



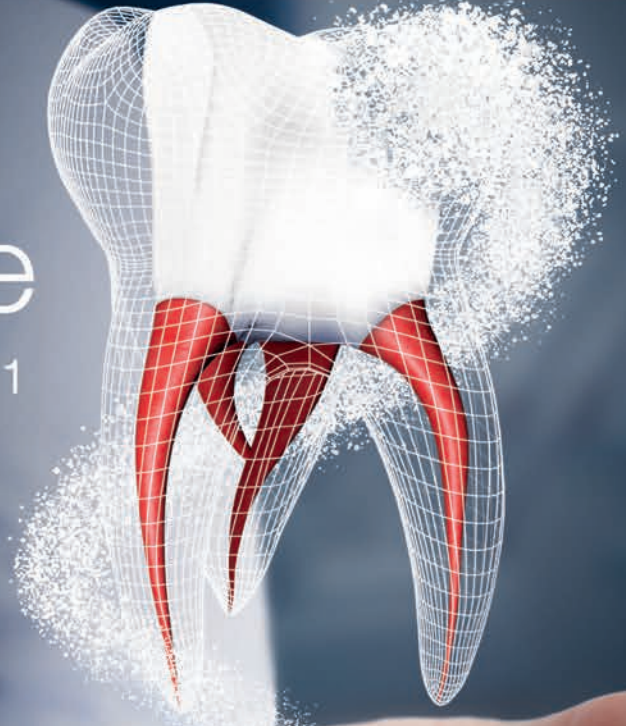
## BITING SPIRIT

The perils of phantom bite syndrome  
or occlusal dysaesthesia

# Biodentine™

Updated Indications

## Reverse the Irreversible!<sup>1</sup>



### Irreversible Pulpitis

**Biodentine™ saves pulps EVEN with signs and symptoms of irreversible pulpitis<sup>1</sup>**

Biodentine™ brings one-of-a-kind benefits for the treatment of up to 85%<sup>2</sup> of irreversible pulpitis cases:

- Vital Pulp Therapy allowing complete dentine bridge formation
- Minimally Invasive treatment preserving the tooth structure
- Immediate Pain relief for your patients' comfort
- Bio-Bulk filling procedure for an easier protocole



ACTIVE  
BIOSILICATE  
TECHNOLOGY

## Innovative by nature

Please visit our website for more information

[www.septodont.ie](http://www.septodont.ie)

or call Gerard Lavery on: +44 (0)7836 255274



<sup>1</sup> If haemostasis cannot be achieved after full pulpotomy, a pulpectomy and a RCT should be carried out, provided the tooth is restorable (ESE Position Paper, Duncan et al. 2017)

<sup>2</sup> Taha et al., 2018



- HONORARY EDITOR** **Dr Ciara Scott** BDS MFD MOrth MDentCh (TCD) FFD (RCSI) MSc (RCSI) FDS (RCSEd) Member EBO  
[journaleditor@irishdentassoc.ie](mailto:journaleditor@irishdentassoc.ie)
- DEPUTY EDITOR** **Dr Siobhain Davis** BA BDentSc FDS (RCSI) MDentCh (Pros) FFD (RCSI) MSc LHPE (RCSI)
- EDITORIAL BOARD**
- Dr Mirza Shahzad Baig** BDS MSc (UK) PhD (TCD)  
**AnnMarie Bergin** RDH  
**Dr Evelyn Crowley** BDS (NUI) MSc (ULond) DDPHRCSEng MSc (TCD)  
**Dr Brian Dunne** BA BDentSc DipPCD (RCSI) MFD (RCSI)  
**Dr Máiréad Harding** BDS MDPH PhD MFGDP (UK) FDS RCPS (Glasg) PGDipTLHE  
**Dr Peter Harrison** BDentSc MFD DChDent  
**Dr Laura Kavanagh** BDS Dip Clin Dent  
**Dr Richard Lee Kin** BDentSc FDSRCSI DChDent (Periodontology)  
**Dr Geraldine McDermott** BA BDentSc MFDS (RCSI) PGrDip ConSed (TCD) MSc Healthcare Leadership (RCSI)  
**Dr Mark Joseph McLaughlin** BDentSc FFD (RCSI) DChDent (Periodontics)  
**Dr David McReynolds** BA BDentSc MFDS RCSEd DChDent (Pros) FFD RCSI  
**Dr Deborah O'Reilly** BA BDentSc
- IDA PRESIDENT** **Dr Anne O'Neill**  
**IDA CHIEF EXECUTIVE** **Fintan Hourihan**  
**CO-ORDINATOR** **Liz Dodd**

The *Journal of the Irish Dental Association* is the official publication of the Irish Dental Association. The opinions expressed in the *Journal* are, however, those of the authors and cannot be construed as reflecting the Association's views. The editor reserves the right to edit all copy submitted to the *Journal*. Publication of an advertisement or news item does not necessarily imply that the IDA agrees with or supports the claims therein. For advice to authors, please see: [www.dentist.ie/resources/jida/authors.jsp](http://www.dentist.ie/resources/jida/authors.jsp)



Published on behalf of the IDA by  
 Think Media, 537 NCR, Dublin 1  
 T: +353 1 856 1166  
[www.thinkmedia.ie](http://www.thinkmedia.ie)

- MANAGING EDITOR** **Ann-Marie Hardiman** [ann-marie@thinkmedia.ie](mailto:ann-marie@thinkmedia.ie)  
**EDITORIAL** **Colm Quinn** [colm@thinkmedia.ie](mailto:colm@thinkmedia.ie)  
**ADVERTISING** **Paul O'Grady** [paul@thinkmedia.ie](mailto:paul@thinkmedia.ie)  
**DESIGN/LAYOUT** **Tony Byrne, Tom Cullen, Niamh Short**



Audit issue January-December 2019: **3,986** circulation average per issue. Registered dentists in the Republic of Ireland and Northern Ireland.

**Irish Dental Association** Unit 2 Leopardstown Office Park, Sandyford, Dublin 18.



Tel: +353 1 295 0072 Fax: +353 1 295 0092 [www.dentist.ie](http://www.dentist.ie)  
 Follow us on Facebook (Irish Dental Association) and Twitter (@IrishDentists).



**CONTINUE TO RECEIVE THIS JOURNAL**

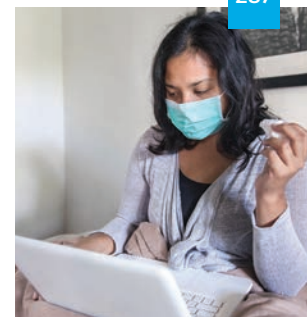
IDA Members: FREE • Non-Members: €120/£100 per annum  
 Digital copies: FREE • email [subscribe@irishdentassoc.ie](mailto:subscribe@irishdentassoc.ie)



279



292



287



312

## 267 EDITORIAL

Saluting our heroes

## 269 PRESIDENT'S NEWS

Making our voices heard

## 270 IDA NEWS

IDA Practice Management Seminar 2021; Top 5 IDA webinars; IDA Annual Conference 2021

## 271 QUIZ

## 274 NEWS FEATURE

Results of the *Journal's* 2020 readership survey

## 276 BUSINESS NEWS

All the latest news from the trade

## 279 FEATURE

Singing the praises of the unsung heroes

## 284 CLINICAL FEATURE

Ventilation and SARS-CoV-2 in dentistry

## 286 PRACTICE MANAGEMENT

The device in your pocket and why it should stay there

## 287 MEMBERS' NEWS

IDA meets the Health Minister;  
 HR advice on Covid-19 and sick leave



## 292 CLINICAL FEATURE

Application of the new periodontal classification: generalised periodontitis

## 296 PEER-REVIEWED

Dental care in patients with dementia  
*L. Fee*

## 301 The perils of phantom bite syndrome or occlusal dysaesthesia

*M.G.D. Kelleher, D. Canavan*

## 305 ABSTRACTS

## 307 CLASSIFIEDS

## 312 MY PROFESSION

Dr John Ahern shares one of the best days of his professional life.

**Colgate®**

Don't forget to renew your patient's **Duraphat** prescription

# Winning the fight against caries



## Effective prevention for patients at increased caries risk\*

High fluoride toothpastes are clinically proven to be **more effective** than a regular toothpaste in **preventing dental caries**:<sup>1-5</sup>

- 5000 ppm Fluoride Toothpaste **prevents cavities** by **arresting and reversing** primary root and early fissure **caries lesions**<sup>1,3-5</sup>



\* Colgate® Duraphat® 5000 ppm high fluoride toothpaste for patients ≥ 16 years at increased caries risk.

References: 1. Baysan A et al. Caries Res 2001;35:41-46. 2. Biesbrock AR et al. Community Dent Oral Epidemiol 2001;29:382-389. 3. Ekstrand et al. Caries Res 2013;47:391-8. 4. Schirrmester JF et al. Am J Dent 2007;20. 212-216. 5. Ekstrand et al. Gerod 2008; 25:67-75.

**Colgate® Duraphat® 5000 ppm Fluoride Toothpaste** - Name of the medicinal product: Duraphat® 5000 ppm Fluoride Toothpaste. Active ingredient: Sodium Fluoride 1.1%w/w (5000ppm F<sup>-</sup>). 1g of toothpaste contains 5mg fluoride (as sodium fluoride), corresponding to 5000ppm fluoride. Indications: For the prevention of dental caries in adolescents and adults 16 years of age and over, particularly amongst patients at risk from multiple caries (coronal and/or root caries). Dosage and administration: Brush carefully on a daily basis applying a 2cm ribbon onto the toothbrush for each brushing. 3 times daily, after each meal. Contraindications: This medicinal product must not be used in cases of hypersensitivity to the active substance or to any of the excipients. Special warnings and precautions for use: An increased number of potential fluoride sources may lead to fluorosis. Before using fluoride medicines such as Duraphat, an assessment of overall fluoride intake (i.e. drinking water, fluoridated salt, other fluoride medicines - tablets, drops, gum or toothpaste) should be done. Fluoride tablets, drops, chewing gum, gels or varnishes and fluoridated water or salt should be avoided during use of Duraphat Toothpaste. When carrying out overall calculations of the recommended fluoride ion intake, which is 0.05mg/kg per day from all sources, not exceeding 1mg per day, allowance must be made for possible ingestion of toothpaste (each tube of Duraphat 5000mg/100g Toothpaste contains 255mg of fluoride ions). This product contains Sodium Benzoate. Sodium Benzoate is a mild irritant to the skin, eyes and mucous membrane. Undesirable effects: Gastrointestinal disorders: Frequency not known (cannot be estimated from the available data); Burning oral sensation. Immune system disorders: Rare (≥1/10,000 to <1/1,000); Hypersensitivity reactions. Legal classification: POM. Marketing authorisation number: PA 0320/008/002. Marketing authorisation holder: Colgate-Palmolive (U.K.) Ltd. Guildford Business Park, Midleton Road, Guildford, Surrey, GU2 8JZ. Recommended retail price: €9.36 (51g tube). Date of revision of text: April 2015.

[www.colgateprofessional.ie](http://www.colgateprofessional.ie) [www.colgatetalks.com](http://www.colgatetalks.com)



## A year of heroes

This issue celebrates the heroism of the dental profession in an extraordinary year.



Heroism is derived from the Greek word for demigod – heros. It describes someone with courage and integrity, who puts others first, even at their own peril. Fred Luthans developed another way to describe a HERO.<sup>1</sup> His concept of psychological capital is the combination of four constructs that promote positive psychology in the workplace:

- Hope:** describes human spirit, motivation and perseverance.
- Efficacy:** is confidence in achieving a specific outcome in a specific situation.
- Resilience:** is a positive way of coping with adversity or distress.
- Optimism:** is a realistic expectation of what can be achieved and the potential for success.

We are familiar with the value of economic capital and human capital in business, and psychological capital also drives individual and organisational performance. Decades of theory building and research have demonstrated that HERO attributes and behaviours can be learnt and practiced, and that building psychological capital has far-reaching benefits for individuals and organisations. Forward-thinking organisations find ways to build psychological capital. This has a ripple effect both beyond work, influencing health and relationships, and beyond individuals, across workplaces and organisations. Positive organisational scholarship has built an evidence base that positive emotions improve staff satisfaction and engagement, and the ability to adapt to change, and improve client outcomes and satisfaction, turnover and staff retention in organisations across many sectors, including health.

Positivity is heliotropic. Positive stories and actions have lifted us through a challenging year. Many of us have built up our inner HERO and have also recognised and valued HEROes among our colleagues, friends and communities. This issue celebrates all the HEROes in our profession and shares some of their stories.

I count the IDA secretariat, Board and Committees among my heroes this year for all the work they have done to advocate for dental patients and support the profession.

### In this issue

The National Return to Work Safely Protocol (updated November 20) highlights the need for ventilation in all workplaces and this has been of particular concern to us in dental practice. The IDA Quality and Patient Safety Committee provided

updated guidance in October. I expect I'm not alone in wearing thermals under my scrubs in recent weeks to compensate for open windows in the clinic! I thank Nick Armstrong and Hugh O'Connor for sharing their expertise in this field with us in this issue.

I also count my patients among my heroes, many of whom accepted delays in treatment and continued to wear and care for appliances when clinics closed. The Dental Health Foundation promotes positive dental behaviours and has included some new resources with this issue. In this issue, our first peer-reviewed article highlights the importance of really listening to our patients' stories and understanding their dental history to support accurate diagnosis and manage their expectations before starting treatment. I thank Martin Kelleher and Dermot Canavan for sharing their knowledge and experience in the management of 'phantom bite syndrome'. Some patients lose the ability to advocate for themselves. In our second peer-reviewed article, Laura Fee describes how dementia can affect both dental self-care and the provision of dental treatment, and provides excellent advice on caring for this vulnerable group.

In this issue, we also publish the first in a series of clinical cases on the application of the 2017 Periodontal Classification. I would like to thank Peter Harrison for leading on this and all his periodontology colleagues from the Dental Schools in Dublin and Cork who have provided the content for this valuable series.

### Valuable feedback

I'd like to thank all of our readers who took the time to complete the survey in the last issue. Your feedback helps us to understand what readers value and how to continue to improve our content. I'm delighted that we can share some of the initial findings with you in this issue and I look forward to developing your ideas with the Editorial Board. Lastly, I'd like to thank all our contributors during 2020. The *JIDA* is a product of the commitment, vision, knowledge and support we receive from authors, reviewers, members and advertisers. I would also like to thank all of the Editorial Board, our secretariat at IDA House and our publishers Think Media, whose dedication has kept the *JIDA* sailing this year. Wishing you all a happy and vaccinated 2021!

### Reference

1. Luthans, F., Youssef, C.M., Avolio, B.J. *Psychological Capital and Beyond*. Oxford University Press; USA, 2015.



# ADD LISTERINE TOTAL CARE TO YOUR PATIENT'S DAILY ROUTINE TO FINISH THE JOB STARTED BY MECHANICAL CLEANING



The mechanical actions of brushing and interdental cleaning displace plaque and dislodge bacteria from the tooth surface. However, bacteria from other areas of the mouth can quickly recolonise on teeth.<sup>1</sup>

Bridging this gap, a landmark meta-analysis of 29 studies involving more than 5,000 participants demonstrated that those who

added a LISTERINE® essential oils mouthwash to mechanical methods had over **5X MORE PLAQUE** free sites than mechanical methods alone<sup>2</sup> which may lead to the prevention of gum disease.

**For further information and to receive a free sample, visit**  
**[www.listerineprofessional.co.uk](http://www.listerineprofessional.co.uk)**

*Johnson & Johnson*  
THE MAKERS OF

**LISTERINE**

1. Barnett ML. The rationale for the daily use of an antimicrobial mouthrinse. JADA 2006; 137: 16S-21S

2. Araujo MWB et al. Meta-analysis of the effect of an essential oil-containing mouthrinse on gingivitis and plaque. JADA 2015; 146(8): 610-622  
UK/LI/20-15605



Dr Anne O'Neill  
IDA President



## Making our voices heard

Communication will be key to progressing the issues that matter to dentistry.



The recent election in the United States has highlighted once again the importance of honest and transparent communication, and the links between good communication and good leadership. Closer to home, the recent controversy around the sharing of confidential GP contract details with a group not present during the negotiation of that contract has particular resonance for the dental profession as we prepare for difficult times ahead.

The IDA has a vital role in representing the profession, both dentists in independent practice and those employed by the HSE. But the IDA (as the national representative body for the dental profession) has not always been listened to at the table when decisions were being made, most recently in the formulation of the national oral health policy – Smile Agus Sláinte. Now more than ever it is vital that the appropriate structures are in place so that those who should be representing the profession are allowed to do so.

### Dental resilience

Our communication skills, like so much else, have been tested to their limits in recent months. In the face of enormous pressure, the dental profession has managed to adapt, to change, and ultimately to continue to provide care to patients in the face of a global pandemic.

The IDA's role has been an essential one in offering leadership, support and guidance to members as they struggled to deal with the impact of Covid-19 on their lives, their work, and their businesses. The success of the dental profession in responding quickly to the crisis is a testament to the resilience and hard work of our members. The many members of the dental team who have been redeployed to the essential work of Covid testing and contact tracing are also to be lauded.

The speed and efficiency with which dentists were able to move from an almost total shutdown in March to a return to work in May also reflects the importance of the communication pathways open during that time. The IDA worked tirelessly with the Health Protection Surveillance Centre (HPSC), the Dental Council and the HSE to put guidance and protocols in place to ensure that

dentists could reopen safely. These discussions were long, and parties did not always see eye to eye, but through open communication and discussion, disagreements were ironed out, problems were worked through, and a way forward was found.

### Achieving change

We know that good communication works, and we now need to continue and develop the pathways that have been established as we look ahead and think about how dental services are provided in Ireland. The economic impact of Covid-19 will undoubtedly be felt in how dental care is funded. We have no sense yet of how this will affect implementation of the oral health policy, but we know that the IDA needs to be at the table for any discussions on how we move from the plan to actual patient care.

We need to ensure that the discussion does not begin with how little funding is available to provide services. We need to focus first on what constitutes good patient care, the fundamentals and core standards on which we base our practice, founded in the best evidence. These are principles that the Department wishes to embrace, and the voice of the profession will be crucial in deciding how that is done. If we first know what we want to achieve for our patients, then innovative ways can be sought, within budgetary constraints, to provide that care. Work to reinforce that interactive communications pathway with the Department was further developed with the Health Minister and his staff at our recent meeting with the Department. Our representatives brought the voices of the profession (both publicly and privately funded). We also brought the voices of our patients who struggle to access care in the current climate.

Clear and open communication pathways, where everyone who needs to be at the table is represented, will be absolutely crucial to this process. A communication process where we can express our views, have differences of opinion, and work through them to find a solution that keeps patient care and good dental practice at the centre, will help us to put systems and schemes in place that will support and protect the future of dentistry in Ireland.



**MARS WRIGLEY**  
Foundation

**SIX GRANTS**

**€13,500**

€2,800 €2,800 €2,800

€1,000 €1,000



## Mars Wrigley Grants 2021

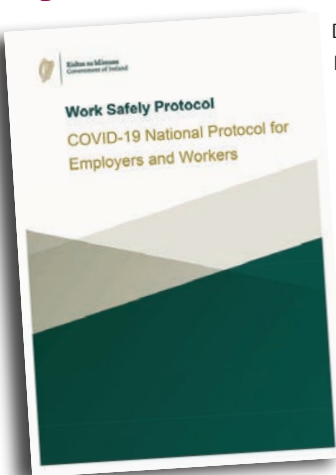
There was great disappointment that our 2020 Mars/Wrigley Grant programme could not go ahead due to Covid-19. However, the IDA is now delighted to announce that the programme, originally set out for 2020, has now been extended into 2021.

Applications are now open for these grants, and a full application form is available to download on [www.dentist.ie](http://www.dentist.ie).

There will also be grants available for 2021.

Applications are accepted from any IDA member and any Irish Dental Hygienist's Association (IDHA) member\* (\*must be working in a practice of an IDA member). Applications are welcome from individuals or dental teams.

## Updated Covid-19 workplace guidance



Dr Jane Renehan at Dental Compliance Ltd reminds dentists that the Government published updated guidelines (November 20, 2020) to prevent the spread of Covid-19 in the workplace to staff.

The Health and Safety Authority will remain the lead agency in co-ordinating compliance with the Work Safely Protocol. Nearly 20,000 Covid-19 inspections have been carried out since May 2020.

The key messages in this document are:

- each workplace must have at least one Lead Worker Representative who works with the employer to implement infection control protocols;
- keep the practice Covid-19 Response Plan up to date;
- monitor staff and patients for signs and symptoms of Covid-19 and have a

## Annual Conference 2021

Like a lot of events in 2020, the IDA was very disappointed to have to cancel our Annual Conference.

We are now delighted to announce that our Annual Conference 2021 will take place virtually on April 16 and 17, 2021. The Annual Conference subcommittee, under the Chairmanship of Dr PJ Byrne, is working very hard in the background and will bring delegates a very exciting and interesting programme. World-renowned speakers will include: Dr Paul Abbott (endodontist, Australia); Dr Mink Vasant (composites); Dr Shaz Memon (social media); Dr Celine Highton (rubber dams); Dr Larry William (vaping and cannabis use); and, Dr Teresa Gonzalez (oral medicine).

2021 will offer us an opportunity to invite top-class international speakers who might not otherwise be in a position to travel to Ireland for our face-to-face event. It may very well be the best year ever!

The full programme will be available in early 2021.



**ANNUAL CONFERENCE**  
April 16+17, 2021

SEE  
[www.dentist.ie](http://www.dentist.ie)  
FOR  
DETAILS



**ONLINE WORLD  
IN-PERSON DENTIST**

system to deal with individuals who display symptoms in the workplace; and,

- continue to implement infection control measures of physical distancing, environmental cleaning, PPE, hand hygiene and respiratory etiquette.

Dr Renehan says: "I suggest that principal dentists and responsible persons in the practice should pay particular attention to the new section in this document which deals with heating, ventilation and air condition (HVAC)". She draws members' attention to the new advice sheet on Ventilation and SARS-CoV-2 in dentistry on the members' section of the IDA website.

Dental Compliance Ltd offers an online advisory programme, on-site assessments, and a range of training options for dentists and dental teams who require support with their regulation and compliance concerns – [www.dentalcompliance.ie](http://www.dentalcompliance.ie).

## Practice Management Seminar to continue in 2021

The IDA is delighted to announce that the annual Practice Management Seminar will take place virtually on Saturday, January 30, via Zoom. A fantastic line-up of speakers is planned. Full details will be announced soon.



## Quiz

Submitted by Dr Rory Govan.

A four-year-old female attends as an emergency after sustaining trauma from tripping over onto her face. The patient did not go unconscious. She reports that one of her front teeth fell out, which she has with her in a plastic bag. Medically she is fit and well.

On examination, there are no findings extra-orally. Intra-orally, her labial frenulum is lacerated, there is contusion of her anterior buccal gingivae, the URA is missing, the URB is grade 1 mobile with bleeding from the gingival crevice, the ULA has no mobility, and there is no occlusal interference.

### Questions

1. What do you see radiographically?
2. What are your diagnoses?
3. How would you manage this patient?
4. What are the possible unfavourable sequelae to successor teeth following trauma to primary teeth?

Answers on page 306



## Guided implant surgery services

The ultimate, predictable, guided system. Trusted by dentists across the UK & Ireland.

- Hassle-Free Online Ordering
- Open To All Implant Systems
- Upfront & Fair Pricing
- Full Impression Digitisation Service Available
- Experienced Clinical Support Team
- Accurate & Sturdy 3D Printing



Compatible with all major implant systems, including:



Dental 3D Printing & Design

w: [www.quoris3d.com](http://www.quoris3d.com) e: [chrome@quoris3d.com](mailto:chrome@quoris3d.com) t: 01-4370896

## IDA webinars – January to March 2021

The CPD Committee is currently finalising our series of webinars for early 2021. A full list of webinars with topics and dates will be announced in due course. Webinars will continue on Wednesday evenings, unless otherwise advertised, at 8.00pm. All webinars are available for members to view at any time, except for those indicated, on the members' section of [www.dentist.ie](http://www.dentist.ie).

### Top five webinars

The IDA provided a series of 13 webinars between September and December, weekly at 8.00pm via Zoom. All webinars are available to members to watch either on the evening they are being streamed or at a more convenient time via our website. Thank you for tuning in.



Dr Rona Leith



Dr Andrew Bolas



Dr Sheila Galvin



Roisín Farrelly



## TOP FIVE IDA WEBINARS

1

The Hall Technique

Dr Rona Leith

2

10 Top Tips for Compliance  
in Dental Radiography

Dr Andrew Bolas

3

Return to Work Refresher

Dr Jane Renehan  
Dr Ahmed Kahatab

4

Mouth Cancer:  
Lumps and Bumps

Dr Sheila Galvin

5

HR: Working with Covid

Roisín Farrelly  
IDA House



**Irish Dentists' Approved  
Retirement Savings**  
For Dentists, by Dentists

## JOIN US IN 2020!

Lower fees mean a bigger pension

For more information, email Edward today



### Please remember

- A planned retirement is a happy one
- Procrastination ultimately costs more money
- Competitive charges make a difference to final outcomes
- Our interest is focused on what's right for you

Acuvest manages the Irish Dentists' Approved Retirement Savings Scheme. We are currently helping over 40,000 retirement savers in Ireland today. To find out how to start a pension or how to protect your pension against market volatility as you approach retirement, please contact us.

**Edward O'Hanlon**  
QFA

Phone: +353 (0)1 634 4801  
Mobile: +353 86 155 4830  
Email: [edwardoh@acuvest.ie](mailto:edwardoh@acuvest.ie)

67 Merrion Square South, Dublin 2, D02 CK11.  
Telephone: +353 (0)1 634 4800  
[www.irishdentistsretirement.com](http://www.irishdentistsretirement.com)

Boyne Trustees Company Limited by Guarantee Directors:  
Mr. Gary Byrne, Dr. Ellis Delap, Dr. Gerry Hall, Dr. Joe Murphy.

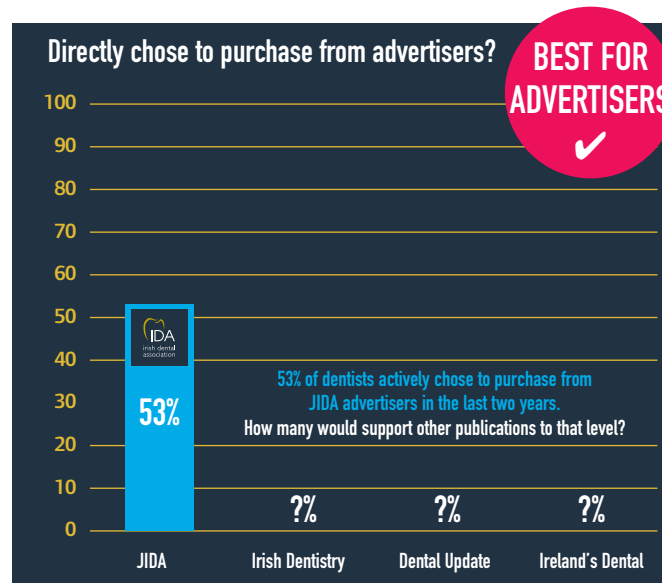
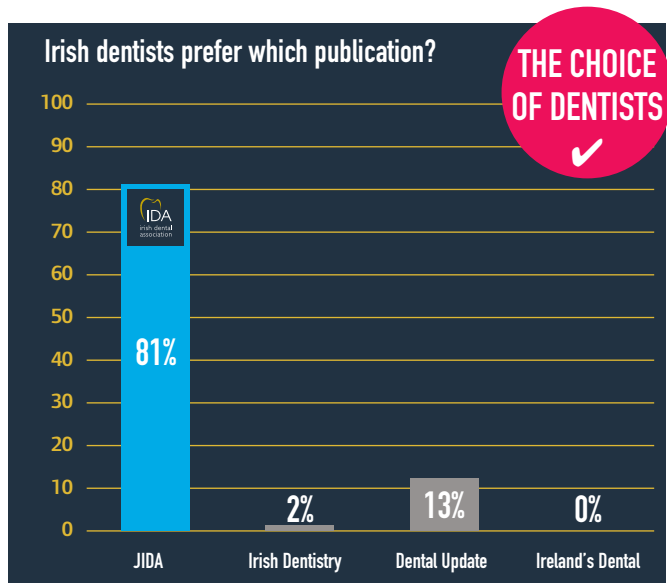
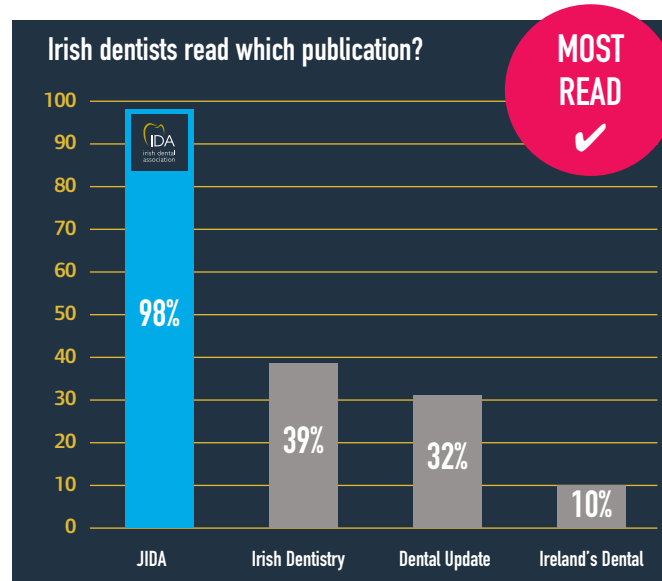
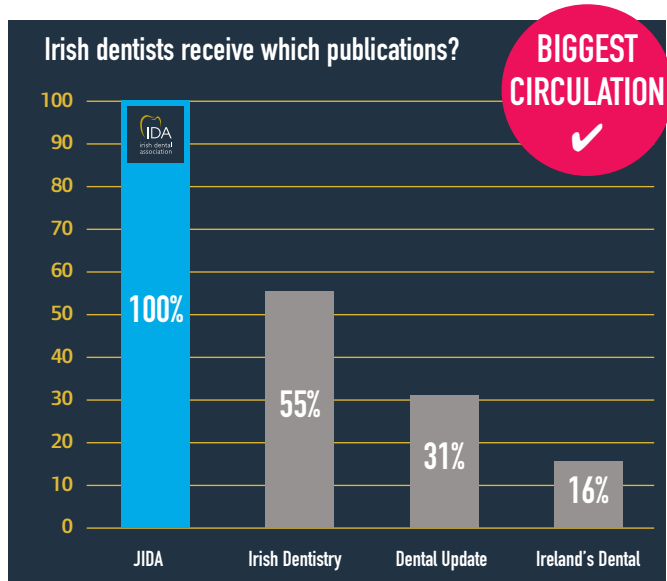




## TrioClear - THE NEW THREE-STEP CLEAR ALIGNER SOLUTION

Contact Southern Cross Dental on 028 8772 7100 (NI)  
or 042 934 3043 (ROI) for more information.  
[www.trioclear.com](http://www.trioclear.com)





## JIDA is out in front

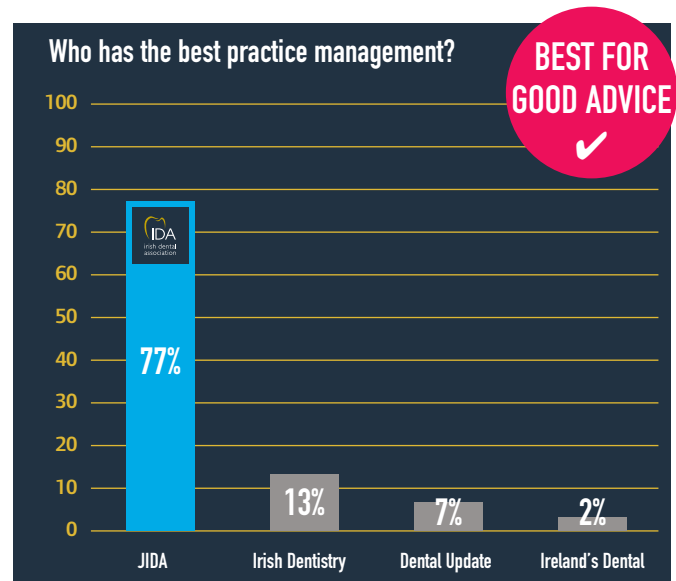
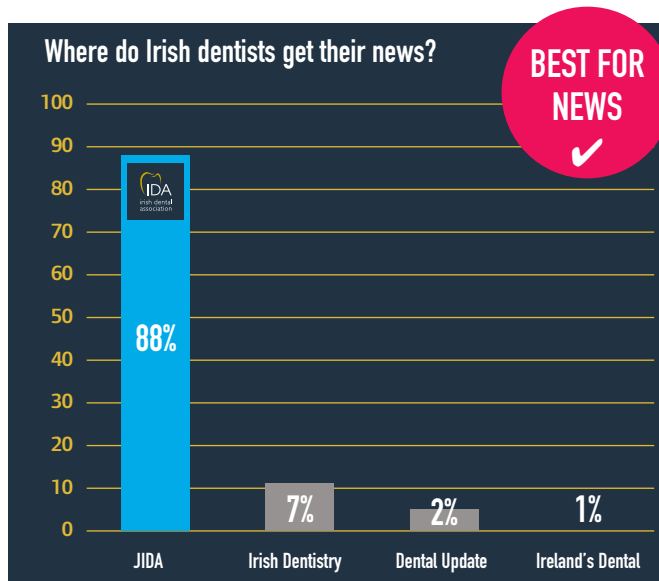
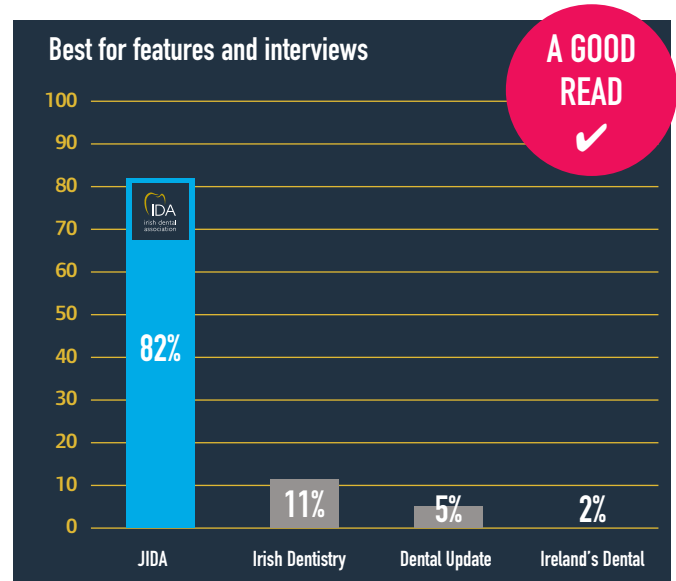
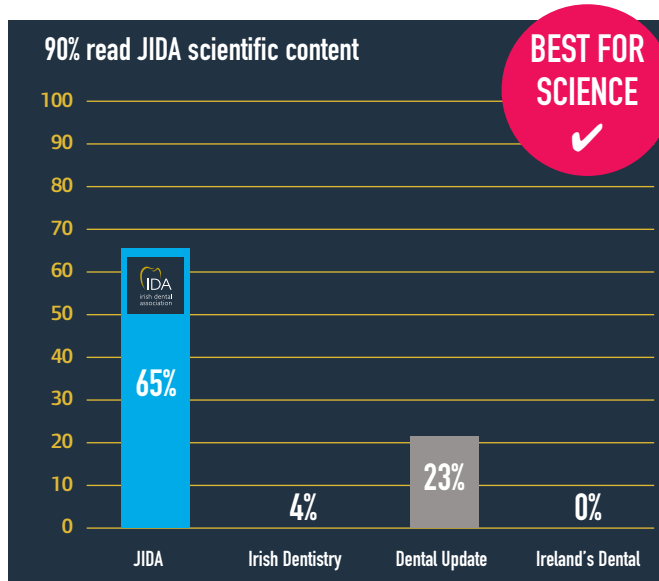
The results from the latest *JIDA* Readership Survey show that the *Journal of the Irish Dental Association* is categorically the preferred dental publication in Ireland.

While other publications may claim to reach a lot of dentists, the survey shows that this is not the case. All dentists surveyed said they receive the *Journal of the Irish Dental Association (JIDA)*, while just 55% said they get *Irish Dentistry*, 31% get *Dental Update*, and 16% get *Ireland's Dental*. The survey covered a broad range of age groups and had an almost 50:50 gender split.

A total of 98% of dentists read the *JIDA*. None of the other publications are read by even 40% of the dentists surveyed. Overall, 81% of dentists said the *JIDA* was their preferred dental publication. One dentist said that the *Journal* is continually improving, while another commented: "I really enjoy the *Journal*. I feel by reading it I can get a good handle on what is going on in the profession. So many of us are working in small practices on our own or with few colleagues, so it can be difficult to keep up with what's going on and the *Journal* helps".

There was a clear preference for a printed journal, with 84% saying they favour getting a hard copy. If they were given a choice between getting a printed copy or an electronic, 86% said they would choose print.





### Supporting advertisers

Over half of the respondents said they had supported the advertisers in the *Journal* by purchasing something from them in the past two years. Being the official journal of the IDA makes the *JIDA* stand out, as one dentist said: "It has a certain amount of credibility to it and it's the journal of the Association, so if there is something related to the IDA, I expect the *JIDA* to have first-hand reporting of it – the other magazines are simply reporting on what the IDA says or does, not reporting from the IDA".

The *JIDA* is also the clear leader for different types of articles. For clinical/scientific articles, 65% of dentists prefer it to the other publications. For features and interviews, 82% prefer it. For practice management articles, business/trade updates, and news, 77%, 75% and 88% prefer the *JIDA*, respectively.

The content of *JIDA* keeps dentists reading to the final page in most cases, with over 60% of dentists either always or usually reading nearly all sections of

the *Journal*. Clinical features and scientific material prove very popular, as one dentist commented: "We are scientists – keep emphasising peer review and facts over hysteria. In a world of media, the *JIDA* brings facts".

**98% of dentists read the *JIDA*. None of the other publications are read by even 40% of the dentists surveyed.**

Another said: "I find it useful for clinical tips. I'm a GDP so I want practical advice that I can use in surgery".

The quality of the *JIDA* is shown in this survey, with many dentists commenting on the layout and how engaging it is. One called it a first-class publication: "It's so well put together and keeps me reading all the way to the end".

# The seven habits of successful investors

A young dentist recently asked me for solutions as to how to manage their money for the long term. At the same time, I was doing my usual research on markets and looking for new investing ideas for clients. I came across a thought-provoking article by Alexander Green on scripbox.com outlining his seven key habits that generate wealth for people. The article has a more international leaning, so I've given the concept local context. Before we scold ourselves into not having done all of the intelligent and sensible things below, there are some things that we should remember, to make ourselves feel somewhat better for not all being multi-millionaires by the time we are 40. Ireland is still very much in its youth in terms of standing on its own two feet and being economically independent. As a country, we are too young to have much inter-generational wealth. The 1950s saw great foresight by our economic leaders in opening our economy to international trade and subsequent membership of the European Economic Community (EEC) in the early 70s. The struggles and unemployment hardships of the 1980s continued to force the emigration of our best people. It is really only in the last 30 years that we can see the creation of wealth that can be sustained between generations through inheritance.

Here are some ideas that might help us make the most of what we have:

## 1 Living within our means

This is more often said than done. The secret to this is often education, because it can enhance people's means for them to live within. Certainly, more extensive education can make it easier to manage through recessions and difficult times. As the economic environment improves, people are in a stronger position to benefit financially and increase their means significantly. Getting into a good savings routine from an early age is a great habit; putting 10% of net income away each month is a perfect start.

## 2 Don't be a renter: own your own home

Only one person is winning when you are renting and that is your landlord. During early years post qualifying, it can be impossible to purchase a home because you may be moving around and you haven't enough savings. If you can manage to build up your savings for a deposit you begin to give yourself valuable equity, which will grow significantly over time. Paying rent is paying someone else's mortgage: better to pay your own as early as you can.

## 3 Take calculated risks

Saving money means making sacrifices, so measuring the risk that you take with investing is very important. Interest rates and Government bonds are showing no return at present, so an element of risk for return is required. There's a difference between gambling and investing, and stock tips received at dinner parties or golf clubs tend to be gambling, not investing. It is very easy to research stock prices these days and investor magazines giving ideas are plentiful. Research volatility and know that you may be in for a bumpy ride but that it will be worth it over time.

## 4 Invest tax efficiently

The most tax-efficient method of investing funds is through your pension. Quite simply, you can get up to 40% tax relief on contributions (up to your relevant ceiling), which is an enormous gain to begin with. If you wish to save €1m in your pension fund, you could do so while getting €400k back in tax through your career. Add in a good investment return and you could have much more than €1m at retirement. Investors in their twenties and thirties may feel that it is too far away, but creating wealth in your retirement fund at an early age has exponential benefits. Some of you will have heard me talk about my client who began saving €500 per month into her pension at age 25. The premium increased a little each year and by age 42, we discovered she had amassed €1.2m in her fund! We then had to bring down her premium substantially for fear of overfunding.

## 5 The importance of diversification

There are a number of different asset classes to invest in including shares, Government and corporate bonds, property (commercial and residential), gold and cash. Within each of these assets are regions and sectors, and these also have different risk levels. Diversify your portfolio across assets to give yourself balance against market falls. Don't forget that market falls can be good news, as you have the chance to buy assets for less.

## 6 Watch your costs

Nowadays, transaction fees on share purchases can be kept to a minimum with the many online platforms available. You won't get any advice with these platforms – they will just be for trading. Advice-led fees should be around 1% per annum, with more technical funds attracting higher fees due to higher hedging costs, etc. Keep costs as close to that as possible.

## 7 Make a plan and be disciplined

The likelihood is that unless you are close to retirement, you will be able to ride out any market fall without it hurting you in the short term. Therefore, don't sell when markets take a dive; if you can, be brave and buy cheaply. A price correction should mean opportunity for you. An alternative and more favourable method in my opinion is to invest monthly in a disciplined manner. This will give you the benefit of 12 investment prices during a year rather than just one at the end.

Self-employed dentists also have the challenge of paying their tax annually, which takes considerable discipline in preparation. All of the above suggestions are of course in an ideal world. Unexpected expenses, living life to the full and the normal costs of family life and living all make sticking to a rigid plan difficult.

**John O'Connor**

John is Managing Director of Omega Financial Management which are an approved supplier for Irish Dental Association members.





# Welcome to Dubco Credit Union Limited

now amalgamated with Irish Dental Credit Union Limited

No wait period or  
minimum savings  
required for  
members who wish  
to borrow!

## THE NEW CREDIT UNION FOR DENTISTS, THEIR COLLEAGUES & EXTENDED FAMILY

### DUBCO LOAN RATES



#### COVID-19 BUSINESS SUPPORT LOAN

6.97%  
(7.20% APR\*)



#### BUSINESS IMPROVEMENT LOAN

5 year term  
5.97%  
(6.14% APR\*)

7 year term  
6.47%  
(6.67% APR\*)

10 year term  
6.97%  
(7.20% APR\*)



#### INCOME TAX LOAN

6.47%  
(6.67% APR\*)



#### PERSONAL LOAN

7.97%  
(8.27% APR\*)



#### CAR LOAN

Standard Car  
5 to 7 year term  
5.97%  
(6.14% APR\*)

Electric Car  
5 to 10 year term  
4.97%  
(5.08% APR\*)



#### HOME IMPROVEMENT LOAN

5 year term  
5.97%  
(6.14% APR\*)

7 year term  
6.47%  
(6.67% APR\*)

10 year term  
6.97%  
(7.20% APR\*)



#### EDUCATION LOAN

4.97%  
(5.08% APR\*)



#### COVERED LOAN (SAVINGS HIGHER THAN LOAN)

4.97%  
(5.08% APR\*)



#### HOME LOAN

LTV < 50%  
3.40%  
(3.45% APRC\*\*)

LTV < 80%  
3.60%  
(3.66% APRC\*\*)

\*The APR (Annual Percentage Rate) included is an example only; all APR examples are based on a €10,000 loan over a period of 60 monthly repayments.

\*\*The APRC (Annual Percentage Rate of Charge) included is an example only; all APRC examples are based on €200,000 over a period of 300 months.  
1st legal charge will be required.

To join:



Visit [www.dubco.ie/join](http://www.dubco.ie/join)  
and sign up online



Call us on  
01 887 0400



Download a Membership Pack  
from [www.dubco.ie/membership](http://www.dubco.ie/membership)

Dubco Credit Union Limited is regulated by the Central Bank of Ireland



Together We're Better

Little Green Street,  
Dublin 7

Malahide Road, Coolock, Dublin 5  
(for Mondelez employees only)

Tel: 01 887 0400 Email: [info@dubco.ie](mailto:info@dubco.ie) Website: [www.dubco.ie](http://www.dubco.ie)



## Quoris3D appoints new sales manager



*Orla Sheehy, Sales Manager,  
Quoris3D (Ireland and Scotland).*

Quoris3D states that it is changing the face of dentistry with pioneering 3D-print technologies. Its core business is CHROME-guided surgery, which was developed for dentists who desire a pre-planned, predictable, guided all-on-X-style surgery. The company states that this service delivers anchored bite verification, anchored bone reduction, anchored site drilling, accurate anchored provisionalisation, and a method of transferring all surgical and restorative information for the final restorative conversion phase. According to Quoris3D,

most cases simply require a CT scan and traditional records. Quoris3D states that it is delighted to welcome Orla Sheehy to its team as the new sales manager for Ireland and Scotland. Originally from Carlow, Orla has worked in the dental industry for over 16 years. Prior to joining Quoris3D, she spent a number of years working for GSK, before moving to the dental implant sector. Speaking of her appointment, Orla said: "I look forward to helping dental

practices streamline their workflow with CHROME-guided surgery and our 3D-printing solutions. We have a fantastic portfolio of products to offer, along with the technical and surgical knowledge to support our customers".

## Virtual Dentsply Sirona World

Exceptional circumstances require exceptional changes. Dentsply Sirona World took place completely online from November 13-20. More than 4,500 dentists, dental technicians and practice teams registered for over 70 courses in almost all practice-related disciplines. The company states that live surgeries were special highlights that fascinated the audience.

According to the company, the virtual Dentsply Sirona World set a new standard in online education with its versatile programme. In his opening speech, Don Casey, CEO of Dentsply Sirona, emphasised the company's commitment to provide participants with comprehensive support in offering their patients the best possible dentistry: "The first entirely virtual Dentsply Sirona World has sent a clear signal that dentistry is truly essential. Dental professionals from more than 25 countries attended our courses, demonstrating that even in times like these, the dental world stands together and takes responsibility for a healthy smile of its patients".

## Tax Loans for SMEs Your route through taxing times

At a time when working capital could be limited and cash flow management is crucial, our Tax Loan could help you to spread the cost of your tax bill into more manageable monthly payments.

- Take control of your cash flow
- Repayment term up to 24 months
- Faster Payment transfer
- Quick and simple to arrange

Take control of your cash flow, contact us today.

☎ 086 772 7552 / 081 882 7893

✉ [info@braemarfinance.ie](mailto:info@braemarfinance.ie)

🌐 [www.braemarfinance.ie/tax](http://www.braemarfinance.ie/tax)

Finance approval is subject to status

Close Brothers Limited (being a UK registered private limited company and its Irish registered branch of the same name having registration number 907899), trading as (and having as registered business names) Close Brothers Asset Finance, Close Brothers Commercial Finance, Close Brothers Premium Finance Ireland, Close Brothers Motor Finance and Braemar Finance, is authorised by the Prudential Regulation Authority in the United Kingdom and is regulated by the Financial Conduct Authority and the Prudential Regulation Authority in the United Kingdom and is regulated by the Central Bank of Ireland for conduct of business rules.





## Singing the praises of the unsung heroes

When the Covid-19 pandemic came to our shores, dentists and dental team members went the extra mile to help with the national effort in the fight against the virus. The JIDA spoke to just some of the dental team members on how their jobs changed overnight and how they adapted.



**Dr Amalia Pahomi**  
HSE Public Dental Surgeon, Hartstown Health Centre, Dublin 15

Amalia was among the first volunteers from the HSE for redeployment to Covid-19 testing: "I started my redeployment in Swords testing centre on Saturday, March 21. That was the very first day the Swords drive-through testing centre opened. Then on Sunday April 19, we joined the

National Ambulance Service, medics from the Defence Forces and other HSE staff to swab residents and staff in nursing homes and other care facilities. From June on, I also started swabbing in the walk-in testing centre in the Croke Park handball alley".

Although the work was a challenge, Amalia says she felt privileged to be able to help: "Obviously, the swabbing work was very different to my regular dental job. It was quite a challenging task at that time from many perspectives. Each testing centre had its own particularities and requirements. In the drive-through and walk-in centres, we worked 12-hour shifts, including weekends. It was very demanding, both physically and mentally, and we constantly had to be extremely careful with our cross-infection measures and the proper use of

PPE, as we were in contact with potentially Covid-positive people".

Swabbing in nursing homes was again very different to dentistry: "It was also the most rewarding knowing that we were part of a national effort in fighting Covid-19 spreading in nursing homes and ultimately saving lives. All these challenges aside, I felt extremely lucky and privileged that I was in a position to help during the pandemic in such a meaningful way, alongside my dental colleagues and other HSE staff. I have never experienced such a high level of camaraderie, goodwill and support as I did during the redeployment. I felt inspired and humbled by my colleagues' effort and dedication, and the way they overcame their personal circumstances, either childcare or family difficulties, to be present and give 100% to their work".



**Dr Sinéad O'Hanrahan**  
Private and HSE Orthodontist, Navan and Louth

Sinéad was seconded from her HSE role to perform swab testing in the testing centre in Co. Louth, before moving on to do testing in nursing homes. She is now back in her orthodontic clinic and, looking back, she says she really enjoyed the testing work: "You felt you were doing something, but at the time it was extremely

tiring. It's also a bit stressful because you're wondering are you bringing it home? My parents are old. I couldn't see my partner... Otherwise, I was glad. The ambulance guys were also great craic".

There were many people in the HSE redeployed into testing from different specialties, and Sinéad thinks the dental team members had particular transferable skills that made them suited to it: "I think we're good at it because we're all trained in cross-infection, especially the nurses, and we've a good sense of doing our own disinfecting. We understand viruses, within reason. I think we're well placed also because we're good at organising clinics. We organise patients, we organise volume of patients. We work fast in orthodontic services. We don't have long appointments and I think that's a skillset that these two [hygienist Tara Mundow and dental nurse Joanne O'Kane] definitely brought to the testing unit".

The HSE can sometimes get a lot of flak, but Sinéad says: "Everyone loves to put down the HSE, but I was really proud of the HSE for its response to Covid-19 – and the people who came on board. It was amazing to put together such





*The team of dental workers from Community Health Organisation (CHO) 9 in Dublin who were involved in Covid-19 testing (from left): Ailish Nolan; Dr Siobhan Bell; Geraldine Kelly; Bernie Owens; Sandra Joyce; Dr Amalia Pahomi; Dr Sarah Roux; Helen Gallagher; Rachel Kavanagh; Dr Feleena Tiedt; Dr Eimear Toomey; Miriam Drury; and, Dr Norma Ni Reachtagain.*

a team effort; normally, we can't agree on anything, and suddenly this massive effort arrived from the HSE. I have to say, overall, I was really proud of the HSE and its clinical staff. It was well organised, it was fast, they pulled all the stops out and to be fair, I think they did a really good job".

#### **Dr Sarah Roux**

##### **Senior Dental Surgeon – Special Needs, Dublin North City**

Sarah started her redeployment in the Swords testing centre the weekend after St Patrick's Day: "They were doing a drive-through testing centre at that point over there. I was there for about three weeks and then I was with a team that was going out with the National Ambulance Service out of Cherry Orchard Hospital and we were going from there to test in nursing homes, direct provision centres, homeless shelters and places like that. After that I was in the handball alley at Croke Park for a while and then I was in Swords again. Then I came back to work in August, properly back in clinic".

Although she was understandably a bit apprehensive at first, once she settled into the role of testing and had gotten used to wearing more PPE than she would in the dental surgery, she found the work quite enjoyable.

The scale of the redeployment was something that has probably never been seen before in the HSE: "I'd say around 70 or 80% of the staff were redeployed. Most were redeployed into testing and then there were a handful of people who were contact tracing. Then everyone else was doing the admin of the clinics and the emergencies".

Although the effort to fight Covid-19 should be commended, the fact that so many staff members were redeployed has meant that there are now delays to the already stretched HSE dental services: "It takes longer for one treatment appointment than it would have before. The other thing that's quite worrying about the dental services at the minute is that we don't seem to have our GA service back for children to have extractions done. That would have been done through the private sector and there doesn't seem to be any provision for that at the moment still, so that's really worrying".

#### **Monique Le Feuvre, Treatment Co-ordinator, Kinsale Dental**

Private practice was of course also affected by the pandemic, and Monique

explains how the team in Kinsale Dental did all they could to continue to care for their community.

The practice owners are Drs Janet and PJ Power. Janet joined an Ireland-wide WhatsApp group of 700 dentists and Monique says: "The support for each other to preserve the industry fairly for every practice/dentist was astounding. There was no competition and all information was openly discussed and all opinions considered".

When the practice had to close its doors, they set about doing what they could, says Monique: "We volunteered our time and operated as not for profit (ran at a loss like most practices) to man the phones and get to work on a solution. We could not put a value on our patients' care. All phone calls were triaged for the level of emergency assistance required and Dr PJ and Dr Janet Power were fully committed to phone consultations. We received video calls and photos to assist the dentists".

Monique explains that the practice already operated stringent decontamination standards before lockdown: "We aimed to increase them again and did extensive research into ionised air cleaning, dry fogging and more. We followed closely what different countries were putting into place for donning and doffing PPE, PPE required, social distancing, preventing cross-contamination in communal areas, and more. We then used this to develop our own standard operating procedures and training for staff when they returned to work".

All in all, the pandemic has invoked positive change at the practice, says Monique: "We have become very forward thinking about dental emergency management so our patients can have immediate care and practice footfall is managed in line with Covid-19 procedures. Patient care is our priority".



**Dr Grainne Gillespie and Dr Eabha Cronin former dental students, Dublin Dental University Hospital**

It wasn't just dental work that was affected by Covid-19, it also proved quite a challenge for those undergoing dental education. Grainne and Eabha were final-year dental students when the pandemic struck. On March 12, clinics were cancelled and the Dublin Dental University Hospital (DDUH) closed for students. Luckily, their class was close to finishing the academic year. For the following month, they were unsure what was happening or what to expect. Some lectures were moved online. They studied from home, unsure about where, when or what format final exams would be or if they would even happen. This was a manic and stressful time for both students and examiners. The final examinations were changed to online, open-book written exams, with the Vivas and OSCE proctored over Zoom. The day they finished their examinations, there was a Zoom call with the rest of their classmates to celebrate. On June 19, they officially graduated online. The DDUH staff held the annual end of year awards over Zoom to finish a memorable day.

On June 29, they both began their dental careers as junior house officers in the

DDUH after online interviews. Due to the pandemic, their degrees couldn't be posted to the Dental Council, so their registration couldn't be approved for another two weeks. Therefore, they couldn't treat patients until this requirement was fulfilled.

Once they obtained their registration, it was off to work with a service limited to accident and emergency, avoiding aerosol-generating procedures where at all possible. In August, the college reopened, dental school students returned and most elective clinics resumed.

Now six months into their new careers, they are learning to adapt to the 'new normal' every day and finding enjoyment in caring for their dental patients.



**Tara Mundow**  
**Dental Hygienist, HSE Orthodontic Unit, Louth Hospital, Dundalk**

When Tara and her colleague Joanne O'Kane were first seconded to the Covid-19 testing centre, their skills in clinic management and infection prevention and control were quickly recognised and now they are running the centre in Co. Louth.

Tara explains what this involves: "It's making

sure that it's running efficiently, making sure that the samples are sent to the labs and that the correct number of samples to the number of patients we've seen have been sent".

Tara enjoys working with people in the HSE that she normally wouldn't: "I've liked meeting people from other specialties within the HSE. The swabbing itself is the easiest part of all of this. The admin side is the tough part. I don't mind swabbing. In March, we were all terrified that we would catch Covid-19. To date none of us have, which is a huge testament to our dedication to infection control and following a very stringent swabbing process. This whole process was led by Hilda McConnon, Assistant Director of Public Health Nursing".

Tara says now she's enjoying the work: "It's something new that I've been kind of thrown into. I've been working as a hygienist since 1999 and I never thought I wouldn't be working as a hygienist, so it's been a crazy few months". It has changed her outlook on work: "I would have gone to work, done my day's work and come home and switched off. But this Covid-19 testing and the running of the centre: you come home and you're constantly thinking about it. For weeks, myself and Joanne were trying to figure out how we could work it more efficiently because there seemed to be a lot of paperwork being repeated. All in all, it's been a good experience. I've liked that I've been able to be a frontline worker and really help when it was needed".

## PRACTICE FOR SALE

Well established 3 Surgery **orthodontic practice** for sale in **Dublin South**. Great patient numbers. Excellent location close to schools, busy town centre and comprehensive public transport network. Ideal for two orthodontists who would like to work part time. Owner retiring and willing to transition out of practice over a period of time or look at a more immediate takeover.

If you are interested in purchasing a dental practice or alternatively selling your dental practice get in touch with us today!

### THE BANK OF YOU + YOUR BUSINESS

KBC Business Banking wish Marguerite and her team at Irish Dental Brokers every success. At **KBC Business Banking** we continue to support the dental and medical sectors through our specialised business banking offering. For further details please contact Kevin McCarthy, Business Partner at [kevin.mccarthy@kbc.ie](mailto:kevin.mccarthy@kbc.ie) who will be happy to assist you.



BUSINESS  
**All-Star**  
FOUNDATION



# IRISH DENTAL BROKERS



*"A sister company of Irish Dental Jobs - Ireland's Only Dental Recruitment Agency!"*



[www.irishdentaljobs.ie](http://www.irishdentaljobs.ie)



01-8494070 / 0879383155



[marguerite@irishdentaljobs.ie](mailto:marguerite@irishdentaljobs.ie)

## WHY CONTACT US?

01

We retain Ireland's only dental database. Bringing prospective buyers and sellers together in the Irish Dental Profession.

02

This is our 11th year specialising in the Irish Dental Profession - **WE KNOW OUR MARKET!**

03

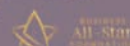
We can give you access to unique sources of funding for dental practice purchase.

04

We can give you personal introductions to specialist accountants and solicitors

05

Irish Dental Brokers have a very strong network in Ireland/UK to ensure **optimal marketing of your practice**





**Dr Annie Hughes**  
Restorative Senior House Officer,  
Dublin Dental University Hospital

When the pandemic spread across the country, things in the Dublin Dental University Hospital (DDUH) changed rapidly, becoming emergency treatment only. Annie explains how the Hospital adapted quickly to all of this: "The Hospital closed many services in line with national guidance, but was able to maintain the A&E service to provide acute dental care to those in need. The hospital quickly adapted in line with

current recommendations to ensure the service was as safe as possible for both patients and staff. To reduce the risk of transmission of Covid-19 in the Hospital, we had to change our triaging system to a phone-based one".

Dentists are used to PPE, but Covid-19 required another level of it: "We all had to rapidly acclimatise to a whole new range of masks and PPE, which we had never seen or worked with before".

Annie enjoyed working throughout the pandemic, even though it was a challenging time and the DDUH was inundated with extra calls because many dental practices were closed: "Despite this, staff morale remained high and we all felt fortunate to be able to provide our skills and services to the public when most needed. Naturally, it was unnerving at times, given that the nature of our work is extremely high risk and there was very little understanding of this entirely novel virus. During this time, I was contact traced by the HSE informing me that a patient I treated had tested positive for Covid-19; fortunately, my subsequent test was negative, reassuring me that our PPE and precautions were effective".

Annie pays tribute to how dentistry dealt with the pandemic: "I think it's very impressive how resilient the profession has been through these times. As a team, we quickly learned to adapt and come together in the best interest of the public, which has been a very rewarding process. I would like to commend the Hospital on their prompt adaptations and implementations, which provided an exceptional workplace throughout these difficult times and has more recently allowed for the safe return of teaching in the hospital".



**Joanne O'Kane**  
Dental Nurse, HSE Orthodontic Unit,  
Louth Hospital, Dundalk

Joanne started out swabbing in Louth test centre but was soon made lead of the centre with one of her colleagues: "I was asked to lead with one of my other colleagues who works in the orthodontic unit, Tara Mundow. We were there from the very start. I was redeployed full-time, as was she. A lot of the other people were there part-time".

She explains how she's grown more used to the role over time: "I was a little nervous naturally, but I was at an advantage in being very used to the mouth. And I also had good training from the National Ambulance Service (NAS) and in infection prevention and control. We have an

amazing clinical lead to guide and support all staff. I really enjoyed it and I still do enjoy it. We're dealing with different situations every day and you have the stress of trying to do tests and work with the labs, but I really do like it. It's completely different".

Joanne praises the atmosphere of the centre, where everyone is working together for a common cause: "No matter what grade or discipline, we have learned to work together and support each other, and learn from each other. This has created lifelong friendships, which is a lovely positive to come out of this pandemic. I'd like to take the opportunity to thank these colleagues, and they know who they are, and recognition should be given to the NAS, the Defence Forces, and the food providers and all the caretakers, the clerical staff, security, cleaning staff, who were all thrown into this and who were all very nervous at the beginning, but who all put themselves forward and have provided an excellent service for the public. I think that should be recognised. And all the different disciplines – fabulous people – everyone's just been wonderful to work alongside".



**Dr Catherine Gallagher**  
and  
**Siobhán Lynch**  
Cork University Dental School and  
Hospital

Catherine is Chair of Clinical Governance in the Hospital and her other role is teaching. When the pandemic came along, the Hospital had to figure how it would move forward: "The two main things that I was involved in were getting the emergency service up and running and trying to do that safely, and then since all the students had been sent home, it was moving to teaching online and getting examinations organised online".



With the available staff in the Hospital, an emergency service was set up, says Catherine: "We kept an emergency clinic open all the way through from the beginning of the lockdown. How to organise that was the biggest challenge. What was actually safe to do? There was very little information. What PPE should we use? Where would we get PPE? What procedures were dangerous? We always operated a walk-in emergency service in Cork and we couldn't do that any longer, and it was setting up a whole system of how we triage patients, how we remote manage patients where we can, and then how we appoint them and how they come into the hospital and what we can do for them".

All the routine appointments were cancelled and had to be reorganised for when the Hospital could get back up and running. Most of the treatments that were done were ones that didn't involve creating an aerosol.

Siobhán is Dental Hospital Manager and says that when it was clear that the lockdown was going to go on longer than expected, they moved all they could to remote working. Staff were still coming in on a rostered basis and she says they all felt very safe because of the measures that had been put in place.

Catherine explains that in the University, all teaching that can be online is online. The first- to third-year dental students are all online, while the fourth and fifth years are in, because largely what they do is clinical.



# DUAL ACTION

## PAIN RELIEF



## IN ONE TABLET

A new analgesic brand that is clinically proven to provide  
30% more effective pain relief<sup>1\*</sup>

## 30% MORE EFFECTIVE FOR YOUR PATIENTS

**References:** 1. Merry A, et al. AFT-MX-1, a prospective parallel group, double-blind comparison of the analgesic effect of a combination of paracetamol and ibuprofen, paracetamol alone, or ibuprofen alone in patients with post-operative pain. Department of Anaesthesiology, University of Auckland, New Zealand 2008. \*compared with the same daily dose of standard paracetamol or ibuprofen alone.

**Easolief Duo 500 mg/150 mg film-coated tablets** Each tablet contains: paracetamol 500 mg and ibuprofen 150 mg. **Presentation:** A white, capsule shaped tablet with breakline on one side and plain on the other side. **Indications:** Short-term symptomatic treatment of mild to moderate pain. **Dosage: Adults/elderly:** The usual dosage is one to two tablets taken every six hours up to a maximum of six tablets in 24 hours. **Children:** Easolief Duo is contraindicated in children under 18 years. **Contraindications:** Severe heart failure, known hypersensitivity to paracetamol, ibuprofen, other NSAIDs or to any of the excipients, active alcoholism, asthma, urticaria, or allergic-type reactions after taking acetylsalicylic acid or other NSAIDs, history of gastrointestinal bleeding or perforation related to previous NSAID therapy, active or history of recurrent peptic ulceration/haemorrhage, severe hepatic failure or severe renal failure, cerebrovascular or other active bleeding, blood-forming disturbances, during the third trimester of pregnancy. **Warnings and precautions:** This medicine is for short term use and is not recommended for use beyond 3 days. Clinical studies suggest that use of ibuprofen, particularly at a high dose may be associated with a small increased risk of arterial thrombotic events. Patients with uncontrolled hypertension, congestive heart failure, established ischaemic heart disease, peripheral arterial disease and/or cerebrovascular disease should only be treated with ibuprofen after careful consideration and high doses should be avoided. Careful consideration should be exercised before initiating long-term treatment of patients with risk factors for cardiovascular events. The use of paracetamol at higher than recommended doses can lead to hepatotoxicity, hepatic failure and death. Patients with impaired liver function or a history of liver disease or who are on long term ibuprofen or paracetamol therapy should have hepatic function monitored at regular intervals. Severe hepatic reactions, including jaundice and cases of fatal hepatitis, though rare, have been reported with ibuprofen. Paracetamol can be used in patients with chronic renal disease without dosage adjustment. There is minimal risk of paracetamol toxicity in patients with moderate to severe renal failure. Caution should be used when initiating treatment with ibuprofen in patients with dehydration. The use of an ACE

inhibiting drug, an anti-inflammatory drug and thiazide diuretic at the same time increases the risk of renal impairment. Blood dyscrasias have been rarely reported. Patients on long-term therapy with ibuprofen should have regular haematological monitoring. Like other NSAIDs, ibuprofen can inhibit platelet aggregation. GI bleeding, ulceration or perforation, which can be fatal, has been reported with all NSAIDs at anytime during treatment. Combination therapy with protective agents (e.g. misoprostol or proton pump inhibitors) should be considered. Use with concomitant NSAIDs including cyclooxygenase-2 selective inhibitors should be avoided. NSAIDs may lead to onset of new hypertension or worsening of pre-existing hypertension and patients taking antihypertensive medicines with NSAIDs may have an impaired anti-hypertensive response. Fluid retention and oedema have been observed in some patients taking NSAIDs. NSAIDs may very rarely cause serious cutaneous adverse events such as exfoliative dermatitis, toxic epidermal necrolysis and Stevens-Johnson syndrome. Products containing ibuprofen should not be administered to patients with acetylsalicylic acid sensitive asthma and should be used with caution in patients with pre-existing asthma. Adverse ophthalmological effects have been observed with NSAIDs. For products containing ibuprofen aseptic meningitis has been reported only rarely. NSAIDs may mask symptoms of infection and fever. **Interactions:** Warfarin, medicines to treat epilepsy, chloramphenicol, probenecid, zidovudine, medicines used to treat tuberculosis such as isoniazid, acetylsalicylic acid, other NSAIDs, medicines to treat high blood pressure or other heart conditions, diuretics, lithium, methotrexate, corticosteroids. Refer to summary of product characteristics for other interactions. **Fertility, pregnancy and lactation:** Easolief Duo is contraindicated during the third trimester of pregnancy. **Driving and operation of machinery:** Dizziness, drowsiness, fatigue and visual disturbances are possible after taking NSAIDs. If affected patients should not drive or operate machinery. **Undesirable effects:** Dizziness, headache, nervousness, tremor, oedema, fluid retention, abdominal pain, diarrhoea, dyspepsia, nausea, stomach discomfort, vomiting, flatulence, constipation, slight gastrointestinal blood loss, rash, pruritus, alanine aminotransferase increased, gamma-glutamyltransferase increased, abnormal liver function tests, blood creatinine increased and blood urea increased. Refer to Summary of Product Characteristics for other adverse effects. **Pack size:** 24 tablets. **Marketing authorisation holder:** Clonmel Healthcare Ltd., Clonmel, Co. Tipperary. Marketing authorisation number: PA0126/294/1. Medicinal product not subject to medical prescription. For retail sale through pharmacy only. A copy of the summary of product characteristics is available upon request. **Date prepared:** October 2019. 2019/ADV/EAS/117H.

# Ventilation and SARS-CoV-2 in dentistry

Current evidence suggests that transmission of Covid-19 occurs primarily through direct, indirect or close contact with infected persons. Infected secretions, including saliva and respiratory secretions or droplets, are expelled when an infected person coughs, sneezes, talks, shouts or sings. It is known that people with no symptoms can infect others; it is not clear to what extent this occurs.<sup>1</sup>

The consensus remains that Covid-19 is mostly spread by droplets, but the World Health Organisation (WHO) agrees that there may be evidence of the spread of Covid-19 by small airborne particles (aerosols).<sup>1</sup> Infected secretions can fall on objects or materials, producing fomites (contaminated surfaces). Consequently, surface disinfection of the area surrounding the patient operative zone is critical. All hand touch surfaces should be cleaned at least twice daily. Aerosols can remain suspended in the air.

## Ventilation

For this reason, ventilation of dental surgeries and local decontamination units (LDUs) is important. Ventilation can be achieved naturally, e.g., by using a window, or mechanically, e.g., a wall unit extracting air from the room and venting it outside. As stated in HTM 01-05:<sup>2</sup> "Good standards can be achieved without resorting to unreasonably complex or expensive ventilation systems". Suitable ventilation of the room will keep air contamination to a minimum. This is particularly important due to the potential aerosol risks.<sup>3</sup> Air changes per

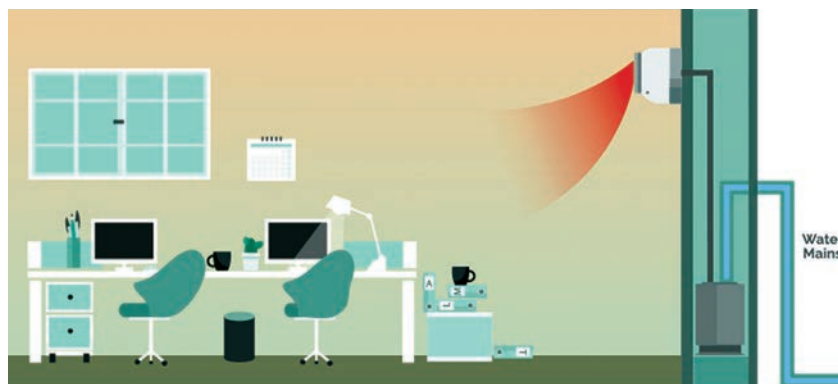


FIGURE 1: Example of a split system that is acceptable if fitted with extraction and filtration.

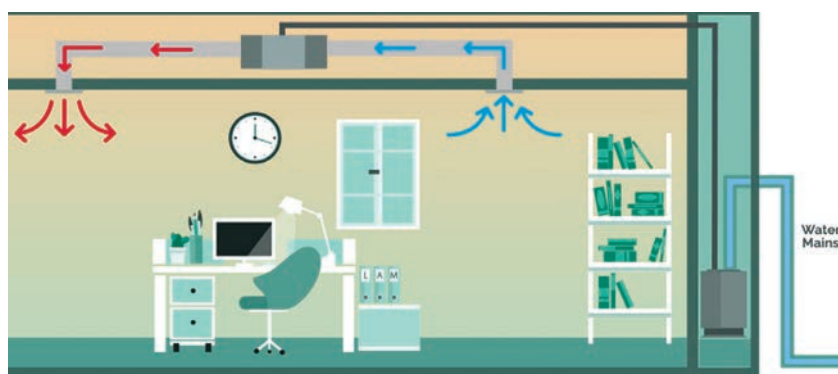


FIGURE 2: Example of ducted air conditioning system.

hour (ACH) is a measure of the air volume added to or removed from a surgery/LDU divided by the volume of the room. The recommendation for dental surgeries/LDUs is about 10 air changes per hour (ISO 14644-1 – dirty room in a hospital central decontamination unit).<sup>4</sup> An average of 6-12 ACHs is recommended for the dental surgery.<sup>3</sup> A single air change can remove over 60% of airborne contaminants, and after five air changes only about 1% of the original contamination remains.<sup>5</sup>

Mechanical air removal devices (e.g., extraction fans) specify the amount of air removed and from this the ACH rate can be calculated. It is important that ventilations systems are maintained in accordance with the manufacturers' recommendations.

Heating ventilation and air conditioning (HVAC) systems will filter the air as well as controlling the humidity and temperature. HVAC systems may have a role in decreasing the spread of infection in indoor spaces by increasing the rate of air change, decreasing the recirculation of air and increasing the use of outdoor air. High-efficiency particulate air (HEPA) filters have shown good performance with particles similar in size to the SARS-CoV-2 virus (70-120nm).<sup>6</sup> The manufacturer or supplier should be consulted on the filtration efficiency of any system intended for use in a dental surgery. For further useful general information on ventilation, please refer to the Health Protection Surveillance Centre (HPSC) guidance document.<sup>7</sup>

Split air conditioners and fans, which heat or cool a room, recirculate air and do not provide ventilation. They are not suitable for healthcare systems unless ducting, filtration and extraction are included (**Figure 1**). This is because healthcare settings require air changes and micron filtration (removes 99% of



**Dr Nick Armstrong** BA BDentSc MSc  
Infection control advisor, member of IDA  
Quality and Patient Safety Committee

**Hugh O'Connor** MSc  
Authorised Engineer (Decontamination),  
Principal Clinical Engineer



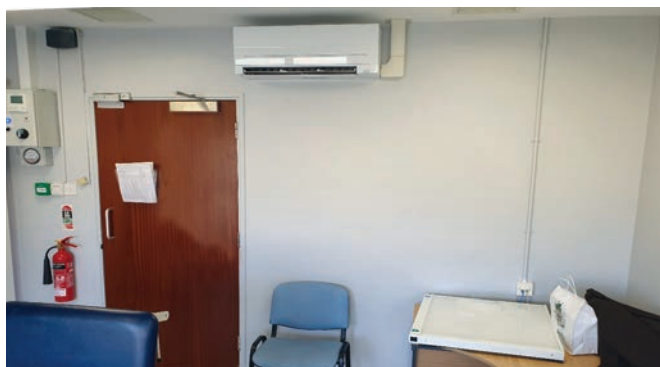


FIGURE 3: Installation on HSE site that satisfied microbial and ventilation requirements.

bacteria, moulds and viruses).

A split air conditioner consists of an outdoor unit and an indoor unit. The outdoor unit is installed on or near the exterior wall of the room that you wish to cool. This unit houses the compressor, condenser coil, and the expansion coil or capillary tubing. The indoor unit contains the cooling coil, a long blower and an air filter.

Installing a ducted air conditioner within a practice is best undertaken as part of a building project; however, if you have a suspended ceiling (like many health centres) then they can be easily retrofitted without significant disturbance (Figure 2). Some advantages of this system include the fact that air changes and diffusion of microbes in air can be measured and controlled (Figure 3).

It is not necessary to buy sophisticated air cleaning/'sterilising' systems that are intended mainly for hospital and not community use. There is no conclusive evidence that these systems will add substantially to the ability of a dental practice to resume 'routine practice'. Most of the air disinfection systems procurable during the pandemic require maintenance, are expensive and do not heat/cool the circulating air. UV radiation, which is used in some of the advertised 'air sterilising' systems, must be contained so that it cannot harm dental staff. UV light can be dangerous and may lead to cancer and cataracts. The use of 'dental foggers' or other surgery fumigation systems is not necessary if the dental surgery has an adequate ventilation system. The potential health risks of some of these systems in areas of poor ventilation have not been assessed. It is important that surgery fumigation is only carried out after a thorough cleaning of the premises.


Most transmissions occur at close range. The distinction between droplets and aerosols may be a moot point from a dental point of view as the droplets can vary in size from very large to very small. However, there will be greater emphasis on ventilation in indoor locations if it becomes apparent that aerosols are resulting in a higher number of infections than is considered likely at present.

This document refers to the treatment of patients without any signs or symptoms of Covid-19. Further information on dealing with the pandemic can be obtained on the IDA website – <https://www.dentist.ie>.

## References

1. World Health Organisation. Transmission of SARS-CoV-2: implications for infection control prevention precautions. Scientific Brief, July 9, 2020. Available from: <https://www.who.int/news-room/commentaries/detail/transmission-of-sars-cov-2-implications-for-infection-prevention-precautions>.


2. Department of Health, UK. Decontamination in primary care dental practices (HTM 01-05). 2013. Available from: <https://www.gov.uk/government/publications/decontamination-in-primary-care-dental-practices>.
3. World Health Organisation. Considerations for the provision of essential oral health services in the context of Covid-19. Interim guidance, August 3, 2020. Available from: <https://apps.who.int/iris/handle/10665/333625>.
4. ISO 14644-1:2015. Cleanrooms and associated controlled environments – Part 1: Classification of air cleanliness by particle concentration. Available from: <https://www.iso.org/standard/53394.html>.
5. Health Protection Scotland. Covid-19 Annex 1: Infection prevention and control in urgent dental care settings during the period of Covid-19. April 2020. Available from: <https://www.hps.scot.nhs.uk/web-resources-container/covid-19-annex-1-infection-prevention-and-control-in-urgent-dental-care-settings-during-the-period-of-covid-19/>.
6. European Centre for Disease Prevention and Control. Heating, ventilation and air conditioning systems in the context of Covid-19. June 22, 2020. Available from: <https://www.ecdc.europa.eu/sites/default/files/documents/Ventilation-in-the-context-of-COVID-19.pdf>.
7. Health Protection Surveillance Centre. Guidance on Non-Healthcare Ventilation during Covid-19, V1.2 15/10/2020. Available from: <https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/educationguidance/Guidance%20on%20non%20HCbuilding%20ventilation%20during%20COVID-19.pdf>.



**DENTAL COMPLIANCE**  
Limited

SOLVE  
REGULATORY AND  
COMPLIANCE  
PROBLEMS

ONLINE CONSULTATIONS  
NOW AVAILABLE



"I work with dentists to help them meet their compliance challenges."

**Dr Jane Renehan**

Dental Compliance Limited  
Ashfield, Monmore,  
Crossabeg,  
Co. Wexford

086-806 1618  
[compliance@dentalcompliance.ie](mailto:compliance@dentalcompliance.ie)  
[www.dentalcompliance.ie](http://www.dentalcompliance.ie)  
[@DentalComplyIRL](https://twitter.com/DentalComplyIRL)



## The device in your pocket

It is not acceptable to use your phone to share dental images with colleagues online.

Most people have a mobile phone, sometimes more than one. How often would it be useful to take a photograph of a patient's teeth using your own mobile? However, before you start snapping away, here are some considerations to bear in mind.

### Consent

When taking a photograph, you must respect the patient's privacy and dignity, and their right to make or participate in decisions that affect them. The photograph should only be taken with appropriate consent, ensuring that the patient was under no pressure to give their consent. The patient must be aware of the purpose of the image and how it will be used. This consent process should be fully recorded in the patient's records. The photograph must not be used for purposes beyond the scope of the original consent without consulting the patient. Consent gained for baseline recording of potential pathology, for example, would not support the use of the images to advertise a practice's services on their website.

### Confidentiality

Confidentiality is central to trust between clinicians and patients. Without assurances about confidentiality, patients may be reluctant to seek medical attention or to share all the information needed by the clinician in order to provide the most appropriate treatment. However, information sharing by medical and dental teams is essential to the efficient provision of safe, effective care, both for the individual patient and for the wider community of patients. Photographs taken in the course of the patient's care form part of the clinical record, and should be treated in the same way as written material in terms of security and decisions about disclosures. Therefore, you must follow guidance on confidentiality when taking photographs.

### Safeguarding

Individual dentists have a duty to safeguard and promote the welfare of children. You should take into account that mobile camera phones are a potential risk, in that inappropriate photographs could be taken either of the



child, or of confidential information pertaining to them, and could be disseminated further.

### Storage

Any image, whether it is anonymised or not, forms part of the dental record and is personal data. As a consequence it must be stored and processed in accordance with the requirements of the General Data Protection Regulation (GDPR) as brought into law by the Data Protection Act 2018. It is therefore not acceptable to carry images of patients on your mobile phone, or to electronically share them with other devices in your possession, as there is clearly a risk of the data being lost or stolen. It is important to recognise that unless cloud-based environments are used, strictly in accordance with a documented policy of appropriate security and organisational measures, these can introduce the potential for data breach risks. This clearly runs counter to the key principles of safety and security underpinning the Data Protection Act. More information on data protection responsibilities in relation to mobile phones and other devices can be found on the website of the Data Protection Commission – <https://www.dataprotection.ie/en/guidance-landing/general-portable-storage-device-recommendations>.

### Use a dedicated camera

If there is a clinical need or a desire to take images for diagnosis or education purposes, it is not appropriate to use mobile phones. Agreement from a patient to allow the taking of a photograph does not negate your professional obligations regarding appropriate data handling, or your duty to protect confidentiality. Barring emergencies, there are no circumstances where taking patient images on a personal mobile phone, whether or not you have the patient's consent, is justified.

A dedicated digital camera, linked to the practice computer system storing patient details, offers a more secure method. The practice record-keeping system should already be compliant with data protection requirements and still allows the sharing of images between colleagues, if the patient has given their consent. The unintended risks that might arise if a mobile phone is lost or cloud-sharing software is engaged, will have been eliminated. It also looks more professional.

### Advantages of clinical photography:

- ▶ creating a 'baseline' record of the patient's presenting condition;
- ▶ recording progress and development of the above;
- ▶ improved usefulness of referral correspondence;
- ▶ improved clinical record keeping;
- ▶ assistance with the consent process;
- ▶ patient education and communication;
- ▶ improved laboratory communication;
- ▶ self-education;
- ▶ gallery of photographs to demonstrate treatment options;
- ▶ oral pathology; and,
- ▶ treatment planning.



Dr Philip Johnstone

Philip is a Dentolegal Consultant at Dental Protection

# MEMBERS' NEWS



## IDA meeting with Minister for Health

Representatives of the Irish Dental Association (IDA) met with Minister for Health Stephen Donnelly TD on Friday, November 20. Minister Donnelly committed to prioritising the promotion of oral health, and IDA representatives expressed the Association's willingness to work with the Department to find solutions to the many difficulties faced by patients and dentists at present.

### Medical card scheme

The most urgent challenge is undoubtedly the collapse of the medical card scheme for 1.5m adults. There are now just 1,350 dentists participating in the scheme, which is a significant reduction from the 3,000 dentists who were participating in the scheme in 2019.

A delegation from the Irish Dental Association met recently with the Minister for Health to discuss urgent issues in dentistry and oral health.

proposed Framework Agreement would allow discussions between the IDA and Department to take place in compliance with competition law and accepted practice for the Department of Health.

The IDA believes that the adoption of such a framework would allow trust between the parties, which has been sadly lacking, to be re-built, and establish common purpose in the design and delivery of oral health policy.

In order to begin to repair the damaged relationship between the Department and general dental practitioners, IDA representatives reiterated that the Department must review the promise made on June 4 by then Minister Simon Harris to the IDA to establish a Framework Agreement for the Department of Health.

## Covid-19 and my staff: What should I know? What can I do?

The below information is correct as of the date of publication. Public health information and guidance on Covid-19 is updated regularly so you should keep informed of the latest guidelines from the HSE and HPSC.

### Covid-19 symptoms

During the Covid-19 pandemic you and your staff should all know the common symptoms of Covid-19. According to the HSE, these are a temperature over 38 degrees, a cough, shortness of breath or breathing difficulties, and/or loss or change to your sense of smell or taste.

If a member of your staff has any of these symptoms, they should self-isolate and phone their GP for advice. They should not attend work or school.

apply.

Public health will determine the staff member's close contacts and if any other staff (or patients, which is less likely due to PPE) might be considered to be close contacts. It is not a foregone conclusion that a practice will need to close, or that others in the practice will be considered close contacts. Public health will assess each circumstance as they find it.

Importantly, **public health contact tracers have the right to inform close contacts that they have been in contact with a positive case. Other people do not, so you should not contact other staff or patients** to tell them that an individual has tested positive for Covid-19. This is particularly important as health data is considered sensitive data under GDPR and you do not have a right to share your employee's sensitive data.

You should carry out a risk assessment of the practice and the risk of spread of Covid-19. If you are concerned that there is a strong risk of infection spread, or there has been a breach of protocols or PPE, you can contact public health for advice.

After conducting a risk assessment, if you (rather than public health contact tracers) decide to ask an employee to stay away from work because you are concerned about possible risk and close contact, you will need to pay them for the absence or agree that they take annual leave or some other kind of leave. But they will need to agree to this as they are technically fit to attend work and you are requesting that they do not attend.

*For an in-depth article on how to manage Covid-19 in your practice, see the article on page 10.*







## Self-audit of amalgam waste disposal

The IDA is aware that some local authorities have sent a self-declaration form regarding

local authorities have decided to progress the enforcement of the mercury regulations by issuing self-declaration forms to dentists in their areas. The Department believes that this approach is a useful first step and will be encouraging other local authorities to adopt a similar approach on a harmonised basis.

### Competent authority

Local authorities are the competent authority appointed to monitor compliance with the EU regulations on mercury as they relate to dental practices and the safe removal and disposal of dental amalgam waste by all the dental practices.

## Sick leave – what you need to know

The issue of employee sick leave and sick leave policies is at the forefront of many employers' minds due to the current Covid-19 pandemic.

It is likely that sick leave absences will increase this winter because an employee who has any of the common symptoms of Covid-19 should not attend for work and should take sick leave.

In addition, the matter of pay during sick leave is gaining a lot of public attention due to the Government's public consultation on the introduction of a statutory right to paid sick leave for all employees. This follows a commitment by the Tánaiste and Minister for Enterprise, Trade and Employment, Leo Varadkar TD, to bring Ireland in line with other OECD countries by providing for a statutory entitlement to sick pay.

### Sick leave and absence policy

All dental practices should have a policy on sick leave and absence. This is even more important now and you should also endeavour to have a contingency plan in place for absences and cover over the next number of months. Your sick leave/absence policy should state:

- whether sick leave is paid or unpaid and in what circumstances, at what level and duration, e.g., a maximum of three weeks' full certified sick pay in any 12-month period;
- notification/reporting procedures for absences on sick leave, e.g., contact with the practice by a specific time;
- any other relevant provisions.



### Illness benefits

For employees who have no entitlement to pay while on sick leave, employers should consider whether to provide additional financial support to employees experiencing



## FIRST CLASS IN EFFECTIVENESS AND TASTE

- **Effective** – Quick desensitisation and fluoride release  
(5 % NaF  $\triangleq$  22,600 ppm)
- **Excellent handling** – moisture tolerant
- **Aesthetic** – tooth-shaded varnish
- **Universal** – available in tube version, *SingleDose* and cartridge
- **Variety of flavours** – mint, caramel, melon, cherry, bubble gum and cola lime

## VOCO Profluorid® Varnish





# Application of the new periodontal classification: generalised periodontitis

Two clinical cases are presented here to demonstrate application of the 2017 World Workshop classification of periodontal and peri-implant diseases and conditions in daily practice.

The World Workshop on the Classification of Periodontal and Peri-implant Diseases and Conditions was convened in 2017 and resulted in the publication of a new classification system in 2018.<sup>1</sup> This replaces the formerly used Armitage Classification.<sup>2</sup> The complete Workshop proceedings are available to clinicians for free online via the European Federation of Periodontology (EFP) website.<sup>3</sup> The new system incorporates significant changes from previous classification systems that may be pertinent to Irish dental healthcare professionals, as reviewed recently in this *Journal*.<sup>4</sup> Perhaps the most significant of these changes is the process for diagnosing and classifying periodontitis, which incorporates staging and grading of each case.<sup>5</sup>

The diagnosis of individual periodontitis cases has been simplified by the publication of diagnostic decision trees by several of the major periodontal organisations. For pragmatic reasons, the current series utilises the decision tree published by the British Society of Periodontology (BSP), so readers may find it useful to refer to this decision tree while evaluating each case. The decision tree is available free to dental professionals on the BSP website.<sup>6</sup>

## CASE 1

This case assimilates patient history, clinical and radiographic findings from a 61-year-old female patient who attended the Dublin Dental University Hospital (DDUH) for periodontal assessment, in order to establish a clinical case diagnosis. To assist readers in understanding the new classification system, the rationale for the clinical diagnosis is presented.



FIGURE 1: Orthopantomogram (OPG) of patient taken at time of referral by GDP.



FIGURE 2: Clinical photograph at initial presentation at DDUH. Note extraction of mandibular anterior teeth by GDP since initial referral.

**Ian Reynolds**  
Practice limited to  
periodontology and  
implant dentistry

reynoldsperio@gmail.com

**David Naughton**  
Postgraduate student  
in Periodontology,  
Dublin Dental  
University Hospital

**Lewis Winning**  
Division of Restorative  
Dentistry &  
Periodontology,  
Dublin Dental  
University Hospital

**Peter Harrison**  
Division of Restorative  
Dentistry &  
Periodontology,  
Dublin Dental  
University Hospital



# Opening doors for **business**

## KBC Business Banking for Professionals

When you choose KBC you are assigned a dedicated Business Partner. A specialist who understands the Dental Sector, available online and in person, so you can spend your time where it matters most

**You focus on your business.  
We'll focus on you.**

**To experience a new way to bank for  
business, call our Business Support Team**

 **Call 1800 804 414**

 **Visit [www.kbc.ie/business](http://www.kbc.ie/business)**

# THE BANK OF YOU + YOUR BUSINESS

KBC Bank Ireland plc is regulated by the Central Bank of Ireland.



### Case presentation: patient history

**Table 1: Overview of case presentation.**

Patient:	61-year-old female
Presenting complaint:	"loose teeth and bleeding gums"
Medical history:	Hypothyroidism, hypertension, high cholesterol and penicillin allergy
Smoking status:	Former smoker (ceased five years ago)
Family history of periodontitis:	Yes
Other risk factors:	No

**Table 2: Summary of clinical findings.**

Visual assessment:	Generalised swelling and erythema of gingival tissues with heavy deposits of supra and subgingival calculus
Probing pocket depths (PPD):	Range 2–11mm
Clinical attachment loss (CAL):	Range 1–13mm
Bleeding on probing:	99%
Plaque control:	Poor
Tooth mobility:	Grade I: 11, 12, 14, 21, 22, 24, 25, 37, 43 and 47 Grade II: 32 and 48 Grade III: 31 and 42
Furcation involvement:	Class II: 27, 36, 37, 46 and 47 Class III 16 and 48
Tooth loss due to periodontitis:	2 teeth
Other factors of relevance:	3 further teeth extracted following initial assessment

#### RADIOGRAPHIC FINDINGS:

Bone loss present:	Yes
Pattern of bone loss:	Mostly horizontal
Severity of bone loss:	Range 30–90%
Distribution:	Generalised (>30% of teeth)

### Clinical findings

#### What is the diagnosis using the new classification?

The diagnosis in this case is:

- generalised periodontitis;                      ■ Stage IV, grade C;
- currently unstable; and,                        ■ risk factors: former smoker.

#### How this diagnosis was reached

- This is a periodontitis case as clinical attachment loss is present at  $\geq 2$  non-adjacent teeth.
- This is a generalised periodontitis case as >30% of teeth are affected by attachment loss/bone loss.
- Stage IV was selected based on the site of greatest bone loss severity (based on the radiographic assessment: 90% bone loss of tooth 42 equating to apical third of the root).
- Grade C was chosen based on calculation of the ratio of percentage bone loss at the worst site divided by patient age being >1.0 (90% bone loss  $\div$  61 [age] = 1.48).
- The disease was identified as currently unstable based on the presence of PPD  $\geq 5$ mm.

### CASE 2

This case assimilates patient history, clinical and radiographic findings from a 51-year-old male patient who attended the Dublin Dental University Hospital (DDUH) for periodontal assessment, in order to establish a clinical case diagnosis. Once again, the rationale for the clinical diagnosis is presented.

### Case presentation: patient history

**Table 1: Overview of case presentation.**

Patient:	51-year-old male
Presenting complaint:	"bleeding gums"
Medical history:	Systemically healthy
Smoking status:	Former smoker of 15 cigarettes/day; quit 10 years ago
Family history of periodontitis:	No
Other risk factors:	No

**Table 2: Summary of clinical findings.**

Visual assessment:	Gross palatal surface staining; supra- and subgingival calculus evident
Probing pocket depths:	Range 1–5mm
Clinical attachment loss:	Range 0–4mm
Bleeding on probing:	27%
Plaque control:	Poor
Tooth mobility:	Nil
Furcation involvement:	Class I: 1,8; 1,6; 2,6; and 3,6
Tooth loss due to periodontitis:	Nil
Other factors of relevance:	No

#### RADIOGRAPHIC FINDINGS:

Bone loss present:	Yes
Pattern of bone loss:	Mostly horizontal
Severity of bone loss:	Range 15–30%
Distribution:	Generalised (>30% teeth)

### Clinical findings

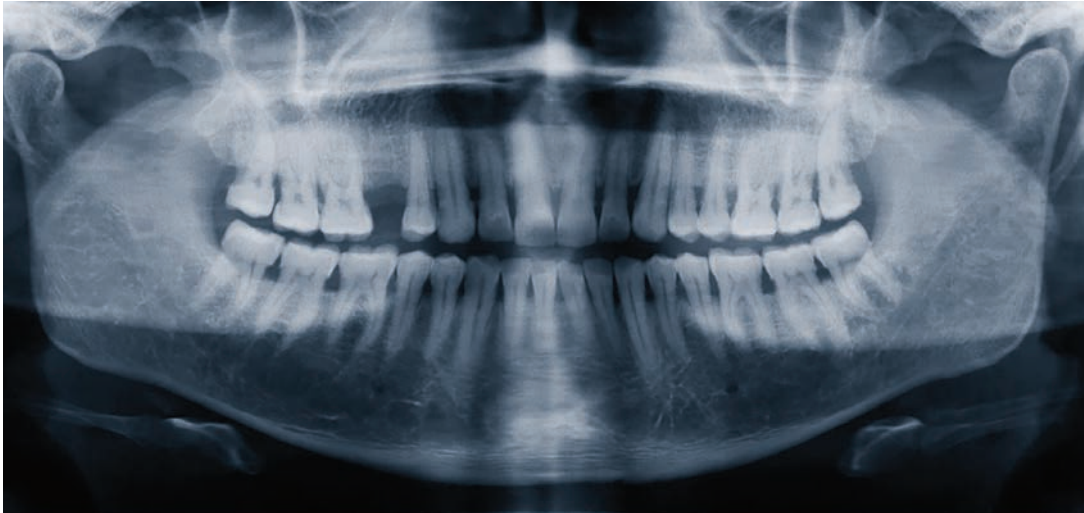
#### What is the diagnosis using the new classification?

The diagnosis in this case is:

- generalised periodontitis                      ■ Stage II, grade B;
- currently unstable; and,                        ■ risk factor: former smoker.

#### How this diagnosis was reached

- This is a periodontitis case as attachment loss is present at  $\geq 2$  non-adjacent teeth.
- This is a generalised periodontitis case as >30% of teeth are affected by attachment loss/bone loss.
- Stage II was selected based on the site of greatest bone loss severity (based on the radiographic assessment: 30% bone loss of tooth 2,7 equating to coronal third of the root).
- Grade B was chosen based on calculation of the ratio of percentage bone



loss at the worst affected tooth site divided by patient age. In this case, the ratio is  $>0.5$  and  $<1$  ( $30\% [\text{bone loss}] \div 51 [\text{age}] = 0.59$ ).

- The disease was identified as currently unstable based on the presence of periodontal probing depth (PPD)  $\geq 5\text{mm}$ .
- The patient's former smoking habit is identified as a contributory factor to disease.

#### References

1. Caton, J.G., Armitage, G., Berglundh, T., et al. A new classification scheme for periodontal and peri-implant diseases and conditions – introduction and key changes from the 1999 classification. *J Clin Periodontol* 2018; 45 (Suppl. 20): S1-S8.
2. Armitage, G.C. Development of a classification system for periodontal diseases and conditions. *Ann Periodontol* 1999; 4 (1): 1-6.
3. European Federation of Periodontology. New classification micro-site. [Internet]. [Accessed November 25, 2020]. <https://www.efp.org/publications-education/new-classification/>.
4. Lee Kin, R., Reynolds, I. Introduction to the new classification on periodontal and peri-implant diseases and conditions. *J Irish Dental Assoc* 2019; 65 (4): 202-206.
5. Tonetti, M.S., Greenwell, H., Kornman, K.S. Staging and grading of periodontitis: framework and proposal of a new classification and case definition. *J Clin Periodontol* 2018; 45 (Suppl. 20): S149-S161.
6. British Society of Periodontology. Flowchart implementing the 2017 Classification. [Internet]. [Accessed November 25, 2020]. [www.bsperio.org.uk/assets/downloads/111\\_153050\\_bsp-flowchart-implementing-the-2017-classification.pdf](http://www.bsperio.org.uk/assets/downloads/111_153050_bsp-flowchart-implementing-the-2017-classification.pdf).



FIGURE 4: Clinical photograph at initial presentation at DDUH.

FIGURE 3: Orthopantomogram (OPG) of patient taken at initial periodontal assessment.

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

### Make sure your practice is profitable in 2021

As Ireland's only specialist dental accountants we're here to help you control your practice costs

**QUARTERLY ACCOUNTS**

**PAYROLL SERVICES**

**TAX CONSULTANCY**

**COST OF TREATMENT**

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

### MedAccount Services

S20, The Pottery,  
Pottery Road,  
Dun Laoghaire,  
Co. Dublin.

**Tel: 01 280 6414**

Email: [info@medaccount.ie](mailto:info@medaccount.ie)

**FIRST  
CONSULTATION  
FREE**

First consultation **FREE OF CHARGE** with no obligation to engage



# Dental care in patients with dementia

**Statement of the problem:** Dementia is a concern in the ageing population. Approximately 5% of the population live with dementia. This progressive neurological condition negatively impacts on the person's ability to remember, communicate, understand and reason. The rate of progression of dementia is individual to the person, although comorbidities such as heart disease and diabetes can increase the rate of decline.

**Purpose of the study:** This literature review aims to enable the dental profession to better understand dementia in order to improve the provision of oral and dental care for this patient group. Patient-centred approaches to aid effective disease prevention and management strategies for patients with dementia are discussed.

**Conclusion:** Dentists and dental hygienists can support patients living with dementia by establishing an oral care programme as early as possible following diagnosis to ensure continuity of care as dementia progresses. Maintaining oral and dental health improves patients' self-esteem, social integration, nutrition, and overall well-being, as pain and infection can lead to increased confusion in patients with dementia.

*Journal of the Irish Dental Association 2020; 66 (6): 296-300.*

## Introduction

Dementia is a progressive disease of the brain associated with memory difficulties and disorientation. Patients often struggle to understand what is going on around them and experience difficulty in calculation, learning, language and judgement. An individual's motivation, emotional control and social behaviour increasingly deteriorate.<sup>1</sup> The dental profession has a key role in improving standards of care for patients living with dementia. Less than half of people living with dementia obtain a formal diagnosis despite the fact that one in three people over 65 years of age will die with dementia.<sup>2</sup> Epidemiology figures suggest that 5% of the population are living with dementia and this figure may grow as life expectancy increases. Improvements in diagnosis enable people to plan better for their future and learn how they can access the necessary support.<sup>3</sup> The lack of public understanding regarding the symptoms of this condition can result in social stigma, which can cause patients to withdraw. Patients living with dementia must be treated with dignity and receive individualised care.<sup>4</sup>

Supportive dental care programmes are important to preserve a patient's oral health as their dementia worsens. This helps to maintain a person's dignity, self-confidence, social integration and adequate nutrition. As dental pain and

infection can increase the confusion experienced by a patient with dementia, its management also improves their overall well-being.<sup>5</sup>

## Principles of dental care

Patients with dementia often have a decreased attention span, which negatively affects their capacity to co-operate. Appointment reminders can be helpful as they can help to decrease anxiety for a patient living with dementia that they will miss their appointment.<sup>3</sup>

Patients with dementia need information to be clear and easy to understand. Reducing background noise and reverberation within the surgery,<sup>6</sup> and giving written information in a larger font, bullet points and simple language can be helpful. Patients who have had regular dental visits prior to their diagnosis of dementia tend to remember expected behaviours in the surgery better as the surroundings are familiar.<sup>1</sup> Step-free access to the dental surgery reduces another potential barrier to care.<sup>3</sup>

The carer's role is critically important in supporting patients with dementia attending their appointments. Details relating to who the carer is and their relationship with the patient with dementia should be recorded. To avoid confidentiality or ethical issues it should be documented if the patient has consented to be contacted directly or through their carer.<sup>4</sup> It is often helpful if a family member has a dental examination before the patient with dementia to allow the patient to acclimatise to the environment and feel prepared for their own check-up.<sup>1</sup> Carers and family members can help to provide dental histories, and in later stages of dementia they can support patients in having choice and control over decisions that impact on them.<sup>2</sup> In cases where mental capacity is lost there may be a lasting power of attorney in place with regard to healthcare issues and financial matters.<sup>3</sup>



**Dr Laura Fee**

BA BDS Dip Conscious Sedation MSc  
Dental Implantology Dip Primary Care  
Oral Surgery

**Corresponding author:**

Dr Laura Fee,  
lauramichellefee@gmail.com

### Raising concerns about dementia

Dentists may be the first healthcare professionals to notice a change in the patient's behaviour and abilities. Gentle questioning can allow this to be approached sensitively, such as 'Did you have a good journey?' and 'How did you travel here today?' If concerned, the dentist should seek permission to write to the patient's general medical practitioner.<sup>1</sup>

### Medical history

Dentists should update the medical history at each visit as the progressive nature of dementia can be erratic.<sup>5</sup> The patient's medical history and symptoms often determine the type and extent of treatment provision.<sup>6</sup> Patients with dementia are often taking antidepressants, antipsychotics and sedatives. Dry mouth is a common side-effect of these medications, which increases the build-up of plaque and materia alba. Dry mouth also increases the risk of dental caries, periodontal disease and difficulties wearing dentures. Denture fixatives and artificial saliva can be helpful for some patients with dementia.<sup>7</sup> Medications should be checked to assess their risk of causing gingival hyperplasia, and whether they are taken in tablet or syrup form to identify caries risk. Antipsychotic medication can result in involuntary, repetitive tongue and jaw movements, which can hinder patients trying to wear dentures. Sometimes these movements can persist despite patients stopping the medication.<sup>8</sup>

Dentists should inquire about swallowing or dysphagia, particularly in patients at risk of a stroke or with Parkinson's disease. Some patients may benefit from speech and language support or guidance on posture during eating/drinking. If dysphagia is a comorbidity, the risk of inhalation of food or oral micro-organisms, and subsequent risk of aspiration pneumonia, must be considered and discussed with the carers.<sup>9</sup> The medical history must be signed by the patient, carer/relative and the dentist.

Undiagnosed depression is common in patients with dementia living in care homes.<sup>10</sup> Patients with dementia usually have communication difficulties, especially in the later stages of their journey and this can create a barrier for healthcare professionals diagnosing depression.<sup>11</sup> Depression increases the likelihood of physical and verbal aggression among patients with dementia.<sup>12</sup>

### Dental history

Previous issues during dental treatment should be noted. An assessment of past dental or periodontal disease experience may be predictive of future disease risk.<sup>1</sup> Poor communication can make diagnosis of pain more difficult. Assessment tools such as the Abbey Pain Scale<sup>9</sup> can be helpful (Table 1).

### Pain history

Pain in patients with dementia can be easily overlooked or misdiagnosed. Carers or family members may feel that a patient is not experiencing increased pain because they continue to eat on their supposedly sore tooth, but it may be because they have forgotten that eating increases their pain. These attitudes can lead to pain being wrongly assessed.<sup>13</sup> Studies have demonstrated that 50% of patients with dementia will regularly experience pain and the more advanced the person's dementia, the more severe the pain.<sup>14</sup> Vigilance for non-verbal signs of pain is important in supporting patients with dementia. Carers who are emotionally attached to the person with dementia often instinctively notice behavioural changes that are indicative of pain.<sup>7</sup> If a person with dementia is shouting, speaking incoherently or their movement is restricted the

**Table 1: The Abbey Pain Scale.<sup>7</sup>**

Name of resident

For measurement of pain in people with dementia who cannot verbalise.  
How to use scale: while observing the resident, score questions 1 to 6.

Name/designation of person completing the scale:

Date

Time

Latest pain relief was

at

hours

**Q1 Vocalisation**

e.g., whimpering, groaning, crying

Absent: 0 Mild: 1 Moderate: 2 Severe: 3

**Q2 Facial expression**

e.g., looking tense, frowning, grimacing, looking frightened

Absent: 0 Mild: 1 Moderate: 2 Severe: 3

**Q3 Change in body language**

e.g., fidgeting, rocking, guarding part of body, withdrawn

Absent: 0 Mild: 1 Moderate: 2 Severe: 3

**Q4 Behavioural change**

e.g., increased confusion, refusing to eat, alteration in usual patterns

Absent: 0 Mild: 1 Moderate: 2 Severe: 3

**Q5 Physiological change**

e.g., temperature, pulse or blood pressure outside normal limits, perspiring

Absent: 0 Mild: 1 Moderate: 2 Severe: 3

**Q6 Physical change**

e.g., skin tears, pressure areas, arthritis, contractures, previous injuries

Absent: 0 Mild: 1 Moderate: 2 Severe: 3

Add scores for 1-6 and record here: **TOTAL PAIN SCORE**

Now tick box that matches the total pain score

0-2  
No Pain

3-7  
Mild

8-13  
Moderate

14+  
Severe

Finally, tick the box that matches the type of pain

Chronic

Acute

Acute on chronic

**Table 2: Dementia Rating Scale:**

Score only as decline from previous usual level due to cognitive loss, not impairment due to other factors.

Impairment	None	Questionable	Mild	Moderate	Severe
Clinical Dementia Rating	0	0.5	1	2	3
Memory	No memory loss or slight inconsistent forgetfulness	Consistent slight forgetfulness, partial recollection of events, 'benign' forgetfulness	Moderate memory loss, more marked for recent events, defect interferes with everyday activities	Severe memory loss, only highly learned material retained, new material rapidly lost	Severe memory loss, only fragments remain
Orientation	Fully oriented	Fully oriented except for slight difficulty with time, relationships	Moderate difficulty with time, relationships, oriented for place at examination, may have geographic disorientation	Severe difficulty with time, relationships, usually disoriented to time and place	Oriented in person only
Judgement and problem solving	Solves everyday problems and handles business and financial affairs well, judgement good in relation to past performance	Slight impairment in solving problems, similarities and differences	Moderate difficulty in handling problems, similarities and differences, social judgement usually maintained	Severely impaired in handling problems, similarities and differences, social judgement usually impaired	Unable to make judgements or solve problems
Community affairs	Independent function at usual level in job, shopping, volunteer and social groups	Slight impairment in these activities	Unable to function independently at these activities, although may still be engaged in some. Appears normal	No pretence of independent function outside home. Can be taken to functions outside family home	No pretence of independent function outside home. Appears too ill to be taken to functions outside of home
Home and hobbies	Life at home, hobbies and intellectual interests well maintained	Life at home, hobbies and intellectual interests slightly impaired	Mild but definite impairment of function at home, more difficult chores abandoned, some hobbies abandoned	Only simple chores preserved, very restricted interests, poorly maintained	No significant function in home
Personal care	Fully capable of self-care	Fully capable of self-care	Needs prompting	Requires assistance in dressing, hygiene, keeping of personal effects	Requires much help with personal care. Frequent incontinence

person may be in pain. Body movements are often the most usual expression of pain in patients with late-stage dementia. Other signs of pain include increased agitation, fidgeting, tense muscles, withdrawn behaviour, alterations in sleep patterns, falls, sweating, and an increase in blood pressure.<sup>15</sup>

### Treatment planning

Treatment planning must consider the stage of dementia in terms of the level of cognitive impairment. A long-term dental care plan is important once a patient has been diagnosed with dementia. This can be divided into immediate care proposals and longer-term management for the individual. The elimination of pain, controlling dental infection and disease prevention are key. Dentists can improve oral health by understanding the oral health risk and introducing preventive strategies and patient-specific advice regarding diet and the use of fluoride.

Patients with early dementia are often receptive to treatment and can be actively involved in decision-making. The dental care plan must take account of the fact that the progression of dementia may result in a patient being less able to tolerate treatment, express their wishes, or understand the signs or

symptoms of dental disease. The dentist is part of a multidisciplinary team that supports a person living with dementia to avoid late-stage dementia crisis management.<sup>16</sup>

Patients with dementia may become unable to take part in decision-making with regard to their treatment and their capacity to consent may be affected. Based on the individual risk of dental disease, the dentist should determine the recommended interval between check-ups for a patient with dementia. If treatment is necessary the dentist must discuss treatment options with the patient and their family or carers, and ascertain if a patient can give informed consent. Consideration must be given to the patient's level of independence, co-operation, cognitive abilities and physical impairment. A Clinical Dementia Rating may be possible.<sup>17</sup> This is a five-point scale as shown in **Table 2**, which is used to rate the cognitive and functional performance of a person to permit healthcare professionals to understand the level of disease progression.<sup>18</sup>

Patients with dementia should perform their own oral hygiene measures for as long as they can competently do so. An individual with dementia may become unco-operative with regard to performing their daily oral hygiene routines as they may no longer understand the reason for tooth brushing.<sup>19</sup> It is important



## The Assisted Decision-Making (Capacity) Act

The Assisted Decision-Making (Capacity) Act 2015<sup>22</sup> establishes a modern statutory framework to support decision-making by adults who have difficulty in making decisions without help. The Act proposes to change the law from the current all or nothing status approach to a flexible functional definition as the Act recognises that capacity can fluctuate in certain cases.<sup>1</sup>

### Decision-making support options

*Assisted decision-making:* a person may appoint a decision-making assistant – typically a family member or carer – through a formal decision-making assistance agreement to support him or her to access information or to understand, make and express decisions.

*Co-decision-making:* a person can appoint a trusted family member or friend as a co-decision-maker to make decisions jointly with him or her under a co-decision-making agreement.

to ask about a patient's oral hygiene routine and evaluate whether assistance is required.<sup>16</sup> As time progresses the patient may need to be supervised or helped by carers. The carer may also need to prompt the patient and remind them how to brush by showing them. Carers or family members can advise on the patient's capacity to brush their own teeth or whether an electric toothbrush or a modified toothbrush with an adapted handle may be beneficial. A person with dementia often finds an electric toothbrush or a toothbrush with an adapted handle easier to use.<sup>1</sup> Visual reminders on the bathroom mirror are useful to remind some patients to brush their teeth. Brushing at the same time as a family member can be helpful.<sup>3</sup>

The UK National Institute for Health and Care Excellence (NICE) guidelines recommend advising the patient and their carer on methods to prevent tooth decay and periodontal disease.<sup>19</sup> Walls (2014) suggested that a thorough cleaning should be performed every 48 hours to prevent disease. With regard to social cleanliness, a targeted approach may be useful where at each session one quadrant is cleaned to ensure plaque removal.<sup>8</sup> A straight-backed chair with the carer positioned behind the patient is often best. The carer may support the patient against their body using one arm to help cradle the person's head for support. A dry toothbrush with a pea-sized amount of high-concentration fluoride toothpaste (5,000ppm) is beneficial.<sup>7</sup>

### Domiciliary care

NICE has also developed oral healthcare guidance for care homes, recommending an oral healthcare assessment on admission and for all residents to have a named local dentist. The care home manager has a duty of care to provide information about their provision of oral healthcare.<sup>20</sup> With the progression of dementia, attending dental visits outside the person's familiar environment can be disruptive. Carson and Edwards (2014) reported that the most significant barriers to the provision of oral care to older patients in care homes was lack of equipment and training.<sup>21</sup> Patients can also be directed to HSE special care dentistry facilities where the more dependent patients can access domiciliary oral healthcare.

For patients in the late stages of dementia, referral for special care dental treatment may be necessary. Special care dentists are trained in the application of behavioural adjuncts to encourage patients to better tolerate dental treatment. Consideration may be given to the use of oral and intranasal

*Decision-making representative:* for the small minority of people who are not able to make decisions even with help, the Act provides for the Circuit Court to appoint a decision-making representative.

*Enduring powers of attorney:* under the Powers of Attorney Act 1996, a person can create an enduring power of attorney appointing an attorney to make decisions on his or her behalf in relation to property and finance, personal welfare, or a combination of both.

*Advance healthcare directives:* the Act makes provision for advance healthcare directives. The purpose of the advance healthcare directive is to enable a person to be treated according to their will and preferences, and to provide healthcare professionals with important information about the person in relation to their treatment choices. A person may, in an advance healthcare directive, appoint a designated healthcare representative to take healthcare decision on his or her behalf when he or she no longer has the capacity to make those decisions. Designated healthcare representatives will be supervised by the Director of the Decision Support Service.

sedation, with intravenous sedation and general anaesthesia if co-operation is challenging.<sup>18</sup>

### Denture wearing

The inability to wear dentures can negatively impact a person's appearance, diet and speech. Denture loss is frequent within residential or respite care settings. Carry-cases are useful to prevent denture fractures and allow patients to store dentures safely at night. The patient's name should be permanently marked on their dentures during their fabrication.<sup>7</sup> Alternatively, the patient's name can be written on their denture using commercially available dental marking kits, which consist of a non-toxic pen and clear sealant. Providing a copy denture can be considered.<sup>15</sup>

### Conclusion

Dementia is the most common neurological disorder in patients over 65 years old. Dentists and dental hygienists can dramatically improve the quality of life for patients living with dementia. Poor oral health can negatively impact a patient's eating habits, socialising, and their general well-being. Dental pain can affect the patient's well-being and the symptoms of dementia. A person with dementia who is experiencing dental pain may display intimidating, aggressive, antisocial or simply unusual behaviour as a manifestation of their personal distress. Patients with dementia often cannot adequately communicate their feelings.

Dental teams can ensure the highest quality of care for patients with dementia through shared decision-making, engaging the patient and working within the patient's values. The profession has an ethical responsibility to safeguard compassionate care for patients with dementia by striving to optimise their oral health and function, which can help to prevent distress.

### References

1. **World Health Organization.** 10 facts on dementia. 2012. (Accessed October 10, 2019). Available from: <http://www.who.int/features/factfiles//dementia/en/>.
2. **McNamara, G., Millwood, J., Rooney, Y.M., Bennett, K.** Forget me not – the role of the general dental practitioner in dementia awareness. *BDJ* 2014; 217: 245-248.
3. **National Health Service (UK).** Digital recorded dementia diagnoses. 2019. Available from: [www.content.digital.nhs.uk/catalogue/PUB24036](http://www.content.digital.nhs.uk/catalogue/PUB24036).

4. **Alzheimer's Society UK.** Right to Know campaign – diagnosis and support. Available from: [www.alzheimers.org.uk/info/2016/campaigns/204/right\\_to\\_know\\_campaign\\_](http://www.alzheimers.org.uk/info/2016/campaigns/204/right_to_know_campaign_).
5. **Roberts, T., Nolet, K., Gatecliffe, L.** Leadership in dementia care. In: **Downs, M., Bowers, B. (eds.).** *Excellence in Dementia Care*. Maidenhead; Open University Press, 2008: 455-475.
6. **Hayne, M.J., Fleming, R.** Acoustic design guidelines for dementia care facilities. Proceedings of 43rd International Congress on Noise Control Engineering: Internoise 2014; 1-10. Australia: Australian Acoustical Society.
7. **Cohen-Mansfield, J., Creedon, M.** Nursing staff members' perceptions of pain indicators in persons with severe dementia. *Clinical Journal of Pain* 2002; 18 (1): 64-73.
8. **Walls, A.** Developing pathways for oral care in elders: challenges in care for the dentate subject? *Gerodontology* 2014; 31 (Suppl.1): 25-30.
9. **Van den Maarel-Wierink, C., Vanobbergen, J., Bronkhorst, E., Schols, J., de Baat, C.** Oral health care and aspiration pneumonia in frail older people: a systematic literature review. *Gerodontology* 2013; 30 (1): 3-9.
10. **Baller, M., Boersma, M., Frijters, D.H., van Marwijk, H.W., Nijpels, G., van Hout, H.P.** Depression in Dutch homes for the elderly: under-diagnosis in demented residents? *International Journal of Geriatric Psychiatry* 2010; 25 (7): 712-718.
11. **Lee, H.B., Lyketsos, C.G.** Depression in Alzheimer's disease: heterogeneity and related issues. *Biological Psychiatry* 2003; 54 (3): 353-362.
12. **Majic, T., Pluta, J.P., Mell, T., Treusch, Y., Gutzmann, H., Rapp, M.A.** Correlates of agitation and depression in nursing home residents with dementia. *International Psychogeriatrics* 2012; 24 (11): 1779-1789.
13. **Cole, L.J., Farrell, M.J., Duff, E.P., Barber, J.B., Egan, G.F., Gibson, S.J.** Pain sensitivity and fMRI pain-related brain activity in Alzheimer's disease. *Brain* 2006; 129 (11): 2957-2965.
14. **Corbett, A., Husebo, B., Malcangio, M., Staniland, A., Cohen-Mansfield, J., Aarsland, D., et al.** Assessment and treatment of pain in people with dementia. *Nature Reviews Neurology* 2012; 8 (5): 264-274.
15. **Manning, W., MacLulich, A., Agar, M., Kelly, J.** *Delirium (2nd ed.)*. Stirling. DSDC, University of Stirling, 2012.
16. **Pretty, A., Ellwood, E.P., Lo, E.** The Seattle Care Pathway for securing oral health in older patients. *Gerodontology* 2014; 31 (Suppl. 1): 77-87.
17. **Morris, J.C.** The Clinical Dementia Rating (CDR): current version and scoring rules. *Neurology* 1993; 43: 2412-2414.
18. **British Society of Gerodontology.** Oral health resources. Available from: [www.gerodontology.com/resources/oral-health\\_](http://www.gerodontology.com/resources/oral-health_).
19. **National Institute for Health and Care Excellence (NICE).** Dementia: supporting people with dementia and their carers in health and social care (CG42). 2016. Available from: [www.nice.org.uk/guidance/cg42](http://www.nice.org.uk/guidance/cg42).
20. **National Institute for Health and Care Excellence (NICE).** Oral health in care homes. Quality standard (QS151). 2017. Available from: [www.nice.org.uk/guidance/qs151](http://www.nice.org.uk/guidance/qs151).
21. **Carson, S.J., Edwards, M.** Barriers to providing dental care for older people. *Evidence-Based Dentistry* 2014; 15 (1): 14-15.
22. **Irish Statute Book.** Assisted Decision Making (Capacity) Act 2015. Available from: <http://www.irishstatutebook.ie/eli/2015/act/64/enacted/en/html>.

## CPD questions

To claim CPD points, go to the MEMBERS' SECTION of [www.dentist.ie](http://www.dentist.ie) and answer the following questions:



CPD

- |  |  |   |
|--|--|---|
| <p>1. What concentration of daily fluoride toothpaste is recommended for patients with dementia?</p> <p><input type="radio"/> A: 2,500ppm fluoride</p> <p><input type="radio"/> B: 1,350ppm fluoride</p> <p><input type="radio"/> C: 5,000ppm fluoride</p> <p><input type="radio"/> D: 1,250ppm fluoride</p> | <p>2. What score on the Clinical Dementia Rating Scale is a person who has moderate difficulty in problem-solving, moderate memory loss but maintains social judgement and appears normal upon casual inspection?</p> <p><input type="radio"/> A: 0</p> <p><input type="radio"/> B: 0.5</p> <p><input type="radio"/> C: 1</p> <p><input type="radio"/> D: All of the above</p> | <p>3. For patients living with dementia who cannot verbalise the level of their discomfort, what does a score of 8 indicate on the 'Abbey Pain Scale'?</p> <p><input type="radio"/> A: no pain</p> <p><input type="radio"/> B: moderate pain</p> <p><input type="radio"/> C: severe pain</p> <p><input type="radio"/> D: behavioural change</p> |
|--|--|---|

# The perils of “phantom bite syndrome” or “occlusal dysaesthesia”

## Abstract

Occlusal dysaesthesia is a clinical disorder characterised by persistent occlusal discomfort in the absence of obvious occlusal discrepancies. Typically this is associated with significant emotional distress. This condition was first described by Marbach in 1976 as a subgroup of temporomandibular disorder patients, and he coined the phrase ‘phantom bite syndrome’. The term occlusal dysaesthesia was introduced in 1997 by Clark *et al.* and currently this is the most widely used term in the literature. In keeping with the psychiatric literature of the time Marbach suggested that these patients had a ‘mono-symptomatic hypochondriacal psychosis’.

Recently the psychiatric hypothesis has been challenged and alternative explanations have been proposed. It is postulated that the condition might be an intraoral sensory disorder, which can occur: a) spontaneously; b) in conjunction with an underlying autoimmune disorder; or, c) with trigeminal neuropathic pain. Although our understanding of this condition has improved, it remains a real challenge for clinicians to recognise the symptoms and provide appropriate treatment.

In the absence of controlled studies and agreed diagnostic criteria, the literature is largely based on descriptive reviews. This article describes the clinical characteristics, diagnosis, aetiology and some management strategies for this disorder. Two case studies are provided, which serve to illustrate both the diagnosis and management of this condition. Importantly, clinicians are advised that inadvertently providing further occlusal treatments can intensify the disorder.

*Journal of the Irish Dental Association* 2020; 66 (6): 301-304.

## Introduction

Marbach’s original description of this condition as a purely psychiatric disorder has been challenged, but he pointed out correctly that patients obsessively seek adjustment/correction of their occlusion.<sup>1,2</sup> Clark’s introduction of the term occlusal dysaesthesia (OD) has been broadly accepted but the term ‘phantom bite’ is still used in the literature.<sup>3</sup>

Recently, Imhoff and colleagues have described OD as a condition in which “tooth contacts that are not clinically identifiable as premature contacts, nor associated with other disorders (e.g., odontogenic tissues, masticatory muscles, TM joints) have, for more than six months, been perceived as disturbing or unpleasant”.<sup>4</sup> The persistent nature of this disorder is a diagnostic feature.

The term “dysaesthesia” implies a sensation that is unpleasant and uncomfortable. The occlusal discomfort experienced by this patient group is intense with a huge overlay of psychological distress. In association with OD, patients may describe other functional disorders (e.g., unexplained back pain, headache, gastric discomfort, etc.). On occasion, OD may be part of the symptom complex seen in patients with recognisable temporomandibular joint disorders. The disorder may be triggered by simple dental procedures, e.g., tooth extraction, restorative treatment or orthodontics, but it may also arise spontaneously.<sup>5</sup> Repeated dental interventions typically fail to resolve the symptoms with a resulting increase in physical/emotional distress. This places a considerable strain on the dentist-patient relationship. A number of studies



**Dr Martin G.D. Kelleher**  
MSc FDSRCS FDSRCPS FDSRCS  
King’s College London SE5 9RW, and  
Bromley, Kent

**Corresponding author:** Dr Martin G.D. Kelleher, [info@martinkelleher.co.uk](mailto:info@martinkelleher.co.uk)

**Dr Dermot Canavan**  
BDentS MGDS MS Dip Cons Sed  
Dublin Dental University Hospital and  
5 Fitzwilliam Terrace, Strand Road,  
Bray, Co. Wicklow





have recognised high levels of associated stress and anxiety. It has been further postulated that this underlying emotional distress might contribute to the initial development of the symptoms. However, there seems to be little dispute about the fact that patients with OD have an unhealthy preoccupation with their symptoms, and a compulsive drive to seek treatment that may alleviate their occlusal discomfort. Patients with OD meet the criteria for “somatic symptom disorder” as defined by the Diagnostic and Statistical Guide to Mental Disorders (DSM-5).<sup>6</sup>

For many patients the desire to seek out new dentists and new therapies is matched by their level of anger at previous treatment failures. The situation may be complicated further if patients engage in litigation, and this course of action becomes increasingly more likely as treatment costs increase.

The clinical challenge is to make the correct diagnosis as early as possible. Current expert opinion suggests that this is a sensory abnormality due to a disorder of signal processing. Realignment of teeth or changing occlusal surfaces in any way will not alleviate the symptoms. In fact, repeated interventions with occlusal therapies typically increase symptom intensity. Unfortunately, the intensity of the patient’s distress often creates a significant burden for the clinician as well.

Convincing the patient to accept this diagnosis is often a challenge, particularly when they are already convinced that the previous treatment failures were associated with poor technical ability. Clearly some patients are more open to this level of insight than others. Treatment approaches that include patient education and reassurance lead to a more favourable outcome. Referral to a clinic that provides a multidisciplinary approach may offer the best support for patients with this type of occlusal dysaesthesia.

### Current views on pathophysiology

#### Psychiatric theory

Studies based on psychological consultations have associated OD symptoms with somatoform disorders.<sup>7</sup> The extent to which this condition has been categorised as a psychiatric disorder has recently been challenged. The high level of emotional distress accompanying this disorder is significant but the degree of comorbidity with anxiety, depression and obsessive compulsive disorders seems to vary from patient to patient. Lower levels of psychological comorbidity seem to offer a more favourable outcome. In this context a favourable result may just be acceptance of the problem rather than total resolution of the symptoms.<sup>5</sup>

#### Central sensitivity and alteration of the neuromatrix

Melzack’s theory of the neuromatrix is a theoretical construct that suggests that connectivity between the spinal cord and brain produces self-awareness of the whole body.<sup>8</sup> Melzack speculated that the “neurosignature” for all occlusal surfaces could be altered by dental procedures under conditions of intense stress or anxiety. Ultimately this distorts sensations within the oral cavity. Advances in diagnosing OD utilising prefrontal haemodynamic activity (differentiating both control and symptomatic groups) lends greater support to the possibility of changes in brain function as a cause of OD.

#### Altered dental proprioception

Clark and Simmons suggested that the kinaesthetic ability of the jaw might be altered in these patients, giving rise to alterations in proprioception.<sup>9</sup> However, recent studies have shown that the discriminative properties of patients with OD and a control group were not significantly different.<sup>10</sup>

### Prevalence of occlusal dysaesthesia

The precise prevalence or incidence of this condition is unknown. However, based on a detailed review of 28 well-documented cases, the mean age of presentation was 51.7 +/- 10.6 years. The gender distribution was 1/5.1 (male/female) and the symptom duration was 6.3 to 7.5 years.<sup>11</sup>

### Making the correct diagnosis

The diagnosis of OD is based on information gleaned from the history and clinical examination. In addition, specific health questionnaires may be used to assess the extent of underlying anxiety and distress.<sup>4</sup> Factors of significance in the history include the:

- description of persistent (more than three months), non-specific occlusal discomfort often using dental jargon;
- use of emotive descriptors (e.g., occlusal difficulties may be described as exhausting, unbearable, draining, depressing, etc.);
- association of symptoms with high levels of functional impairment (cannot sleep properly, unable to work or study, relationships are affected);
- number of previous dentists or specialists attended in relation to this problem; and,
- tendency to blame others for this problem rather than admit they have difficulty coping.

Factors of significance in the clinical examination include:

- absence of clinically significant occlusal discrepancies;
- evidence of previous attempts to resolve the disorder (extensive occlusal changes, endodontics, orthodontics, etc.);
- disproportionate level of concern about their symptoms; and,
- insistence that the clinician reviews previous study models, radiographs, photos, treatment plans, etc.

If minor occlusal irregularities are present it should be borne in mind that these discrepancies are not the cause of the patient’s discomfort. Further occlusal therapies ought to be avoided if the patient is to be successfully managed.<sup>4</sup>

The detection of psychological distress may be difficult in a dental setting. Patients may rationalise that their anxiety and distress only arose when the occlusal problems started. Anxiety disorders may impact on other areas such as interpersonal relationships, workplace scenarios, sleep disruption, appetite changes, significant weight gain/loss, reluctance to exercise, increasing use of alcohol, etc. A number of health anxiety questionnaires are available online and are easy to use.

While it is imperative that each patient is provided with a detailed clinical and radiographic assessment to rule out underlying dental disease, it is important that these findings are viewed in the broader context of the history and chief complaints. Some studies have pointed out that patients with OD may pressurise clinicians into providing further occlusal therapies.<sup>6</sup>

### Therapeutic approaches

Patient education and reassurance is fundamental to successful management. The initial challenge lies in getting the patient to accept the diagnosis and to move away from having more dental procedures.<sup>7,12,13</sup> A simple perspective is that the occlusal symptoms are a physical manifestation of underlying emotional distress. Clinical psychologists (despite their lack of dental knowledge) are often much more successful in getting this message across to patients with OD. The multidisciplinary teams available to hospital and specialist clinics will generally have more experience (and probably more

success) in getting the patient to shift their focus on this disorder.

A broader holistic approach that encourages the support, understanding and empathy of close family members is essential if patients are to be successful in accepting the true nature of their disorder. Patients with OD frequently exhibit compulsive tendencies in terms of repeatedly seeking dental treatment and close family members may be helpful in modifying this behaviour. Treatment programmes are based on a self-care model with intermittent support from a variety of professionals.<sup>4</sup>

Cognitive behavioural therapy is considered by most to be helpful but, as with all psychological approaches, it is entirely dependent on the patient's level of enthusiasm and co-operation.<sup>11</sup> Understandably it is difficult for patients to accept that 'retraining of the brain' is more helpful than readjustment of their occlusion. Likewise, it can be challenging for clinicians to ignore the repeated requests for dental therapies in the early phases of patient management.

As yet, there is very little literature available on treatment outcome.<sup>9</sup> A wide variety of centrally acting medications have been tried but none with notable success.<sup>14</sup>

## Case reports

### Case No. 1

A 50-year-old female patient attended her general practitioner for a regular review appointment. A simple composite filling was placed on the occlusal surface of the upper right first molar tooth. She developed postoperative occlusal discomfort and sensitivity, which did not settle over time. At the patient's insistence the symptomatic tooth was adjusted on several occasions. Ultimately the tooth had root canal therapy. Unfortunately, the patient did not improve and on review 18 months later, she had widespread and persistent dental discomfort. The patient was adamant that her occlusion was not being adjusted properly.

As time passed her anxiety and frustration grew. She attended several different general practitioners and specialists over a five-year period. Numerous dental procedures were carried out during this time in an effort to achieve a comfortable occlusion.

When the patient was referred to a specialist clinic for a further opinion on the origin of her discomfort, a number of important issues were noted in her psychosocial history. In the previous five years she had experienced difficulties in her marital relationship, which ultimately led to separation. She also acknowledged difficulties in her place of employment where she felt she was bullied by her employer. She was attending a medical consultant for investigation of unexplained gastric pain.

Detailed clinical assessment of the orofacial area was within normal limits. Her panoramic radiograph (**Figure 1**) illustrates the extensive nature of her previous dental treatment. She had a class one occlusion with bilateral even



**FIGURE 1:** Panoramic radiograph taken when the patient was diagnosed with occlusal dysaesthesia.

and simultaneous contacts. On completion of the examination the concept of OD was explained to the patient. She initially refuted the suggestion that underlying stress and anxiety might be contributing to her difficulties. However, her sister, who had attended with her, acknowledged that other family members had expressed concern about her level of emotional distress. Eventually the patient agreed to a programme of treatment, which included a commitment to avoid seeking further dental treatment. She also agreed to work with a counsellor on a comprehensive stress management programme. In the following months a gradual improvement in her symptoms was noted. After 12 months the patient was discharged but she committed to attending for periodic recalls for the next two years. At the two-year follow-up the patient reported that her sense of occlusal discomfort was still present but the intensity had eased. She was coping better and she felt she had 'moved on' from the ordeal.

### Case No. 2

A 63-year-old female patient was referred for assessment of her occlusal discomfort by a prosthodontist. She had undergone a prolonged programme of extensive restorative treatment in both the maxilla and mandible five years previously (**Figures 2, 2a, 2b and 2c**). She was a regular attendee at her general dentist and only returned to her specialist when a posterior restoration



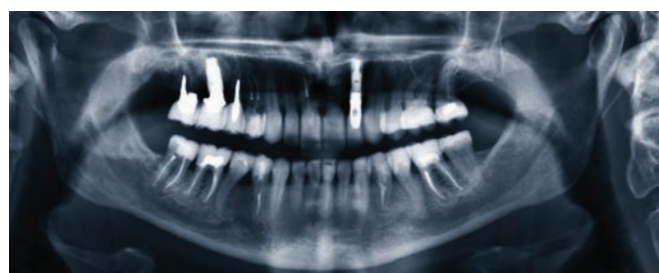
**FIGURE 2:** Anterior view of the patient's dentition.



**FIGURE 2a:** Upper occlusal view.



**FIGURE 2b:** Lower occlusal view.



**FIGURE 2c:** Panoramic view.

fractured. The damaged restoration was replaced and subsequently the patient began to experience diffuse occlusal discomfort. Despite several attempts to adjust her occlusion her symptoms continued. Over time she began to exhibit signs of anxiety and depression. Her family became increasingly concerned about her obsession with her occlusal difficulties. The impact on her life (both personally and socially) was significant.

Detailed review of the patient's history showed that she had attended a number of different dentists and specialists before returning to her original prosthodontist. The clinicians she attended were largely in agreement that no significant mechanical difficulties were present. However, they were unable to provide an explanation for her ongoing difficulties. The patient was insistent that further extensive occlusal changes were required and demanded treatment.

On completion of her assessment the patient was reassured that she had no significant occlusal discrepancies. However, a number of items in her family history were significant. Her husband had been diagnosed with Parkinson's disease ten years previously. His condition had steadily declined until he passed away in the preceding year. She was now living alone and both of her children had moved abroad to work. She felt isolated and alone. The concept of OD was explained to the patient. She was initially sceptical and her acceptance of the proposed treatment was based on her view that she "had nowhere else to go". She committed to engaging with a programme, which included referral to a clinical psychologist.

She was subsequently diagnosed with general anxiety disorder. She completed a course of cognitive behavioural therapy, which included the objective of avoiding thoughts about her occlusion. As the patient was living alone it was suggested that she might bring a friend to the clinic where the patient's disorder was explained to her. Her friend was then in a position to provide some support for the patient, who felt isolated. As her acceptance of the programme grew, her level of emotional distress eased. Twelve months after completion of the treatment programme she reported that her occlusal discomfort was still present but it no longer bothered her as much. The patient was discharged with the recommendation that she would have annual review appointments.

## References

1. **Marbach, J.J.** Phantom bite syndrome. *Am J Psychiatry* 1978; 135 (4): 476-479.
2. **Marbach, J.J.** Phantom bite. *Am J Orthod* 1976; 70 (2): 190-199.
3. **Clark, G.T., Tsukiyama, Y., Baba, K., Simmons, M.** The validity and utility of disease detection methods and of occlusal therapy for temporomandibular disorders. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 1997; 83 (1): 101-106.
4. **Imhoff, B., Ahlers, M.O., Hugger, A., et al.** Occlusal dysesthesia – a clinical guideline. *J Oral Rehabil* 2020; 47 (5): 651-658.
5. **Shinohara, Y., Umezaki, Y., Minami, I., et al.** Comorbid depressive disorders and left-side dominant occlusal discomfort in patients with phantom bite syndrome. *J Oral Rehabil* 2020; 47 (1): 36-41.
6. **Kelleher, M.G., Rasaratnam, L., Djemal, S.** The paradoxes of phantom bite syndrome or occlusal dysaesthesia ('Dysesthesia'). *Dent Update* 2017; 44 (1): 8-12, 15-20, 23-24, 26-28, 30-32.
7. **Marbach, J.J.** Orofacial phantom pain: theory and phenomenology. *J Am Dent Assoc* 1996; 127 (2): 221-229.
8. **Melzack, R.** Pain and the neuromatrix in the brain. *J Dent Educ* 2001; 65 (12): 1378-1382.
9. **Clark, G., Simmons, M.** Occlusal dysesthesia and temporomandibular disorders: is there a link? *Alpha Omegan* 2003; 96 (2): 33-39.
10. **Baba, K., Aridome, K., Haketa, T., Kino, K., Ohya, T.** [Sensory perceptive and discriminative abilities of patients with occlusal dysesthesia]. *Nihon Hotetsu Shika Gakkai Zasshi* 2005; 49 (4): 599-607.
11. **Hara, E.S., Matsuka, Y., Minakuchi, H., Clark, G.T., Kuboki, T.** Occlusal dysesthesia: a qualitative systematic review of the epidemiology, aetiology and management. *J Oral Rehabil* 2012; 39 (8): 630-638.
12. **Reeves, J.L., 2nd, Merrill, R.L.** Diagnostic and treatment challenges in occlusal dysesthesia. *J Calif Dent Assoc* 2007; 35 (3): 198-207.
13. **Tinastepe, N., Kucuk, B.B., Oral, K.** Phantom bite: a case report and literature review. *Cranio* 2015; 33 (3): 228-231.
14. **Watanabe, M., Umezaki, Y., Suzuki, S., et al.** Psychiatric comorbidities and psychopharmacological outcomes of phantom bite syndrome. *J Psychosom Res* 2015; 78 (3): 255-259.

## CPD questions

To claim CPD points, go to the MEMBERS' SECTION of [www.dentist.ie](http://www.dentist.ie) and answer the following questions:



CPD

### 1. Occlusal dysaesthesia is a disorder characterised by:

- ☐ A: a persistent sense of occlusal discomfort
- ☐ B: irregular occlusal contact points
- ☐ C: poor anterior and lateral guidance

### 2. The cause of occlusal dysaesthesia is:

- ☐ A: due to persistent tooth clenching and grinding
- ☐ B: not fully understood
- ☐ C: TMJ dysfunction

### 3. The best treatment approach is based on:

- ☐ A: occlusal adjustment
- ☐ B: psychological therapies
- ☐ C: orthodontic realignment of upper and lower dentition



### COVID-19 vaccine: a comprehensive status report

Kaur, S.P., Gupta, V.

The current Covid-19 pandemic has urged the scientific community internationally to find answers in terms of therapeutics and vaccines to control SARS-CoV-2. Published investigations mostly on SARS-CoV and to some extent on MERS have taught lessons on vaccination strategies for this novel coronavirus. This is attributed to the fact that SARS-CoV-2 uses the same receptor as SARS-CoV on the host cell, i.e., human angiotensin-converting enzyme 2 (hACE2), and is approximately 79% similar genetically to SARS-CoV. Though the efforts on Covid-19 vaccines started very early, initially in China, as soon as the outbreak of novel coronavirus erupted and then world-over as the disease was declared a pandemic by the WHO, we will not have an effective Covid-19 vaccine before September 2020 as per very optimistic estimates. This is because a successful Covid-19 vaccine will require a cautious validation of efficacy and adverse reactivity as the target vaccinee population includes high-risk individuals over the age of 60, particularly those with chronic co-morbid conditions, frontline healthcare workers and those involved in essential industries. Various platforms for vaccine development are available, namely: virus vectored vaccines, protein subunit vaccines, genetic vaccines, and monoclonal antibodies for passive immunisation, which are under evaluation for SARS-CoV-2, with each having discrete benefits

and hindrances. The Covid-19 pandemic, which is probably the most devastating one in the last 100 years after Spanish flu, mandates the speedy evaluation of multiple approaches for competence to elicit protective immunity and safety, and curtail unwanted immune potentiation, which plays an important role in the pathogenesis of this virus. This review is aimed at providing an overview of the efforts dedicated to an effective vaccine for this novel coronavirus, which has crippled the world in terms of economy, human health and life.

*Virus Research* 2020; 288:198114. doi: 10.1016/j.virusres.2020.198114. Epub 2020 Aug 13. PMID: 32800805; PMCID: PMC7423510.

### Transmission of SARS-CoV-2 on mink farms between humans and mink and back to humans

Oude Munnink, B.B., Sikkema, R.S., Nieuwenhuijse, D.F., Molenaar, R.J., Munger, E., Molenkamp, R., et al.

Animal experiments have shown that non-human primates, cats, ferrets, hamsters, rabbits and bats can be infected by SARS-CoV-2. In addition, SARS-CoV-2 RNA has been detected in felids, mink and dogs in the field. Here, we describe an in-depth investigation using whole genome sequencing of outbreaks on 16 mink

## FINANCIAL SERVICES for DENTISTS

INCOME PROTECTION  
PENSIONS  
AVCs (Early Retirement)  
LIFE COVER  
SERIOUS ILLNESS COVER

For more information contact us today  
01 293 8554 • [info@omegafinancial.ie](mailto:info@omegafinancial.ie)

[www.omegafinancial.ie](http://www.omegafinancial.ie)



Omega Financial Management

OFM Financial Ltd., trading as Omega Financial Management is regulated by the Central Bank of Ireland. Registered in Ireland. Reg No: 349635

farms and the humans living or working on these farms. We conclude that the virus was initially introduced from humans and has since evolved, most likely reflecting widespread circulation among mink in the beginning of the infection period several weeks prior to detection. Despite enhanced biosecurity, early warning surveillance and immediate culling of infected farms, transmission occurred between mink farms in three big transmission clusters with unknown modes of transmission. Sixty-eight percent (68%) of the tested mink farm residents, employees and/or contacts had evidence of SARS-CoV-2 infection. Where whole genomes were available, these persons were infected with strains with an animal sequence signature, providing evidence of animal to human transmission of SARS-CoV-2 within mink farms.

*Science* 2020; eabe5901. doi: 10.1126/science.abe5901. Epub ahead of print. PMID: 33172935.

### Prognostic factors for severity and mortality in patients infected with Covid-19: a systematic review

Izovich, A., Ragusa, M.A., Tortosa, F., Lavena Marzio, M.A., Agnoletti, C., Bengolea, A., et al.

**Background and purpose:** The objective of our systematic review is to identify prognostic factors that may be used in decision-making related to the care of patients infected with Covid-19.

**Data sources:** We conducted highly sensitive searches in PubMed/MEDLINE, the Cochrane Central Register of Controlled Trials (CENTRAL) and Embase. The searches covered the period from the inception date of each database until April 28, 2020. No study design, publication status or language restrictions were applied.

**Study selection and data extraction:** We included studies that assessed patients with confirmed or suspected SARS-CoV-2 infectious disease and examined one or more prognostic factors for mortality or disease severity. Reviewers working in pairs independently screened studies for eligibility, extracted data and assessed the risk of bias. We performed meta-analyses and used GRADE to assess the certainty of the evidence for each prognostic factor and outcome.

**Results:** We included 207 studies and found high or moderate certainty that the following 49 variables provide valuable prognostic information on mortality and/or severe disease in patients with Covid-19 infectious disease: demographic factors (age, male sex, smoking), patient history factors (comorbidities, cerebrovascular disease, chronic obstructive pulmonary disease, chronic kidney

disease, cardiovascular disease, cardiac arrhythmia, arterial hypertension, diabetes, dementia, cancer and dyslipidaemia), physical examination factors (respiratory failure, low blood pressure, hypoxaemia, tachycardia, dyspnoea, anorexia, tachypnoea, haemoptysis, abdominal pain, fatigue, fever and myalgia or arthralgia), laboratory factors (high blood procalcitonin, myocardial injury markers, high white blood cell count (WBC), high blood lactate, low blood platelet count, plasma creatinine increase, high blood D-dimer, high blood lactate dehydrogenase (LDH), high blood C-reactive protein (CRP), decrease in lymphocyte count, high blood aspartate aminotransferase (AST), decrease in blood albumin, high blood interleukin-6 (IL-6), high blood neutrophil count, high blood B-type natriuretic peptide (BNP), high blood urea nitrogen (BUN), high blood creatine kinase (CK), high blood bilirubin and high erythrocyte sedimentation rate (ESR)), radiological factors (consolidative infiltrate and pleural effusion), and high sequential organ failure assessment (SOFA) score.

**Conclusion:** Identified prognostic factors can help clinicians and policy makers in tailoring management strategies for patients with Covid-19 infectious disease while researchers can utilise our findings to develop multivariable prognostic models that could eventually facilitate decision-making and improve important patient outcomes.

*PLoS One* 2020; 15 (11): e0241955. doi: 10.1371/journal.pone.0241955. PMID: 33201896.

### Genomic evidence for a case of reinfection with SARS-CoV-2

Tillett, R., Sevinsky, J., Hartley, P., Kerwin, H., Crawford, N., Gorzalski, A., et al.

The degree of protective immunity conferred by infection with SARS-CoV-2 is currently unknown. As such, the possibility of reinfection with this virus is not well understood. Herein, we describe the data from an investigation of two instances of SARS-CoV-2 infection in the same individual. Through nucleic acid sequence analysis, the viruses associated with each instance of infection were found to possess a degree of genetic discordance that cannot be explained reasonably through short-term *in vivo* evolution. We conclude that it is possible for humans to become infected multiple times by SARS-CoV-2, but the generalisability of this finding is not known.

SSRN. August 25, 2020. Available from: <https://ssrn.com/abstract=3680955> or <http://dx.doi.org/10.2139/ssrn.3680955>

## Quiz answers

Questions on page 271

1. A retained root fragment of the URA is visible.
2. a. Root fracture of the URA and avulsion of the coronal segment.  
b. Subluxation URB.  
c. Lacerated labial frenulum.
3. No treatment is needed. The apical fragment should be left to resorb and the torn labial frenulum left to heal. Debridement with sterile saline is recommended. The parent/guardian should be informed of the risk to the

successor teeth and the possible need for treatment of the ULA and URB. A soft diet, analgesia and avoidance of contact sport should also be advocated.

4. Localised enamel hypoplasia, crown/root dilaceration, impaction, and premature, delayed or ectopic eruption.

### Further reading

Malmgren, B., Andreassen, J.O., Flores, M.T., Robertson, A., DiAngelis, A.J., Andersson, L., et al. International Association of Dental Traumatology guidelines for the management of traumatic dental injuries: 3. Injuries in the primary dentition. *Dental Traumatology* 2012; 28 (3): 174-182.

## SITUATIONS WANTED

Associate/locum dentist available in Sligo/Mayo area from January 2021. TCD graduate, five years' experience. Contact [mayosligodentalassociate@gmail.com](mailto:mayosligodentalassociate@gmail.com).

Experienced prosthodontist available for part-time employment in specialist or general practice in Dublin, or within commuting distance. Contact [Irishprosthodontist77@gmail.com](mailto:Irishprosthodontist77@gmail.com).

Experienced oral surgeon and implantologist available for part-time work in specialist or general practice. Contact [mr.mistaa@hotmail.com](mailto:mr.mistaa@hotmail.com).

## SITUATIONS VACANT

### Associates

Co. Cork: dental associate required for permanent part-time position of two to three days to join our team of three dentists and two hygienists. Digital clinic. CVs to [info@mitchelstowndental.com](mailto:info@mitchelstowndental.com), or call 087-621 7151.

Experienced associate required part-time in a busy, friendly, family-run north Dublin practice. Fully computerised and great support team. Please apply with CV to [northsidedublindental@gmail.com](mailto:northsidedublindental@gmail.com).

Full- or part-time associate required for busy Cork City practice(s). Excellent support. Digital X-ray and computerised system. Experience required. 50% split. 80% private. Full book, massive earning potential (5-10k p/w). Facial aesthetics training an advantage. Huge social media presence. CVs to [colintobinenterprises@gmail.com](mailto:colintobinenterprises@gmail.com).

Dr Paul O'Boyle has opened a fourth surgery and is interviewing now for a full-time permanent dental associate. Very busy, private, modern practice. Contact [poboylerverside@hotmail.com](mailto:poboylerverside@hotmail.com).

Galway – dental associate required for busy, modern dental practice outside Galway City. Please reply with CV to [loughreadentalassociate@gmail.com](mailto:loughreadentalassociate@gmail.com).

Advertisements will only be accepted in writing via fax (01-295 0092), letter or email ([liz@irishdentalassoc.ie](mailto:liz@irishdentalassoc.ie)). Non-members must pre-pay for advertisements, which must arrive no later than **Friday, January 22, 2021**. Classified ads placed in the *Journal* are also published on our website [www.dentist.ie](http://www.dentist.ie) for 12 weeks. **Please note that all adverts are subject to VAT at appropriate rate.**

Advert size	Members	Non-members
up to 25 words	€80	€160
26 to 40 words	€95	€190

The maximum number of words for classified ads is 40.

If the advert exceeds 40 words, then please contact:

Think Media, The Malthouse, 537 North Circular Road, Dublin 1.

Tel: 01-856 1166 Fax: 01-856 1169 Email: [paul@thinkmedia.ie](mailto:paul@thinkmedia.ie)

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

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

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

Cork City multi-surgery practice requires associate. Hours negotiable. Contact [corkcityassociate@gmail.com](mailto:corkcityassociate@gmail.com).

Enthusiastic dental associate required for busy private Dublin 3 practice. Two to three days. Immediate start. Please email CV to [pauleggles@gmail.com](mailto:pauleggles@gmail.com).

Associate required with established group practice to replace departing colleague. Excellent remuneration and training available with our multidisciplinary team including orthodontist, periodontist, implantologist, oral surgeons and master technician. Integrated digital work force including multiple Cerecs, Primescan and CBCT. Contact [deirdre@thejamesclinic.com](mailto:deirdre@thejamesclinic.com).

Part-time dental associate required, Cork City suburb. Please email [toothdr10@gmail.com](mailto:toothdr10@gmail.com).

North west: experienced associate for a high-profile, very busy practice in a busy commercial town. Immediate start, flexible hours. Supportive, progressive environment. Well equipped, computerised, digitalised, three-surgery practice with excellent facilities and superb support staff. Contact [niall@innovatedental.com](mailto:niall@innovatedental.com).

Part-time dental associate required for busy dental practice in Tallaght. Immediate start. Fully computerised with great support staff. Contact: [info@squaredental.ie](mailto:info@squaredental.ie).

Full-time dental associate required for busy Limerick City Centre practice. Flexible hours if desired. Excellent support staff, digital X-ray and computerised system. Experience required. 50% associate terms, mostly private patients. Contact [hickeyaudrey@hotmail.com](mailto:hickeyaudrey@hotmail.com).

Associate required in private only practice Carlow/Kilkenny. Be part of a skilled multidisciplinary team with many visiting specialists. Established book. Excellent facilities and backroom support. Cerec, digital scanner, in-house laboratory, CBCT. Suit experienced colleague. Please send CV to [Bpm.gmedical@gmail.com](mailto:Bpm.gmedical@gmail.com).

Associate general dentists required for our expanding private practices in Munster/Leinster. Be part of a skilled multidisciplinary team with many specialists. Established book. Suit experienced colleague. Please send CV to [jobs@shieldsdentalclinic.ie](mailto:jobs@shieldsdentalclinic.ie).

Associates required for clinics nationwide. Modern clinics with excellent support team and a strong social media presence with a very large number of new patients. Preference to postgraduate training in the areas of cosmetic dentistry and orthodontics. Contact [jobs@alexandrardental.ie](mailto:jobs@alexandrardental.ie).

Dental associate needed for full-time position for Dublin 3 private practice. No medical card. Experienced preferred. Please reply with CV to [office@fairviewdentalclinic.ie](mailto:office@fairviewdentalclinic.ie) or contact Corrine on 01-833 8985.

Experienced associate required for part-time position in modern practice in Westmeath. Full book and great earning potential. 30 minutes from M50. Great patients and excellent support staff. Send CV and cover letter to [aidan@kinnegaddental.ie](mailto:aidan@kinnegaddental.ie).

We have an opportunity for an energetic, full-time associate to replace a departing colleague. Productive schedule, implants and cosmetic dentistry, excellent support team. Position offers mentoring by very experienced clinicians. Email for information or to apply. Contact [paula@eyresquaredental.ie](mailto:paula@eyresquaredental.ie).

Experienced dentist required for a private dental office in Dublin City centre. Contact [contact@freedomdental.ie](mailto:contact@freedomdental.ie).

Part-time associate required for busy practice in the north east. Fully computerised, digital X-ray, OPG, etc. Immediate start. Reply with CV to [fergalbegley@outlook.ie](mailto:fergalbegley@outlook.ie).



Associate required for busy surgery in Dundalk to replace departing colleague. Part-time (Tuesday, Wednesday, Saturday). Practice has all mod cons and is computerised. All applicants considered but would prefer somebody with experience and a long-term view. Contact fergalbegley@outlook.ie.

Experienced (min. one year) associate required for a part-/full-time position in a busy Cavan dental practice. Knowledge of multiple languages very welcome. Please apply with CV to info@ndentalclinic.com.

Full- or part-time associate required for Dublin practice. IDC registered and ready to start immediately. Email for information or to apply. Contact northdublinclinic1@gmail.com.

Experienced associate two to three sessions/week in busy general practice with friendly supportive staff, private/PRSI, modern, computerized with SOE and digital X-rays (air sterilisation in all surgeries). We offer cosmetic dentistry and facial aesthetics. Competitive percentage. Contact dentistsouthdublin@gmail.com.

Full-/part-time dental associate required for busy dental practices in Longford and Tallaght. Immediate start. Experience required. Please email CV to annedental@hotmail.co.uk.

Full-time associate dentist required to replace departing colleague mid-December. Full book, private PRSI and possibly medical card. Excellent support staff. Computerised. Please email CV application to eamonnoonan@hotmail.com.

Full- or part-time associate required for very busy, established practice one hour south of Dublin. Associate will have dedicated own surgery and generous remuneration. Apply by sending CV to info@gracefielddental.ie.

Modern, friendly practice looking for a part-time or full-time associate. Private/PRSI. Newly equipped clinic, CBCT, OPG, Invisalign, orthodontist, prosthodontist, visiting implant specialist. Fantastic opportunity to be part of a great dental team! Contact southdubindental2020@gmail.com.

Full- or part-time experienced associate required to join our Killiney dental clinic. Modern facilities, private/PRSI. CBCT, fully digitalised, with a mix of specialists on site all aided by a great team! Contact hello@killineydental.com.

Experienced dental associate required for a modern, five-surgery practice. Fantastic opportunity for the right candidate interested in working in the west of Ireland. Application via email to paulfdunne@yahoo.ie.

Part-time associate required in Co. Laois, two to three days per week. Exact, OPG, intra-oral scanner. Good support. Would suit someone interested in restorative dentistry. Contact neil@orthodontal.ie.

Part-time associate required for two days a week in modern computerised practice with three surgeries, digital X-ray and OPG. Replacing departing associate. North Dublin City. Contact associatenorthdublin@gmail.com.

Experienced associate required for busy practice in south Dublin. Full- and part-time options considered. Modern, computerised practice with excellent support staff. Strong established book and lots of new patients. CVs to careers@dentalcareireland.ie.

Experienced associate required for busy practice in Midlands. Part-time options considered. Modern, computerised practice with excellent support staff. Strong established book and lots of new patients. CVs to careers@dentalcareireland.ie.

Dental associate required Carlow/Kilkenny. Private only with full book guaranteed. A great multidisciplinary team with many visiting specialists. Excellent backroom support. Cerec, in-house laboratory, digital scanner, CBCT. Suit experienced colleague. CV to bpm.gmedical@gmail.com.

Cork – part- or full-time associate required, several days per week. New Sirona Intego chair. Computerised. Contact charlesrobert1054@gmail.com.

Associate required for one to two days in busy practice in Bray. Replacing departing associate. Please send CV to Jonathandentalfisher@outlook.com or call 01-286 2137 for further info.

Dublin: associate wanted for three full days and one Saturday per month. Modern digital practice with orthodontist, oral surgeon, cosmetic dentist and hygienist. Fully private book! Contact orthosull@gmail.com.

Fantastic opportunity for an experienced, friendly associate to join our Galway City team. Very busy, multidisciplinary, modern practice with experienced support staff. Mentoring available and further development of clinical skills strongly encouraged. Apply in confidence to galwaydentist2021@gmail.com.

Full-time experienced associate required to replace retiring dentist. Dublin south-west. Long-established mixed practice. Fully computerised, OPG, full appointment book. Forward CV to info@priorydentist.ie.

Full- or part-time experienced dental associate required for established practice in Castlerea, Co. Roscommon. Full book and great support staff. Contact dentalcastlerea@yahoo.ie.

Part-time dental associate required for busy, modern dental practice in Ennis, Co. Clare. Fully computerised, digital X-ray and great support staff. Private and PRSI. Experience required. Reply with CV to gbrowne.ennis@gmail.com.

Dublin 6w: associate required two days a week and Saturdays. Experience essential, interpersonal skills and interest in implants/endodontics. Contact dublinsouthdental@gmx.com.

## Dentists

Friendly dentist required for a busy dental surgery in Navan. Good mix private and medical card. Two years' experience preferable. Immediate start part-time with expansion to full-time. Contact abbeydental365@gmail.com with CV.

Experienced, enthusiastic dentist required to work one to two days per week in private practice in Malahide, Co. Dublin. Please email CVs to dentistjobmalahide@gmail.com.

Experienced dentist required part-time for a busy dental practice in Tallaght, Dublin. Great support team. Please apply with CV to annedental@hotmail.co.uk.

Experienced dentist required to cover maternity leave in Malahide, November 2020-May 2021. Full-time position with excellent earning potential. Will be an opportunity for an ongoing position thereafter. Enquiries to info@malahidedentalcare.ie.

Dentist required for busy established practice in north Dublin with a view to associate. Flexible hours if required. CV to dentalassociatea@gmail.com.

Dentist required for busy mixed practice in north Dublin for three to five days/week. Send CV and cover letter to rahenydentalcentre@outlook.com.

Co. Meath. We are looking for an experienced dentist to join our private-only general/specialist practice. Just 30 minutes from north Dublin. Outstanding dental practice. Highly experienced nursing staff. Full book. Great opportunity for the right candidate. Contact kellsdentaljob@gmail.com.

Dentist required to join our practice and take over from departing colleague. Position initially one day/week, potential increase to more. Contact dunboyneorthodontics@gmail.com.

Dentists Kildare: Naas, Blessington or Athy. Meath: Navan. Full-time or part-time. Primary care setting commencing ASAP. Email unagaster@gmail.com or call Una on 087-917 4831.

Dublin – Smiles Dental (part of Bupa Dental) is looking for a passionate dentist to join our well-established, state-of-the-art practice in South Anne St. Position offers five days per week. Established list and great earning potential. Contact joanne.bonfield@smiles.co.uk.

Smiles Dental (part of Bupa Dental) is looking for a passionate dentist to join our well-established, state-of-the-art practice in Drogheda, Co. Louth. Position offers five days per week. Established book, great earning potential. Contact joanne.bonfield@smiles.co.uk.

Full-time dentist required. Private busy practice with all supports, 30 minutes Dublin/Wexford. Minimum three years' clinical experience required. Contact info@rathdrumdental.ie.

Part-time dentist (three days per week) required for expanding practice located in Kildare Town, Co. Kildare. Implant dentistry, orthodontics, OPG and sedation dentistry available on site. Fully computerised. Practice recently refurbished. Mix of PRSI, GMS and private patients. Contact: dave\_gwyer@hotmail.com.

Part-time position in busy mixed practice. Two to three days a week with a full list. Commutable from both Limerick and Cork. Email corkdentaljob100@gmail.com.

Limerick City. Part-time dentist required for a very busy two-surgery practice including Saturdays. Experience absolutely essential. Contact lkpractice3@gmail.com.

Cork – Smiles Dental (part of Bupa Dental) is looking for a passionate dentist to join our well-established, state-of-the-art practice in Cork. Position offers three to four days per week. Established list, great earning potential. Contact joanne.bonfield@smiles.co.uk.

Galway – Smiles Dental is looking for a passionate dentist to join our well-established, state-of-the-art practice in Galway. Position offers five days per week. Established list, great earning potential. Plus, advance performer-related bonus of €3,000. Contact joanne.bonfield@smiles.co.uk.

Athlone – Smiles Dental (part of Bupa Dental) is looking for a passionate dentist to join our well-established, private, state-of-the-art practice in Athlone. Position offers three to four days per week. Established list, great earning potential. Contact joanne.bonfield@smiles.co.uk.

Maternity cover starting first week Nov. 36/37 hours per week, required for six months. Will join excellent, friendly staff. Modern practice, mainly private/PRSI. Contact: apply@fairgreendental.ie.

Seeking experienced dentist at our private city centre practice. Outstanding facility. Highly experienced staff. Full book. Great opportunity for the right candidate. Contact kilkeny dentaljob@gmail.com.

Experienced dentist required for one to two days in busy Galway city centre practice (possible full-time). Established list. Contact drmoreilly@gmail.com.

Caring dentist required for an established digital practice in Kildare. A mix of private and PRSI patients. Initially for a three-day week. Contact info@shackletonclinic.com.

Our busy practice is looking for an additional general dentist with minimum two years' experience who is capable of providing a wide range of treatments one to two days/week with a view to increase. Contact dr.erika.barta@crowndental.ie.

Experienced dentist required for three days a week in our busy dental practice based in Limerick City. Immediate start. Contact bowedentalclinic@gmail.com.

Dentist required, part- or full-time, for dental practice in Cobh, Co. Cork. Friendly practice specialising in nervous patients and cosmetics. Contact accounts@cobhdentalclinic.com.

Dun Laoghaire – Smiles Dental (part of Bupa Dental) is looking for a passionate dentist to join our well-established, private, state-of-the-art practice in Dun Laoghaire. Position offers five days per week. Established list, great earning potential. Contact joanne.bonfield@smiles.co.uk.

Dentist with experience in Invisalign and fixed braces or willing to attend courses required for Cork City practice. Private. Full existing book. Full support. Fully digital. Please email alex@whitesmiledental.ie.

Enthusiastic dentist required to replace departing colleague in progressive practice in the sunny south east from January 2021. Full clinical and hygiene support with a great support staff. On-site acrylic laboratory and TRIOS intraoral scanner. Flexible hours available. Contact dillondental2@gmail.com.

### Locums

Busy south Dublin practice requires full-time locum dentist from early December 2020 to end February 2021. Modern, computerised practice. Friendly, helpful support staff. Experienced associate and hygienist to work alongside successful candidate. Please email CV to associatedentist2021@gmail.com.

Full-/part-time locum dentist required for three months for busy practice in Co. Meath (40 minutes from Dublin). Full book, very experienced nursing staff. Friendly working environment. Minimum two years' experience, immediate start. Contact drsusanmurray@gmail.com.

Locum dentist required for two to three days/week from November to January inclusive. Busy, mixed two-person practice in Tipperary. Possibility of further sessions after January. Excellent terms for the right candidate. Reply with CV to dentalposition057@gmail.com.

### Specialist/limited practice

A Dublin specialist practice with an orthodontist, oral surgeon and restorative dentist is looking for either a periodontist or endodontist to join our team. Contact northsidedentalclinic18@gmail.com.

Orthodontist required to join our specialist team in south Dublin, Cork and Limerick City. All busy, fully private clinics treating both Invisalign and fixed braces. Full existing book. Full support. iTero/OPG/Ceph. CV to alex@whitesmiledental.ie.

Part-time orthodontist required Dublin 4. Large patient base and catchment area for the right candidate to build a book and possible referral base. GDP orthodontic patient base already established with need to expand to offer more complex treatments. Contact office@pembroke dentist.ie.

Orthodontist required to join our specialist team in Limerick City. Full existing book in modern busy clinics. CV to jobs@shieldsdentalclinic.ie.

Specialist multidisciplinary digital clinic now recruiting specialists to meet demands in the following areas; implantology/periodontology, prosthodontics/restorative dentistry, facial aesthetics. Fully Covid-19 guidance compliant. Specialist registration or certification is required. Apply with CV to paulabdsfds@gmail.com.

Endodontist required on a sessional basis for long-established, busy practice in the south east. Large patient base and catchment area. Flexible days. Contact info@rogersdental.ie.

Full-time orthodontist required for specialist orthodontic practice in Dublin. Five locations with state-of-the-art facilities. Remuneration experience dependent. Must be eligible for registration on the Register of Dental Specialists with the Irish Dental Council. Contact elaine.hand@dublinorthodontics.ie.

Specialist orthodontist needed in Donaghmede! The appointee will provide consultation, diagnostic and treatment services to patients referred to its service. Contact [recruitment@smartdentalcare.co.uk](mailto:recruitment@smartdentalcare.co.uk).

Periodontist required on a sessional basis for leading, high-profile private practice in the south east. Large multidisciplinary team already in place providing general dentistry, ortho, implant and oral surgery. Excellent support staff. Email [careers@dentalcareireland.ie](mailto:careers@dentalcareireland.ie).

Orthodontist – Ortho Dundalk (Smiles Dental) is looking for specialist orthodontist to join our specialist practice in Dundalk. Position offers state-of-the-art working environment, full support team, up to five days per week, established referral base and great earning potential. Contact [joanne.bonfield@smiles.co.uk](mailto:joanne.bonfield@smiles.co.uk).

Periodontist required one to two days per month in multidisciplinary clinic one hour from Dublin. Prosthodontist, endodontist, implantologist, orthodontist also attending. Fully digital-CBCT. Will build quickly to increased days. Please contact [bpm.gmedical@gmail.com](mailto:bpm.gmedical@gmail.com) in confidence.

Oral surgeon/dentist required. Part-time basis. Modern, busy, private, centrally located dental practice in Co. Kildare. Immediate start. CV by email to [kdental142@gmail.com](mailto:kdental142@gmail.com).

Friendly, experienced orthodontist required for one day/week. High volume of patients, digital OPG and cep on site. Great opportunity to build up a base. Contact [dr.erika.barta@crowndental.ie](mailto:dr.erika.barta@crowndental.ie).

### Orthodontic therapists

Orthodontic therapist required to join our specialist team in south Dublin/Cork/Limerick City. All busy, fully private clinics treating both Invisalign and fixed braces. Full existing book. Full support. Fully digital. Excellent rates. CV to [alex@whitesmiledental.ie](mailto:alex@whitesmiledental.ie).

Would you like a change of career from general dentistry to orthodontics? Would you like to train as an orthodontic therapist and progress to a dentist with a special interest in orthodontics in our practice in Dublin? Full-time position. Contact [orthodontictherapistreplies@gmail.com](mailto:orthodontictherapistreplies@gmail.com).

Full-time orthodontic therapist required for the largest specialist orthodontic practice in Dublin with state-of-the-art facilities. Support from well-established team of experienced specialists, therapists and support team. Applicant must have excellent manual dexterity and people skills. Contact [elaine.hand@dublinorthodontics.ie](mailto:elaine.hand@dublinorthodontics.ie).

### Facial aesthetics

Facial aesthetics injector required to join our fab team! Must travel to clinics in Roscommon and Claremorris. Possible earnings of 2-3k daily. Strong social media presence, Alexandra Aesthetics. Must be trained in anti-wrinkles and fillers. Contact [jobs@alexandradental.ie](mailto:jobs@alexandradental.ie).

### Dental nurses/managers/receptionists

Experienced part-time dental nurse to include two Saturdays a month required for our expanding multidisciplinary team in Dublin 18. Positive attitude, friendly, team player with fluent spoken and written English essential. Contact [admin@cdpractice.com](mailto:admin@cdpractice.com).

Immediate start for full-time dental surgery assistant in Dublin City boutique dental practice. This is a mixed role involving chairside support, practice administration and business support. A positive and flexible mindset is essential. Please email CV to [anneslanedental@gmail.com](mailto:anneslanedental@gmail.com).

Full-/part-time nurse required for busy practice in Ongar village. Please send CV to [ongar.dental@gmail.com](mailto:ongar.dental@gmail.com) or contact Claire for further info on 01-640 2733.

Dental nurse required at Kingdom Clinic in Killarney. Modern specialist clinic. €16 per hour. Great conditions. Rare opportunity. Contact [tomas.allen@kingdomclinic.ie](mailto:tomas.allen@kingdomclinic.ie).

Ormond Orthodontics: qualified dental nurse required for our Kilkenny City/Thurles orthodontic practice. We are seeking a warm, friendly person with good communication and computer skills. Email application to [reception@ormondorthodontics.ie](mailto:reception@ormondorthodontics.ie).

Part-time dental nurse required for lovely, friendly and modern general practice in Dublin 16/south Dublin. No weekend work, competitive hourly rate. Applicant must be a team player, friendly and hard working. Potential to become full time. Contact [dentistsouthdublin@gmail.com](mailto:dentistsouthdublin@gmail.com).

Dental nurse/receptionist required for weekend sessions at busy, modern practice. Flexible hours apply. Organised candidate with good computer skills required. Good remuneration for the right person. [www.swords-dental.ie](http://www.swords-dental.ie). Contact [colinpatricklynam@hotmail.com](mailto:colinpatricklynam@hotmail.com).

Full-time role available for qualified DSA in Co. Laois. Dental assisting and reception duties. Exact software, OPG, iTero scanner, Invisalign provider. Contact [neil@orthodontal.ie](mailto:neil@orthodontal.ie).

Full-/part-time dental surgery assistant required for a busy general practice, Edenderry, Co. Offaly. Immediate start. Please email CV to [roniekennedy@gmail.com](mailto:roniekennedy@gmail.com).

Experienced dental nurse required for Dublin 2, city centre practice. Full time chairside role, Monday to Friday. Team player with positive attitude to support our patient-based approach to care. Computerised, private/PRSI practice. Salary dependant on experience. Please apply with CV to [marycredy@gmail.com](mailto:marycredy@gmail.com).

Dental nurse required in Dunboyne. Part-time job position with a view to full-time. Initially to cover afternoons, evenings and Saturdays. Contact [dunboyneorthodontics@gmail.com](mailto:dunboyneorthodontics@gmail.com).

Full-time position available for a dental nurse in Kerry. Experience preferred. Contact [milltowndentists@gmail.com](mailto:milltowndentists@gmail.com).

Experienced dental assistant required for a busy northside Dublin private practice. Ideally should be familiar with Exact software. Must be comfortable working in a team environment. Private/PRSI. Generous salary based on experience. Please email CV to [andrewhatherell@gmail.com](mailto:andrewhatherell@gmail.com).

Blessington, Co. Wicklow. Part-time dental nurse required Tuesday/Thursday/Friday. Immediate start. Computerised Sx. Motivated nurse to join a full dental team. CV to [niall@blessingtondental.ie](mailto:niall@blessingtondental.ie).

### Hygienists

Experienced dental hygienist required for a busy and friendly dental practice in Navan. Hygienist required for one to two days per week. Please forward your CV to [abbeydentalcare365@gmail.com](mailto:abbeydentalcare365@gmail.com).

Hygienist required one day per week in Co. Laois. Full book, good support, modern facilities. Contact [info@orthodontal.ie](mailto:info@orthodontal.ie).

Hygienist required for busy, modern practice in Limerick City centre. Full- or part-time hours available. Contact [odowdritam@gmail.com](mailto:odowdritam@gmail.com).

Experienced, flexible and enthusiastic dental hygienist required for part-time position in a modern, computerised family practice in Westmeath. Great patients and excellent support staff. Send cover letter and CV to [aidan@kinnegaddental.ie](mailto:aidan@kinnegaddental.ie).



Part-time hygienist required for a busy general dental practice in south Dublin. Full book in modern surroundings, with a friendly support dental team. Contact [careers@deansgrangedental.ie](mailto:careers@deansgrangedental.ie).

Dental hygienists Kildare: Naas/Newbridge/Athy. Dublin: Tallaght/Crumlin. Full-/part-time. Primary care setting commencing ASAP. Email [unagaster@gmail.com](mailto:unagaster@gmail.com) or call Una on 087-917 4831.

Dental hygienist required for Co. Kildare dental practice. Full- or part-time hours available. Reply with CV to [info@naasdentalcentre.ie](mailto:info@naasdentalcentre.ie).

Dental hygienist required for one day per week in busy practice in Ongar village. Please send CV to [ongar.dental@gmail.com](mailto:ongar.dental@gmail.com) or contact Claire for further info on 01-640 2733.

Hygienist required, two days per week, in a busy private practice in Co. Kerry. Email CVs to [milltowndentists@gmail.com](mailto:milltowndentists@gmail.com).

Full-/part-time hygienist required for a busy, modern and friendly practice with a high earning potential in north Co. Dublin. Please email your CV to [northdublindentalclinic@gmail.com](mailto:northdublindentalclinic@gmail.com).

Dental hygienist required for permanent position. Three days per week for well-established, busy family practice in New Ross. Good remuneration and friendly support staff. Email CV to [info@rogersdental.ie](mailto:info@rogersdental.ie).

Motivated dental hygienist required for a busy private practice in Wicklow. Two to three days initially. Full mix of patients all age groups. excellent equipment and T&C's. Please send CV via email. Contact: [info@rathdrumdental.ie](mailto:info@rathdrumdental.ie)

### PRACTICES WANTED

Experienced dentist looking to rent a room or more in an established or new dental or GP clinic in order to open a dental surgery in Co. Dublin or surroundings. Please reply to [dentalsurgery.ireland@gmail.com](mailto:dentalsurgery.ireland@gmail.com).

### PRACTICES FOR SALE/TO LET

Galway City. Long-established, busy general practice. Prime location. Two surgeries, room to expand. Experienced loyal staff. Minimal medical card. Excellent profits. Very low rent. Ripe for growth potential. Principal available for transition. Priced to sell. Contact [niall@innovatedental.com](mailto:niall@innovatedental.com).

Co Mayo. Two surgeries, leasehold. Low rent. Reasonable equipment/OPG. Very busy, long established, good footfall. Large new patient numbers. Well-established hygienist service. Good profits. Realistically priced, for speedy sale. Area wide open. Excellent potential for growth. Contact [niall@innovatedental.com](mailto:niall@innovatedental.com).

Cork south. Long-established, single-handed, two surgeries plus two rooms for expansion. Parking. Computerised. Sterilisation room. Principal retiring. Priced for handover. Contact [mike1980reynolds@gmail.com](mailto:mike1980reynolds@gmail.com).

Dublin south. Long-established, single-handed surgery. Full planning permission in place. Large room for expansion to three surgeries. Very low overheads. Excellent location. Plentiful parking close by. Huge potential to grow. Principal retiring – speedy sale. Contact [niall@innovatedental.com](mailto:niall@innovatedental.com).

Co. Cork. Long-established practice, good footfall, busy high street. Modern/walkable premises. Fully private, two-surgery practice. Expansion possible. Hygienist. Digitalised. Excellent profits – very low overheads. Strong new patient numbers. Principal available for transition. Contact [niall@innovatedental.com](mailto:niall@innovatedental.com).

Co Kildare. Expanding town – one hour from Dublin. One-person practice. Excellent equipment. Long lease. Reasonable rent. Large room to expand. Area wide open. Contact [niall@innovatedental.com](mailto:niall@innovatedental.com).

Purpose-built, four-surgery building on two levels for sale. Purpose-built dental/medical centre for sale in Mullingar town centre. Includes planning permission for extension plus office space and separate living accommodation. Contact [madsdsmurray19@gmail.com](mailto:madsdsmurray19@gmail.com).

Bright clean suite available located in a purpose-built medical centre in Fermoy, Co. Cork. 1,017sq. feet. Suite comprising reception, bathroom, canteen, three treatment rooms plus large open plan suite that can be divided into three rooms. Contact Donal at [donal@sfod.ie](mailto:donal@sfod.ie) or call Sherry Fitz on 025-32725.

Dublin City Centre. Two surgeries, fully private, long established. Strong passing trade, leasehold/freehold. Strong new patient numbers. Excellent hygienist service/support staff. Room to expand space/services. Easy parking. Excellent profits. Principal available, transition period. Contact [niall@innovatedental.com](mailto:niall@innovatedental.com).

### EQUIPMENT FOR SALE

Eschmann Little Sister 3 x two autoclaves (with printer) €850 each. Bambi 150/700 compressor two/three surgery PWO €800. Whipmix fully adjustable articulator + Facebow €750. Contact [conor.irwin@ratoathdental.ie](mailto:conor.irwin@ratoathdental.ie).

Cerec MC XL milling unit, CS Ivoclar furnace, and blue cam for sale with lots of blocks, powders etc. Recently serviced and approved from DMI. Ono €20,000. Contact [mullanegs@gmail.com](mailto:mullanegs@gmail.com).

**Dureka**<sup>®</sup>  
DENTAL HANDPIECES

**5 YEAR**  
CAPPED PRICE  
SERVICING

GERMAN DESIGN & ENGINEERING

**PLATINUM LINE**

**POWERFUL & QUIET**

**3 YEAR WARRANTY**

Dureka Dental Ltd, Dundalk, Ireland  
Ph: 042 933 1625  
[www.dureka.com](http://www.dureka.com)

## Integrating care

DR JOHN AHERN is a physician at the Cambridge Health Alliance, and faculty member at Harvard Medical School/Harvard School of Dental Medicine.

### What led you to pursue a dual qualification in dentistry and medicine?

I trained in both dentistry and medicine at Trinity College Dublin. My first degree was in dentistry. After graduation I worked as house officer in the Dublin Dental University Hospital. This was a fantastic year. I gained an enormous amount of experience, mostly from my time spent working in the emergency department. We received a broad spectrum of referrals from all types of health professionals across the region. In particular, we treated a lot of trauma cases and minor surgical emergencies. I worked closely with staff from the Department of Oral and Maxillofacial Surgery throughout that year, many of whom had pursued dual qualification or worked in teams where dual qualification was common. I thoroughly enjoyed both the medical and dental aspects of patient care, so I too wanted to pursue dual qualification. It just felt like the right path for me and I am very happy with the decision I made.

### What motivated you to obtain a master's in public health, and did it change the way you think about what you do?

I was fortunate to be part of the first National Mouth Cancer Awareness Day during my house officer year. Ten years later, it still remains one of the best days of my professional life. It was a significant milestone for oral health in Ireland. It motivated me to learn more about population health medicine. I decided to pursue a part-time master's degree in public health, through distance learning, from the London School of Hygiene and Tropical Medicine. During this time, I also continued to work as a dentist, in both hospital and primary care settings in Dublin. My training in public health certainly shaped my trajectory thereafter and I developed a broad interest in prevention, early intervention and integrated care.

### You've since completed a PhD. How do you see your research being applied, especially in Ireland?

I did my PhD in population health medicine, public health and primary care. It was a mixed-methods PhD that focused on integrated care. My thesis explored the opportunities for, and barriers to, integrating oral health and primary care in Ireland. The studies revealed an absence of a culture of collaborative practice between dentistry and primary care in Ireland, and while opportunities were identified, there were a number of important challenges found, notably in the areas of education and policy reform.

### What brought you to Harvard and what does your work there involve?

I did an internship at the World Health Organisation in 2014. During this time, I met with some faculty from the Harvard Medical School and the Harvard School of Dental Medicine. We discussed setting up a research collaboration that would focus on integrating oral health with medicine. They asked me to come and work with them, but I had one year remaining in medical school, so I had to turn down that opportunity at the time. However, later that year I applied for a Fulbright Scholarship and luckily the following spring I found out that I had been successful. Being introduced as a Fulbright Scholar in the United States captures everyone's attention, which was particularly useful for my research interest as it was a relatively new idea and my work involved presenting to many different types of stakeholders across medical, dental and health policy sectors. After I finished my Fulbright, I returned to Dublin to complete my PhD and when I defended my PhD thesis, I was offered a postdoctoral fellowship to return to Harvard. I completed my fellowship shortly after the pandemic struck and I have been in a full-time clinical role as a resident physician in medicine with the Cambridge Health Alliance since then. I still have a part-time faculty appointment at Harvard so I continue to stay involved with academia.

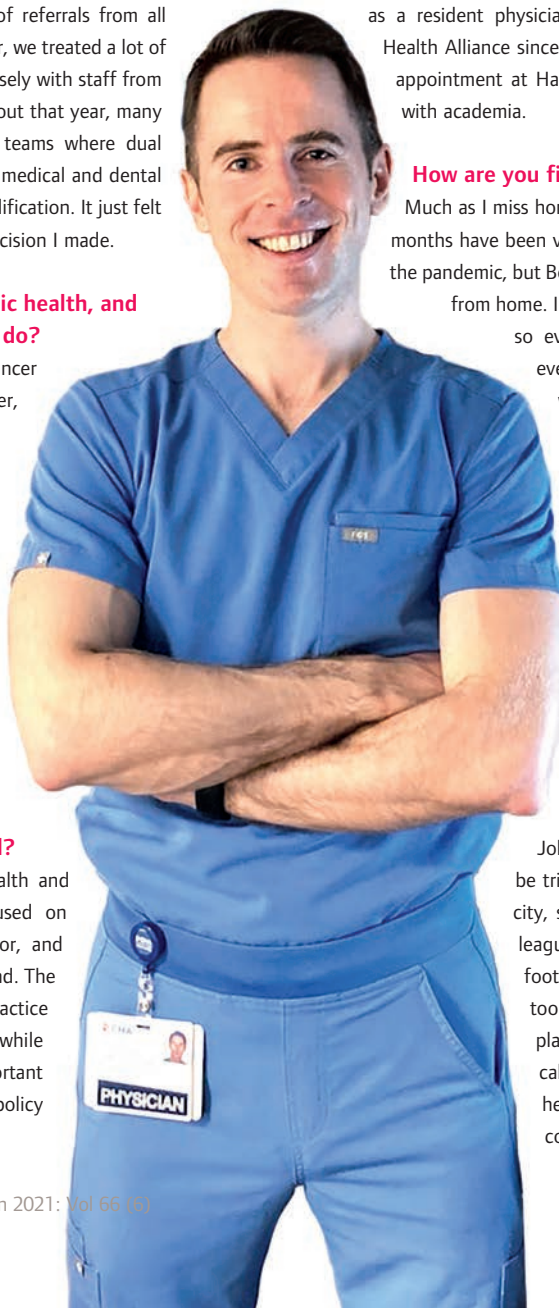
### How are you finding life in Boston?

Much as I miss home, I love Boston. Of course, the last months have been very different for all of us because of the pandemic, but Boston feels very much like home away from home. I am lucky that my job is very sociable so even during the pandemic I am out every day interacting with people at work.

### Do you have any involvement with the Irish Dental Association?

I joined the IDA after I graduated from dental school. I have been asked to review some manuscripts submitted to the *Journal of the Irish Dental Association* over the years.

John enjoys playing tennis, but it can be tricky to find hitting partners in a new city, so he has also joined a flag football league. Flag football is the American football version of tag rugby. John says it took him a while to learn the patterns of play, and although he's not expecting a call from the Patriots anytime soon, he's had a lot of fun and hopes to continue in 2021.





SAVE THE  
DATE

# A NEW FUTURE AWAITS

## TOPICS INCLUDE:

Growing your practice – controlling costs  
Attract the right patients and keep them  
Empowering your dental team  
Tax and finance  
Dental Council update  
Social media – how it can help your practice

and much more...



FULL PROGRAMME IN EARLY JANUARY  
IDA MEMBERS ONLY





# NO LIMITS

## Discretionary protection that reaches further

Discretion allows us to respond quickly to changes in the dental environment. This means we can assess claims and complaints against emerging issues and risks, and treat each case on its individual merit. By using discretion, we're not restricted by small print, financial caps or exclusion clauses.

**Protection that puts you first**

[dentalprotection.org/ireland](https://dentalprotection.org/ireland)