oral cavity and its surrounding and supporting structures. Side effects of radiation therapy may be short term and acute including mucositis, dry mouth and oral infection. Acute radiation mucositis is the first side effect many patients experience. It may cause severe symptoms but usually resolves two to three weeks after radiation therapy ceases.

Long-term effects are caused by cellular and vascular changes in soft tissue and bone, and include radiotherapy-induced thinning of the tissues, salivary gland hypofunction, reduced remodelling capacity in bone, post-radiation dental caries, reduced mouth opening and loss of taste. In the long term, salivary gland hypofunction, perhaps the most troublesome side effect, plays a major role in the progression of dental caries, as well as causing the patient a great deal of discomfort, loss of taste and increased susceptibility to infection. It has been reported that 91.8% of patients who had radiotherapy presented with a degree of salivary gland hypofunction.<sup>9</sup> There are quantitative and qualitative changes in saliva flow post radiation, making it difficult to chew and swallow solid food. There is an alteration in taste sensation so food is less palatable, which may contribute to poor nutrition. In some subjects, salivary function returns after a few months. In others, it may take years to return, or may never return. The other major side effect of radiation therapy is altered bone resulting in a long-term risk of osteoradionecrosis (ORN), a severe complication resulting from changes in vascularity and viability of osteocytes, osteoblasts and fibroblasts. Finally, there may be reduced opening of the jaws, causing difficulty in the provision of dental care in the long term.<sup>10</sup>

Prevention of ORN is one of the most important goals of dental care prior to radiotherapy. It is well documented that post-radiation dental caries is a common risk and an increased incidence of dental caries (DMFT) in post-radiotherapy patients has been reported.<sup>11</sup> Teeth of poor prognosis should be identified and extracted pre radiotherapy in order to decrease the risk of ORN in the future. It was reported that only 11.2% of regular dental attenders were considered to be dentally fit at pre-radiation dental care did not prevent post-radiation problems due to the absence of compliance with oral hygiene and supportive care.<sup>13</sup> Individuals with severe periodontitis at baseline assessment were found to have an increased risk of ORN, especially if the affected teeth were not extracted before radiotherapy.<sup>14</sup> and an increased level of ORN in furcation sites has been reported.<sup>15</sup> Tooth loss and greater periodontal attachment loss occur in teeth that are included in high-dose radiated sites of patients treated with radiotherapy.<sup>16</sup>

Treatment of cancers of the head and neck has included surgery, radiotherapy,

chemotherapy and combinations of these therapies. In recent years, intensitymodulated radiation therapy (IMRT) has made it possible to restrict the highrisk region to the volume of jawbone adjacent to the tumour. With the development of IMRT, it is important to have a risk-adapted dental care approach dividing the mouth into high-risk areas, intermediate/low-risk areas and no radiation-specific risk areas.<sup>17</sup> Consultation with the medical oncology team regarding details of chemotherapy, and the field and dose of radiation planned, is essential in the planning of dental and oral care.<sup>18,19</sup>

Patient management regarding oral disease prior to radiation therapy has to accomplish a number of goals: "(1) to identify existing oral disease and potential risk of oral disease, (2) to remove infectious dental/oral foci before the start of radiation therapy, (3) to prepare the patient for the expected side effects with information about them, (4) to establish an adequate standard of oral hygiene to meet the increased challenge, (5) to provide a plan for maintaining oral hygiene and caries preventive treatment, for oral rehabilitation, and for follow-up, (6) to inform the patient about the availability of any financial support for dental treatment, and finally (7) to establish the necessary multidisciplinary collaboration within the health care system so that oral symptoms and sequelae before, during and after the radiation therapy can be reduced or alleviated".<sup>20</sup>

As well as the assessment of dental disease, emotional, quality-of-life, socioeconomic and medical issues must also be considered.<sup>21</sup> A higher suicide risk was recorded for individuals with head and neck cancer than among the general population or the larger cancer population.<sup>22</sup> A study of support needs and quality of life in oral cancer concluded that needs are highly subjective and varied, and include physical and oral health needs, dysphagia, nutrition, weight loss, appearance, body image, anxiety, depression and alcohol use.<sup>23</sup>

The oral problems associated with radiation therapy can be prevented or minimised through optimal management.<sup>24</sup> Dental assessment and treatment prior to radiation therapy must be an accepted aspect of care for the head and neck cancer patient.<sup>25</sup> Due to the fact that these patients are more susceptible to caries, control of diet and instigation of correct oral home care is of utmost importance. Every effort is made to preserve the dentition as a lack of teeth is associated with a worse quality of life and a risk of weight loss in the years post treatment.<sup>26</sup> Without the patient's understanding and compliance, rapid progression of oral and dental disease is inevitable. Compliance with dental care in these patients pre diagnosis is often poor and difficult to improve despite efforts by the cancer team.<sup>27</sup> A "patients' concerns inventory" revealed that post head and neck cancer patients had concerns regarding dental health/teeth, chewing, eating, and pain in the head and neck region.<sup>28</sup> Caries prevention involves restriction of cariogenic foods in the diet, daily use of topical fluoride gels,<sup>24</sup> rigorous oral hygiene, artificial saliva preparations, and sugar-free gum. Lifelong compliance is required. A survey of prevention and treatment regimens for oral sequelae resulting from head and neck radiotherapy used in Dutch radiotherapy units demonstrated a great diversity between institutes. The most comprehensive counselling was performed by centres with an active dental team, especially if a dental hygienist was on the team.29

Following completion of radiotherapy, most patients will be referred back to their general dental practitioners for their routine dental treatment. Major challenges in establishing and maintaining oral health in these situations in the post head and neck radiotherapy patient are outlined by Schiodt and Hermund: "(1) informing of the patient, (2) timing the co-ordination between all the

Table 1: Changing referral pattern of head and neck cancer patients, 1997-2006.			
	1997-1998 %	1999-2000 %	2005-2006 %
Pre radiotherapy	34	68	79
Post radiotherapy	66	29	
During radiotherapy	0	3	5

health care workers involved, (3) establishing an adequate schedule for dental treatment and follow-up, and (4) securing patient compliance to prevent or reduce the oral side effects".<sup>20</sup>

Financial constraints are often an important factor in the provision of long-term care.

The aim of this paper is to investigate the pre-radiotherapy baseline dental status and treatment needs in a group of head and neck cancer patients.

#### Materials and method

A dental oncology treatment centre to provide oral and dental care to head and neck cancer patients was established in the Dublin Dental University Hospital (DDUH) in 1997/98.

This is a retrospective, observational audit of patients referred for a preradiotherapy dental assessment. The research questions were to establish the pre-radiotherapy baseline dental status and treatment needs in this group of head and neck cancer patients. It is hoped that this information will be used for future service planning. Inclusion criteria were a diagnosis of head and neck cancer at time of assessment, planned radiation therapy and a complete data set in the case notes.

Patients referred to the DDUH for pre-radiation dental assessment and treatment were assessed with as little delay as possible and the necessary treatment provided. Baseline dental records of 746 pre-radiotherapy patients who were referred to the DDUH over a 12-year period were recorded. Records included details of place of residence, age, gender, cancer diagnosis and site, smoking habits, dental and periodontal status, saliva flow rate and treatment need. Cancer stage was not reported as this information was not always provided by the referring oncologist.

The smoking patterns were recorded as: current smokers; recently quit – usually following cancer diagnosis; quit more than one year; and, never smoked.

The dental records of the dentate individuals were recorded and included caries status, range of mandibular opening and periodontal status. The periodontal status was assessed using the Community Periodontal Index of Treatment Need (CPITN). Periodontal probing records were not taken for 15 dentate patients due to significant medical conditions.

Dental plaque and gingival bleeding scores were recorded as present or absent at four sites around all teeth. Resting and stimulated saliva flow rates were measured. Patients were asked to drool into a beaker for five minutes and the resting flow rate was assessed. Stimulated flow was generated by chewing a 1.5cm<sup>2</sup> piece of rubber dam.

Dental treatment need was assessed by factors relating to oral health (diet, oral hygiene and saliva flow), functional issues (mandibular movement), dental caries and periodontal condition, prosthodontic needs such as dentures and radiation stents, and dental extractions.

All patients who attended for pre-radiation dental assessment and had a

![](_page_42_Figure_14.jpeg)

FIGURE 1: Patients referred for pre-radiation dental assessment 1998-2013.

![](_page_42_Figure_16.jpeg)

FIGURE 2: Age range (years) of individuals referred for a pre-radiation dental assessment (n=746).

complete data set were included in the study. The records were entered onto an Excel spreadsheet by the examining clinician at the time of assessment. All records were included in this audit. During the period of this report, all outcome measures were recorded by one clinician. Standard clinical records were used to objectively determine the baseline dental status of each patient. This is an audit of a patient group and appropriate descriptive statistics are used to describe the sample.

#### Results

The head and neck cancer dental oncology treatment centre was established in 1997/98. The early years had a high percentage of patients referred for dental assessment and management of post-radiation dental caries. The attendance pattern has changed, with the clinic now seeing predominantly pre-radiotherapy individuals. The pre-radiotherapy patient referrals increased from 34% in 1997-98 to 79% in 2005-06, and from 66% post-radiotherapy patients in 1997-98 to 16% in 2005-06 (**Table 1**).

The numbers of referrals for pre-radiotherapy dental assessment increased each year (**Figure 1**). There were 746 patient records reviewed for this report, with 178 (24%) females and 568 (76%) males. The pre-radiotherapy patient numbers referred to our clinic increased from 48 in 1997/98-99 to 253 in 2008-09 and 441 in 2012-13 (**Figure 1**).

The age range was from 17 to 89 years of age, with a mean age of 57.4 years, standard deviation (SD) = 13.0 years. The majority were in the 45 to 74 age group, but there was a marked number of individuals in the younger age groups (**Figure 2**).

Table 2	: Diagnosis of tur	nour.	
Squamous cell carcinoma	85.4		
Adenoid cystic carcinoma		* Other included:	
Non-Hodgkin's lymphoma	2.5	carotid body tumour	2
Pleomorphic adenoma		fibroxanthoma	1
Sarcoma	1.2	Merkel cell tumour	2
Hodgkin's lymphoma		myoepithelioma	1
Melanoma	1.1	neuroblastoma	2
Mucoepidermoid carcinoma	0.8	oligodendroglioma	1
Basal cell carcinoma	0.1	plasmacytoma	1
Other <sup>*</sup>		schwannoma	1
Total number of cases	746		

#### Table 3: Site and subsite of tumour.

Site	%	Subsite (number)
Mouth	29.4	Tongue (109), floor of mouth (46), lips (16),
		retromolar (14), buccal mucosa (11), alveolar (10),
		hard palate (7), mandible (4), gingival (2)
Larynx	20.4	Supraglottic (120), larynx (27), subglottic (5)
Oropharynx	18.5	Tonsil and base of tongue (86), oropharynx,
		back and side walls of pharynx (31),
		soft palate (12), hypopharynx (9)
Neck node	10.1	Unknown primary
Nasopharynx		Nasopharynx (35), sinuses (21), nose (12)
Salivary glands	8.6	Parotid (53), submandibular (11)
Ear, eye		
Other	1.2	Thyroid (3), forehead (2), brain (1), carotid body (1),
		cheek (1), ethmoid sinus (1), temporal (1)
Total	746	

Table 4: Dentate individuals with teeth present,
decayed and requiring extractions.

Number of teeth	Teeth present (%)	Teeth decayed (%)	Teeth requiring extraction (%)
0	NA	33.8	24
1-5	5.6	50.0	52.1
6-10	11.8	11.8	17.6
11-15		3.0	4.5
16-20	20.0	1.3	1.2
21-25	24.4	0.1	0.5
>25	21.1	0	0.1
Total no. of patien	ts 720	720	720

Place of residence indicated that 43% of patients lived in Dublin and 40% in the rest of Leinster. The remaining 17% lived in Ulster, Connacht and Munster (**Figure 3**). The tumour diagnosis was squamous cell carcinoma in 85% and adenoid cystic carcinoma in 5% of cases (**Table 2**).

![](_page_43_Figure_7.jpeg)

FIGURE 4: Smoker status.

Table 5: Range of mandibular movement (n=246).

3.9	
40.7	
41.7	
5.8	
N = 746	
	% 3.9 7.9 40.7 41.7 5.8 <b>N = 746</b>

The most common tumour site was the mouth (29%), followed by the larynx (20%). The most common subsite was the supraglottic larynx, followed by the tongue (**Table 3**).

Smoking history revealed that 26% were current smokers and 25% had recently quit at the time of cancer diagnosis (**Figure 4**).

There were 720 dentate and 26 edentulous patients. Of the dentate patients, 18% had 1-12 teeth, 37% had 11-20 teeth and 24% had 21 teeth or more. At total of 34% of the dentate patients were caries free, 62% had up to 10 carious teeth and 4.5% had more than 10 carious teeth (**Table 4**). Some 52% of dentate individuals required one to five teeth extracted and 20% required more than six dental extractions.

In all, 12% of patients had mandibular vertical opening of less than 30mm and 47% had mandibular opening of greater than 40mm (**Table 5**).

The periodontal status was assessed using the CPITN. Highest and lowest scores per individual are reported in **Table 6**. A highest CPITN score of 0 or 1 was recorded in 5.6% of patients, indicating gingival health or gingivitis without periodontal attachment loss in that group. A lowest CPITN score of 3 or 4 was recorded in 20.9% of patients, indicating moderate to severe levels of chronic periodontitis in that group.

Table 6: Community Periodontal Index of Treatment Need – highest and lowest per individual.			
	Highest per	l owest per	
	individual (%)	individual (%)	
0	0.1	6.8	
	5.6	31.8	
2	25.8	40.5	
	36.7		
4	31.8	4.7	
Total no. of patients	705	720	

### Table 7: Dental plaque and gingival bleeding scores.

Individuals affected (%)	Plaque score	Bleeding score
<20%	2.8	9.6
21-40%	14.8	40.4
41-60%	20.4	32.5
61-80%	20.8	12.7
81-100%	41.2	4.8
Total no. of patients	720	705

Some 82% of individuals had a plaque score of greater than 41%. Half had a bleeding score of greater than 41% (**Table 7**).

Resting and stimulated saliva flow rates are reported in **Table 8**. A total of 95% were within the normal range for unstimulated saliva of 0.2-0.9ml/minute. In all, 93% were within the normal range for stimulated saliva of greater than 1-2ml/minute.

Treatment need at baseline is presented in **Table 9**. Dietary, oral hygiene and dry mouth advice was required by all patients. Caries preventive therapy and periodontal therapy was recommended for all dentate patients, with more advanced periodontal care required by 21%. Dental extractions were required for 72% of patients, with 52% requiring between one and five extractions. Restorative treatment, including caries restoration, dentures and radiation stents, was required for 64% of patients.

### Discussion

The information presented in this paper represents the baseline dental status of pre-radiotherapy patients attending the head and neck cancer dental oncology treatment centre in the DDUH.

The records of 746 patients were reviewed, with 178 (24%) females and 568 (76%) males. The age range was from 17 to 89 years of age (**Figure 2**). The demographic trends regarding gender, age, cancer diagnosis and site reported in the audit are in line with other reported studies.<sup>30</sup>

The Irish Cancer Registry reports an annual incidence of head and neck cancer of 411 cases.<sup>1</sup> The patient numbers attending the clinic increased from 48 in 1998/99 to 441 in 2012/13 (**Figure 1**). This increase in referrals is related to the inclusion of a pre-radiotherapy dental assessment as "best practice" for

### Table 8: Saliva flow rate in 746 patients.

Saliva flow ml/min	Unstimulated(%)	Stimulated(%)
<0.2ml/min	3.4	0.9
0.2-0.5ml/min	53.5	
0.6-0.9ml/min	41.2	2.6
1-1.9ml/min		83.5
2-2.9ml/min	0.4	8.7
>3ml/min		

#### Table 9: Treatment required at baseline for 746 patients.

Treatment		Required (%)
Dietary, oral hygiene, dry mouth advice		100
Jaw mobilisation exercises		53
Periodontal treatment		96
Fluoride/chlor	hexidine therapy	
Extractions	1-5 teeth	52
	6-10 teeth	14
	11+ teeth	06
	ntal treatment	45
Dentures		14
Radiation stent		
*Radiation stents are being prescribed more commonly in recent years with the use of intensity-modulated radiation therapy (IMRT).		

head and neck cancer patients.<sup>25</sup>

In a separate review of pre-radiotherapy referrals to our clinic, the number of patients seen within seven days was 51% in 2007 and 78% in 2012. Those who had a longer waiting time for baseline appointments usually had a medical complication causing the delay.<sup>31</sup>

The place of residence in Ireland is of interest when planning the delivery of the dental oncology service. The pre-radiotherapy dental assessment and treatment is done in the DDUH Dental Oncology Treatment Centre while the patients are attending for their cancer treatment in Dublin. Patients living in Leinster (40%) had to travel between 20 and 80 miles for treatment. Patients living in Ulster, Connacht and Munster (17%) had to travel between 60 and 200 miles for treatment (**Figure 3**). The provision of long-term, post-radiotherapy routine dental care should be delivered in the local community.

Some 51% of our study group were current smokers or very recently quit smokers. This is higher than the national prevalence in Ireland, which was approximately 25% during the same period.<sup>32</sup>

In all, 720 patients were dentate and 26 were edentulous (**Table 4**). Of the dentate individuals, 65% had more than 16 remaining teeth, making this a reasonably-dentate population requiring dental care into their future lives. Approximately 34% of individuals were caries free – this is higher than other reported studies<sup>12</sup> and may be related to water fluoridation in Ireland. Dental extractions or restorations were required, as 62% of individuals had up to 10 carious teeth and 4% had more than 10 carious teeth, which is broadly in line with other reports of head and neck cancer patients.<sup>33</sup> It is also in line with reported dental treatment need in the Irish population, with 65% of males and 56% of females requiring some dental treatment.<sup>34</sup>

A total of 24% did not need to have any teeth extracted and 55% required between one and five teeth extracted pre radiotherapy, which is similar to other reported needs.<sup>30</sup> It is very important that necessary dental extractions are completed quickly to reduce delay in the urgent commencement of the radiation therapy. In an audit of the number of days from initial assessment to completion of dental extraction for a subset of 141 individuals in 2012, 24% had the necessary dental extractions on the day of assessment, 56% had the extractions completed within one week, 13% within two weeks and 5% had a delay of greater than three weeks.<sup>31</sup> Some 18% of individuals waited more than eight days for dental extractions, which inevitably delayed the start of radiation treatment.<sup>35,36,37</sup>

Vertical mandibular opening was recorded with the inter-incisal distance in millimetres (**Table 5**) – 12% of individuals had vertical mouth opening of less than 30mm, which is a severe limitation, indicating that the provision of dental care would be more difficult, if not impossible, in the future. Vertical opening of between 30mm and 40mm was recorded in 41% of individuals, which would also be of concern. The restricted mouth opening in this patient group may be related to position and size of tumour, or if the patient was post surgery in the head and neck region. It is urgent to initiate jaw stretching exercises at an early stage to prevent restriction in opening in the long term. The use of the TheraBite appliance (TheraBite Jaw Motion Rehabilitation System) should be considered.

The periodontal status was assessed using the CPITN - highest and lowest scores per individual are reported in Table 6. A highest CPITN score of 0, 1 or 2 was recorded in 31.4% of patients, indicating gingival health, gingivitis or presence of calculus. This indicated the need for oral hygiene instruction and scaling as the periodontal treatment need for this patient group. A lowest CPITN score of 3 or 4 was recorded for 21% of patients, indicating moderate to severe levels of chronic periodontitis. In this group, the treatment need will be complex periodontal care and possibly extraction. Extraction is indicated for furcation involved teeth that are in the radiation field, as these teeth are more likely to develop post-radiation ORN.<sup>15</sup> These figures for the incidence of periodontal disease are in line with previous studies in general population groups in Ireland and abroad.<sup>34,38</sup> Periodontal probing records were not taken for 15 dentate patients due to significant medical history. The plaque and bleeding scores (Table 7) indicated generally poor oral hygiene in this group of patients and the need for oral hygiene instruction. Saliva flow rates, both resting and stimulated, were generally within normal range in the pre-radiation group (Table 8).

The treatment need in this group was recorded at baseline (**Table 9**). All patients needed advice about prevention of dental disease including dietary advice, oral hygiene instruction and advice regarding dry mouth. Jaw stretching exercises were needed by 53% of individuals – it is essential to start physiotherapy as soon as possible to increase mandibular opening when necessary. Periodontal treatment and caries preventive treatment were needed by all dentate patients. Pre-radiation dental extractions were indicated for 72% of patients. Restorative dental care, including fillings and dentures, was needed by 59% of patients. Mandibular positioning and shielding stents were requested by the radiation oncologist for 5% of patients; however, requests for this service are increasing due to the use of IMRT. Retention of strategic teeth is advocated when the radiation field and dose are targeted with the use of IMRT.<sup>17</sup> However, a comprehensive, preventive dental care survivors and funding is needed.

At the baseline assessment, it is necessary to form an opinion based on various dental risk factors such as past dental history, current condition of the oral cavity and dentition (oral health, caries, periodontal, restorations), mandibular mobility, attitude to health and well-being (smoking, diet, exercise), cancer treatment (surgery, radiation, chemotherapy, palliative) and, finally, the patient's own opinion. The baseline dental status is assessed and recorded before the post-radiotherapy complications of illness, depression, tiredness, lack of mobility, dry mouth, oral infection and post-radiation caries are present. We stress the essential need for excellent oral care following radiation if teeth are retained. However, it is very difficult to predict an individual's likely compliance with dental care following their cancer treatment. Financial constraints are often a considerable problem.

The need for supportive care following radiotherapy is described well by the survey of prevention and treatment regimens for oral sequelae resulting from head and neck radiotherapy used in Dutch radiotherapy units, which demonstrated a great diversity between institutes. The most comprehensive care was provided by centres with an active dental team, especially if a dental hygienist was on the team.<sup>29</sup> In a recent study on patient stratification for preventive care in dentistry, it is suggested that resources could be targeted to high-risk populations. This was calculated as being more resource efficient than in the model where the same prevention regime is applied equally across the population.<sup>39</sup> Provision of care is multi team based and needs to be carefully co-ordinated, as documented by National Institute for Health and Care Excellence (NICE)<sup>40</sup> and Scottish Intercollegiate Guidelines Network (SIGN).<sup>41</sup>

There can be little doubt that a functioning, healthy dentition will greatly contribute to quality of life for the head and neck cancer survivor in the long term. A diseased dentition and post-radiation oral problems will greatly increase morbidity. A group of post head and neck cancer patients was asked about their main concerns following treatment – "dental health/teeth and chewing/eating" came second to "fear of the cancer coming back".<sup>42</sup> Most of these patients requested dental care. These findings highlight the importance of oral function and well-being for quality of life including nutrition, body image, self-esteem and social interaction. This patient group often needs complex prosthodontic rehabilitation following cancer surgery,<sup>43,44</sup> as well as ongoing routine dental care and oral health advice. Pre-radiation and long-term dental care should be provided as outlined by the Royal College of Surgeons of England.<sup>25</sup>

### Conclusion

This study highlights the increasing numbers of patient referrals for dental assessment and treatment prior to radiation treatment in Ireland. The main age range was 45-74, with a significant number of younger individuals. Some 49% were current/recent smokers, which is higher than the national average. The group was dentate, with 65% having more than 16 teeth. There was a significant treatment need, with a large number of individuals requiring dental extractions, and restorative and periodontal care. Appropriate and comprehensive treatment to control dental disease prior to radiation treatment should be provided in a timely, integrated manner for all head and neck cancer patients.<sup>25</sup> A healthy functioning dentition will also improve quality of life in the long term.<sup>42</sup> This long-term care must be provided with collaboration between specialist units and community/general dental practices.

Recommendations for the provision of pre-radiation oral and dental care:

- Pre-radiotherapy oral and dental assessments should be provided by a dental specialist at the time of radiotherapy planning in the oncology unit. Decisions regarding the need for, and placement of, dental implants should be made at this time<sup>45,46</sup> and impressions for radiation stents, if required.
- Urgent dental extractions should be completed as soon as possible, within one week of assessment. The patient can then proceed to planning for radiation therapy.
- 3. Advice should be given regarding prevention of oral and dental disease, including the need for excellent oral hygiene, healthy diet, smoking cessation, fluoride and antiseptics daily use, exercises to maintain the range of mandibular movement, management of dry mouth, and the risk of ORN.<sup>47</sup> Treatment of dental caries and periodontal disease should also be initiated. The role of teamwork is essential in the delivery of this aspect of care.
- Oral rehabilitation of post-surgical defects must be provided by a maxillofacial prosthodontist and maintained in collaboration with community/general dental practice.
- 5. Regular, long-term supportive and maintenance care should be provided in collaboration with the community/general dental service.

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### Longevity of anterior composite restorations in a general dental practice-based network

Collares, K., Opdam, N.J.M., Laske, M., Bronkhorst, E.M., Demarco, F.F., Correa, M.B., et al.

This practice-based study investigated the performance of a large set of anterior composite restorations placed by a group of 24 general practices. Based on data from electronic patient files, the longevity of 72,196 composite restorations was analysed, as placed in 29,855 patients by 47 general dental practitioners between 1996 and 2011. Annual failure rates (AFRs) were calculated, and variables associated with failure were assessed by multivariate Cox regression analysis with shared frailty for two age groups (5-24yr and  $\geq$ 25yr).

The observation time of restorations varied from two weeks to 13 years, with a mean of 4.8 years, resulting in a mean AFR of 4.6% (95% confidence interval [95% CI], 4.5% to 4.6%) at five years. Among dentists, a relevant variation in clinical performance of restorations was observed, with an AFR between 2% and 11%. The risk for restoration failure increased in individuals up to 12 years old, having a 17% higher risk for failure when compared with the age group of 18 to 25 years (hazard ratio, 1.17; 95% CI, 1.03 to 1.34), and for the age group >65 years, having an 81% higher risk for failure when compared with 25 to 35 year olds (hazard ratio, 1.81; 95% CI, 1.66 to 1.98). In both multivariate models, there was a difference in longevity of restorations for different teeth in the arch, with fillings in central incisors being the most prone to failure and replacement. It was concluded that anterior composite restorations placed by general dental practitioners showed an adequate clinical performance, with a relevant difference in outcome among operators.

### Journal of Dental Research 2017; 96: 1,092-1,099.

Panoramic radiographs made before complete removable dental prostheses fabrication: a retrospective study of clinical significance

Kratz, R.J., Walton, J.N., MacEntee, M.I., Nguyen, C.T., MacDonald, D.

**Statement of problem:** The value of digital panoramic radiographs to screen for problems before fabricating conventional complete dentures is unclear. **Purpose:** The purpose of this retrospective study was to examine the influence of pretreatment digital panoramic radiographs on the clinical management of patients receiving complete removable dental prostheses.

**Material and methods:** The clinical records, including panoramic radiographs, of 169 patients seeking new complete removable dental prostheses over a sixyear period were interpreted independently by both a prosthodontist and an oral and maxillofacial radiologist to identify radiographic findings that influenced clinical patient management. A 95% confidence interval and an observed proportion of agreement were used to interpret the results.

**Results:** Some 60% of the 169 radiographs examined had one or more abnormal or positive radiographic findings; however, only six (<4%) of 165 abnormalities detected influenced patient management, and three of them were identified during the clinical examination.

Conclusions: Pretreatment digital panoramic radiographs revealed very few

abnormalities that influenced the treatment of patients requiring complete removable dental prostheses. Furthermore, the digital images in this study revealed positive findings at a rate similar to those found in studies assessing analogue radiographs, reinforcing current guidelines that recommend against radiographic screening of patients who seek new complete removable dental prostheses.

Journal of Prosthetic Dentistry 2017; 118: 26-30.

### Effect of attachment type on denture strain in maxillary implant overdentures: part 1. Overdenture with palate

### Takahashi, T., Gonda, T., Maeda, Y.

**Purpose:** This study examined the effects of attachments on strain in maxillary implant overdentures supported by two or four implants.

Materials and methods: A maxillary edentulous model with implants inserted into anterior, premolar and molar areas was fabricated and three types of unsplinted attachments – ball, locator and magnet – were set on the implants distributed under various conditions. Maxillary experimental dentures were

![](_page_48_Picture_18.jpeg)

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![](_page_48_Picture_21.jpeg)

fabricated and two strain gauges were attached at the anterior midline on the labial and palatal sides. A vertical occlusal load of 98N was applied and shear strain of the dentures was measured.

**Results:** On both sides, magnet attachments resulted in the lowest shear strain, while ball attachments resulted in the highest shear strain under most conditions. However, differences in shear strain among the three attachment types were not significant when supported by four implants, especially molar implants.

**Conclusions:** Shear strain of the maxillary implant overdenture was lowest when using magnet attachments. Magnet attachments mounted on four implants are recommended to prevent denture complications when using maxillary implant overdentures.

International Journal of Oral and Maxillofacial Implants 2017; 32: 815-821.

### Removable partial dentures: the clinical need for innovation

Campbell, S.D., Craddock, H., Hyde, P., Nattress, B., Seymour, D.W.

**Statement of problem:** The number of partially-dentate adults is increasing, and many patients will require replacement of missing teeth. Although current treatment options also include fixed partial dentures and implants, removable partial dentures (RPDs) can have advantages and are widely used in clinical

### Quiz answers Questions on page 236.

- A. Appearance of a well-defined, markedly radiopaque, wellcircumscribed area associated with the right proximal mandibular ramus/condyle junction, approximately 25mmx22mm in diameter.
   B. Elongated styloid process/calcification of the stylomandibular ligament.
- A. Duration/length of time swelling has been present. History of change in size of swelling. Any previous history of similar swelling in any other intra-oral or extra-oral sites?

B. Associated symptoms, e.g., pain, neurosensory deficit, discharge, bleeding, fluctuation in size, trismus, difficulty eating, mealtime syndrome, temperature difference on overlying skin, facial nerve function deficits, history of trauma, abdominal discomfort, altered stool habit, or blood in faeces.

- Malignant tumour, e.g., osteochondroma, osteosarcoma. Benign tumour, e.g., osteoma, fibro-osseous lesion, sialolith in the parotid.
- 4.1 A. Clinical examination of the extra-oral lump to determine the extent of the mass, making note of its site, size, shape, mobility, surface characteristics, pulsatility (bruit), consistency, fluctuation and attachment. Cranial nerve (CN) V and VII exam.

B. Extra-oral examination: mouth opening, both active and passive, measured; excursive lateral movements (note any impediment) measured; creipitus/clicking; and, lymphadenopathy. Note any nodular swellings on the skin of the body, limbs and trunk.

C. Intra-oral examination: general inspection of hard and soft tissues, making note of any palpable masses.

practice. However, a significant need exists to advance materials and fabrication technologies because of the unwanted health consequences associated with current RPDs.

**Purpose:** The purpose of this review was to assess the current state of and future need for prosthetics such as RPDs for patients with partial edentulism, highlight areas of weakness, and outline possible solutions to issues that affect patient satisfaction and the use of RPDs.

**Material and methods:** The data on treatment for partial edentulism were reviewed and summarised with a focus on currently available and future RPD designs, materials, means of production, and impact on oral health. Data on patient satisfaction and compliance with RPD treatment were also reviewed to assess patient-centred care.

**Results:** Design, materials, ease of repair, patient education, and follow-up for RPD treatment all had a significant impact on treatment success. Almost 40% of patients no longer use their RPD within five years because of factors such as sociodemographics, pain, and aesthetics. Research on RPD-based treatment for partial edentulism for both disease- and patient-centred outcomes is lacking.

**Conclusions:** Future trials should evaluate new RPD materials and design technologies, and include both long-term follow-up and health-related and patient-reported outcomes. Advances in materials and digital design/production, along with patient education, promise to further the application of RPDs and improve the quality of life for patients requiring RPDs.

Journal of Prosthetic Dentistry 2017; 118: 273-280.

![](_page_49_Picture_22.jpeg)

 Radiographs: additional imaging to consider – ultrasound, CT facial bones.

Colonoscopy to exclude colonic and/or rectal polyposis (Gardner's syndrome is an autosomal dominant inherited disorder predisposing individuals to a high risk of developing multiple maxillofacial osteomas, colonic polyposis, colorectal cancers and mesenchymal tumours). Incisional biopsy.

- 5. The radiopaque mass was confirmed on CT imaging as a 2.2x2.3x2cm sclerotic mass of bone arising from the proximal right mandibular ramus in keeping with an osteoma.
  - A. No treatment recommended as asymptomatic at present.
  - B. Surgical intervention most likely via an extraoral approach.

![](_page_50_Picture_1.jpeg)

![](_page_50_Picture_2.jpeg)

### Improving communication

How to communicate oral care advice so that it impacts patient behaviour By Victoria Wilson, Dental Hygiene Therapist

![](_page_50_Picture_5.jpeg)

Although maintaining optimal oral health is a top priority for dental professionals, it is important to recognise that this is not always the same for patients. Evidence suggests that patients' recall of oral care advice given during appointments is far lower than expected.<sup>1</sup>

Communicating effectively with patients is one of the most challenging tasks and can be far more complex than anticipated. For the best chance of recall and long-term compliance, discussion needs to inspire patients. If successful, they leave the appointment feeling motivated to take better care of their oral health.

With appointment times often limited, how quickly can the information required to assess a patients' personal needs be gathered? Certain questions can easily become habitual, but being sensitive in the approach and adapting it to each patient is key.

There are several ways to increase engagement and improve communication of oral care advice -

- Assess each patient individually to understand which motivation techniques will work for them, listening carefully to their concerns and mirroring their use of words.
- Create an environment of understanding and respect, helping the patient feel more relaxed and confident to encourage discussion<sup>2,3,4</sup>.

- Ask open-ended or ranked questions to gain valuable insights into their personality and motivations (e.g. on a scale of 1-10 how important is your smile to you?).
- Motivate patients to take responsibility for their oral care and work with them to develop a preventive and restorative treatment strategy.
- Encourage self-efficacy, helping patients understand that a few small changes in their daily routine can make a big difference in the long term.
- Set tailored SMART Specific, Measurable, Achievable, Realistic and Timed - goals. These goals should be adapted to the patients' oral care habits and mirror their motivation.

Tailoring information to a patient's oral care habits and sharing in a clear and concise manner is key to increasing the likelihood that the patient will listen, engage and take action.

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- Part-time associate required for predominately private Dublin 3 practice. Modern and fully-computerised surgery. Enthusiastic, friendly candidate required. Experience necessary. Email pauleggles@gmail.com.
- Experienced dental associate. Minimum five years' post dental school experience. Must be competent in endodontics. Mixed busy practice, part-time/full-time, immediate start. CVs with two work references to gduggan2014@gmail.com.

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- Associate required north east IDC registered for busy, modern, computerised, digital x-ray practice. Four to five days. Experience preferable. CVs with two work references to mbcar06@gmail.com.
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- Experienced dentist required for a part-time position in a fully-computerised, modern dental practice in Mallow, Co. Cork. Email ursulalysaght@gmail.com.
- Part-time/full-time position available in a busy multidisciplinary practice in Limerick. Well-equipped, modern practice with experienced support staff. Email resumés to Nikki at oldquarterdental@gmail.com.
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- Cork city. Dentist required. Private/PRSI. Part-time two days per week. Experience essential. Fully computerised, digital x-rays. Please send CV to info@cantydental.ie.
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- HSE Dublin North City requires part/full-time dentist immediately. Irish Dental Council registration essential with at least 12 months' postgraduation experience. Experience working with children desirable. Contact brian.murray@cplhealthcare.com, Tel: 01-482 5352, or 087-222 6752.

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- Qualified dental nurse required to join modern dental practice in the west Dublin area. Maternity cover initially, with a view to a more permanent role. Please email your CV to westdublindental@ gmail.com.
- Dental nurse required immediately in Cork city. Maternity leave cover for six months. Full- or part-time. Experience required. Please forward CV to peteroconnell28@hotmail.com.
- Dental nurse/receptionist required for computerised dental practice in D12. Part-time considered if hours suited. Please call 087-981 0131 or forward CV to youngdentistandhygienist@gmail.com.

#### Hygienists

- Dental hygienist required for immediate start for one to two days per week in a busy Cork city practice. Please send a cover letter and CV to info@cantydental.ie.
- Part-time dental hygienist required in Carlow/Wexford region up to four days available – good back-up facilities, established book – please send CV to southeastdental46@gmail.com.
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- Hygienist required for busy practice in Co. Clare, initially one day a week. Email jfssheehan@yahoo.ie.
- We are looking for an enthusiastic hygienist to join our modern, well-equipped, well-established practice in Tipperary. Position offers existing book. Excellent support team. Candidates must be IDC registered. Email lindaryan001@gmail.com or call 087-228 1282.

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### True north

Originally from Bailieborough, Co. Cavan, DR DARA REYNOLDS practises in Errigal Dental in Letterkenny, Co. Donegal.

### What led you to first get involved in the IDA?

After graduation in 1996 I moved to England with my then girlfriend Rachel, but we returned in 1998 when the opportunity arose to buy a practice in Terenure in Dublin. We found ourselves as young graduates owning a business, a big old dilapidated Georgian house needing renovation. We were in way over our heads but the IDA put us in touch with other dentists who had been through similar situations before and could offer us practical help on things like suppliers, modernisation and computerisation. The IDA was really helpful in building bridges and connections.

#### How did things progress from there?

While Rachel is from Rathgar, her family is from Donegal, and in 2004/5 we set up a practice in Ramelton, a little village outside Letterkenny. I remained in Dublin while Rachel worked in Donegal and we commuted at weekends, but when our first child was born in 2008, we decided to make the move to Donegal full-time. The business grew rapidly for the first few years, but from 2010 onwards we experienced a rapid, sustained contraction, so we made the decision to join forces with a college classmate, Nicholas McCann, in Letterkenny. He had opened a large premises in 2008, with room for four surgeries, so we effectively 'bolted' the two practices together in March 2012.

#### How is business in the north west now?

Slowly but surely things are getting better. The business stabilised circa 2013/14 and we've experienced modest growth from 2015 onwards. We introduced a hygienist in the practice in 2016 and she has grown her practice to a full working week. However, Brexit is already beginning to pose challenges for us as a border practice. With the changes in sterling things in Northern Ireland have suddenly become significantly cheaper. It's a serious concern, especially as practices in Northern Ireland are well subsidised, whereas whatever money dentists in the Republic put into our practices we have to generate ourselves.

#### What has membership of the IDA meant to you?

What attracts me to the IDA is its practical function. Lectures and events are free or well subsidised and the Association disseminates information very efficiently to members. The financial benefits are also significant, in terms of things like indemnity and other insurance. If you never have to lift the phone to IDA House, you will still make a lot more back than you spend just by being a member.

I attend North Western Branch meetings and try to get to the Annual Conference. I try to get to meetings in Dublin too – to catch up with classmates and friends. Dentistry can be very solitary. You need the comfort of knowing someone is there, and the IDA offers that. It's good to know someone is at the end of the phone, and that you can meet likeminded people at a conference or meeting.

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

On the occasions when I've needed a bit of advice and had to lift the phone, if the Association didn't have an answer they would point me to someone who did. You're part of a dental family. It doesn't have to be a crisis, just nuts and bolts practical stuff like practice management issues. The IDA will always offer help and guidance.

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

Dentists are a small lobby group compared to other organisations, so it can be tougher to get our message across. I would love to see more lobbying from the IDA to bring us closer to the level of actual financial support enjoyed by UK dentists – not only in terms of grants, but there may be room for expansion of tax breaks related to capital expenditure, because we're certainly at a disadvantage to our Northern cousins in that regard. It's important to build relationships, particularly within the civil service. Governments change. The 'Sir

Humphreys' don't. That way we make sure we're prepared when the next big thing – like Brexit – happens.

Dara is married to Rachel, and they have two children, Alex and Amelia, aged nine and eight. He's started golfing again this year, and does a bit of running and cycling "to keep the gut off and the head right!" He enjoys socialising with his wife and friends, and loves the

quality of life that living in Donegal offers his family.

![](_page_54_Picture_0.jpeg)

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CORSODYL® TOOTHPASTE IS CLINICALLY PROVEN TO REDUCE PLAQUE, BLEEDING GUMS AND INFLAMMATION

![](_page_55_Picture_3.jpeg)

![](_page_55_Picture_4.jpeg)

Recommend Corsodyl<sup>®</sup> Toothpaste to help patients maintain their gum health between dental visits.

![](_page_55_Picture_6.jpeg)

\*Removes more plaque than a regular toothpaste after a professional clean and twice daily brushing. **Reference: 1.** Data on file, GSK, RH02434, January 2015. Trade marks are owned by or licensed to the GSK group of companies. CHGBI/CHCSYL/0134/16