THE MAGAZINE FOR DENTAL PROFESSIONALS IN IRELAND

Ireland's Dental

SPRING 2025

RRP £5.50

PUSHING THE BOUNDARIES

The RCSI Faculty of Dentistry's Annual Charter Meeting session, p20

Plus: A History of the Northern Ireland Branch of the BDA: an extract, p26

BioRoot™ Flow

Success made easy for everyone

91%
clinical success after 2 years

—

Exceeds
success rates found in the literature*

Your Bioactive Root Canal Sealer

- Ready-to-use hydraulic sealer in a syringe
- No shrinkage - bioactive - biocompatible - high pH
- Whatever your technique, cold or warm

* 24 months after treatment, the overall efficacy rate using loose criteria was 91.0% in the BrF group and 90.4% in the BrRCS group (p= 0.0003)
Clinical study results (Clinicaltrial.gov/NCT04757753) currently under peer review.

Please visit our website for more information
www.septodont.co.uk

septodont

FOLLOW US

irelandsdentalmag.ie
@IrelandsDental
IrelandsDentalmag

Ireland's Dental

CONNECT
ENGAGEMENT IS EVERYTHING
connectmedia.cc

THE MAGAZINE FOR DENTAL PROFESSIONALS IN IRELAND

EDITOR
Will Peakin
Tel: +44 (0)141 560 3019
will@connectmedia.cc

ADVERTISING
Ann Craib
Tel: +44 (0)141 560 3021
ann@connectmedia.cc

DESIGN
Liam Shaw &
Niamh Inglis

SUBSCRIPTIONS
Claire Nichol
Tel: +44 (0)141 560 3026
claire@connectmedia.cc

1 year, 6 issue subscriptions: UK £48; overseas £65; students £25. Back issues: £5, subject to availability.

ISSN 2043-8060
Ireland's Dental magazine is designed and published by Connect Publications (Scotland) Ltd
Studio 4015, Mile End
Paisley PA1 1JS

Tel: +44(0)141 561 0300
info@connect communications.co.uk

Editor

Will Peakin editor@irelandsdentalmag.ie
Follow Ireland's Dental on X at: x.com/IrelandsDental

Positive pledges

The Irish Government has finally committed to improving the nation's oral health, but it must still be held to account

The Programme for Government published by Ireland's coalition government contains a range of measures that will support an improvement in the nation's oral health and overall health. The programme details several positive pledges for oral health, including a promise to recruit additional public dentists and increase the number of college places in dentistry.

It also contains the implementation of Smile agus Sláinte, its oral health policy announced five years ago, as a priority. Expanding access to the orthodontic scheme for children and strengthening the School Dental Programme, as outlined in the Programme for Government, will support this objective.

The Government should now also consider establishing prevention programmes for adults, focusing on non-communicable oral diseases, such as mouth cancer, to ensure a high quality of life for all. A developed public dental service is central to universal healthcare delivery.

The challenge is that the number of dentists in public services has dropped by 23% over the past 15 years, putting an enormous strain on existing services, adding to the burden of existing staff and leading to long waiting lists.

The Dentists Act 1985 is outdated and not fit for purpose, and the Government's pledge to update the Act is to be welcomed. There must also be legislation for the mandatory licensing and inspection of dental practices as the absence of such protocols opens the door to illicit services which may harm the general public.

The Act has also led to dentistry becoming out-of-step with all other regulated healthcare professions in not having a statutory continuous professional development (CPD) scheme. This would reflect the ongoing commitment of the profession to raising standards of dental care and ensuring that dental professionals remain up to date with the latest advances in oral healthcare, techniques and patient safety.

The recognition and regulation of additional dental specialities as outlined by the Government is also long overdue and would bring Ireland in to line with international standards. Its pledge to include a new Dental Treatment Service Scheme for Medical Card Holders is welcome and will be vital in the effort to enhance Ireland's oral health.

The Irish Dental Association has rightly pledged to continue its advocacy in the year ahead "pursuing constructive, policy-led engagement" with the new Minister for Health, Jennifer Carroll MacNeill. Ireland's new coalition Government must be held to the promises outlined in its programme.

It envisions a society where oral healthcare is accessible, affordable, effective and of a high international standard and remains committed to representing its membership and reflecting the patient experience. If Government is held to account in a constructive manner, it can deliver the changes that are necessary to realise a brighter future in oral health, maximising the input of public finances into the system to achieve better outcomes, which will improve the overall health and wellbeing of Irish society.

> "THE CHALLENGE IS THAT THE NUMBER OF DENTISTS IN PUBLIC SERVICES HAS DROPPED BY 23% OVER THE PAST 15 YEARS, PUTTING AN ENORMOUS STRAIN ON EXISTING SERVICES"

3M Health Care is now Solventum

Meet a better material for aesthetic, high-quality attachments

Experience the Difference

Clarity™ Attachment Material

NEW

It works with any aligner brand to create attachments with ease.

Flowable, but performs like a paste

The material dispenses like a flowable while staying in place like a paste—no slump or runnyness.

Virtually bubble-free

The proprietary syringe design dispenses material with virtually no bubbles, reducing the risk of attachment fractures, chipping or food entrapment.

Stain resistant

Designed to provide superior stain resistance from food and beverages, maintaining an excellent aesthetic appearance.

Ergonomic and precise

The proprietary syringe design supports greater accuracy, control and precision for optimal handling while eliminating waste.

Durable

Nano-filled material ensures long-term durability to maintain the attachments' shape integrity.

Request a FREE sample today

Solventum Dental Solutions

Clinician Support: +44 (0)1344 963421
Customer Service: +44 (0)1509 380094
Email: customsmilesuk@solventum.com

solventumorthodonticsemea
www.solventum.com

Dr Paul O'Dwyer BDS MSc (Healthcare Management)

Changes for the better

Ireland's new Government has said it will implement a series of measures to tackle the country's oral health crisis

As 2025 hurtles along, it is timely to take stock of some upcoming changes that might have a real impact on the dental landscape in Ireland.

Regular readers of this column will long be aware of the Dentists Act 1985 – which continues to be the foundation piece of legislation for the practice of dentistry and (provision of oral healthcare in general) in Ireland.

Our Dental Council of Ireland is charged with regulating the profession – and a look at the Dental Council's website will reveal the important Scope of Practice document. This lists the various roles and responsibilities of Dental Healthcare Professionals (DHP) including dental nurse, dental therapist, dental hygienist, dental technician, clinical dental technician and dentist.

Of note too, is that the guidance that the Scope of Practice provides has the triple-aim of safeguarding the health of the patient, promoting welfare of the community and maintaining the honour and integrity of the dental profession.

A cursory glance across our EU neighbours reveals that, according to the EU Stat website, the number of practising dentists per 100,000 inhabitants was generally within the range of 50 to 100; only Ireland was below this range, with 45.1 practising dentists per 100,000 inhabitants.

These are statistics with which we are all too familiar. So, what changes can we expect in 2025 that may change the landscape? With the recent election and installation of a new Government, comes a new Programme for Government. On page 89 of the programme, published on 23 January, it states that the Government will:

- Implement Smile agus Sláinte
- Hire more public dentists
- Agree a new Dental Treatment Service Scheme for medical card holders
- Expand access to the orthodontic scheme for children and strengthen the School Dental Programme
- Update the Dentists Act 1985
- Recognise and regulate more dental specialities.

The Irish Dental Association (IDA) has long advocated for more dentists, improved regulation, updating of legislation and increased recruitment of public dentists. In its 2023 workforce planning document – 'Providing Dental Care in Ireland: A Workforce Crisis' – the IDA also advocates a review of the dental register, increased dental training and a more modern approach to registration for non-EEA dentists, amongst other measures.

> "THE CREATION OF THE NEW DENTAL SCHOOL AT THE ROYAL COLLEGE OF SURGEONS IN IRELAND (RCSI) IS ONE MAJOR STEP IN THE RIGHT DIRECTION"

When we consider the above, it is the impact on the patient that becomes crystal clear. Flexible, affordable and timely access to dental care is a central theme running throughout all these documents.

The creation of the new Dental School at the Royal College of Surgeons in Ireland (RCSI) is one major step in the right direction. Announced in April last year, this new endeavour from the RCSI – itself a University of Medicine and Health Sciences – is set to see its first intake of undergraduate dental students in September this year.

The anticipated timely delivery of community-based training – through the expertise facilitated by partnering with the Peninsula Dental School (PDS) at the University of Plymouth – sees an innovative curriculum set to meet the needs of 21st century dental health professionals.

RCSI of course has a long history of providing dental training – with undergraduate training in place from 1877 to 1976. RCSI continues with post-graduate training with the Faculty of Dentistry – and the various Fellowship examinations also.

With a storied history and a modern approach to the delivery of oral healthcare, the RCSI's new dental school is advantageously placed to deliver much needed new dentists to the workforce. It is timely to also reflect that more than 90% of dentistry is delivered in the primary care/community setting – with the overwhelming majority of dentists working in a self-employed/SME context – such as readers of this column. The future development of our colleagues in dental nursing, hygiene, therapy and other areas is also on the 'to do' list – and one can only hope that this (and future) governments will address the growing needs of these critical support staff to reflect the evident increased demands of our growing (and ageing) population.

invis is expanding your dental portfolio.

With systems designed to educate dentists at every step, we provide first-class support to certification and beyond. Working with us means you will be able to gain from the unparalleled expertise that comes from having treated more than **18.9 million Invisalign patients[1]**.

Find out more at:
www.invisalign-go.co.uk

1. Data at Align Technology, as of September 30, 2021

invisalign go™

Irish Government pledges action on oral health

Programme for 2025 outlines key measures to make dental services more accessible

Changes are coming in oral health policy

THE IRISH Government has outlined its plans to tackle the nation's oral health crisis.

In its recently published programme for 2025, the Government said it intends to recruit more doctors, nurses, dentists and health and social care professionals, and reduce reliance on contract and agency workers. It said it will also increase the number of healthcare college places in nursing, medicine, dentistry, pharmacy and health and social care professions.

"This Government is committed to making dental services more accessible for everyone," said Simon Harris TD, the Minister for Health.

The Irish Government has pledged to:

- Implement Smile agus Sláinte, its oral health policy
- Hire more public dentists
- Agree a new Dental Treatment Service Scheme for medical card holders
- Expand access to the orthodontic scheme for children and strengthen the School Dental Programme
- Update the Dentists Act 1985
- Recognise and regulate more dental specialities.

"Smile agus Sláinte provides the guiding principles to transform our current oral healthcare service over the next eight years," said Harris. "Sláintecare is our long-term vision for building a better health service, through a joined–up approach, designed around the needs of people and providing services close to home. Smile agus Sláinte emphasises the same ideals: primary care, integrated oral and general health, and prevention.

"This keeps the focus on ensuring local access and continuity of care within a primary oral healthcare setting. The policy has two key goals: to provide the supports to enable every individual to achieve their personal best oral health and to reduce oral health inequalities across the population, by enabling vulnerable groups to access oral healthcare and improve their oral health.

"Smile agus Sláinte will facilitate better oral healthcare for everyone. It will support the provision of all levels of care, by appropriate healthcare professionals and in the most suitable settings. Just as importantly, it will support patient choice and access."

Octopus suckers in research first

TINY suction cups based on octopus suckers have been designed into 3D-printed dentures, helping them to stay in position. The research could help the 18% of the population who use a denture and the 350 million around the world who have no natural teeth at all. Many denture wearers are often reliant on denture adhesive, but this option is unhygienic and unpopular with users.

To improve the wearers' experience, an interdisciplinary team of scientists at King's College London explored how they could replicate in dentistry the same process which enables octopuses to stick to slippery surfaces. Octopuses have 'suction cups' on their tentacles which create a negative pressure and a vacuum, creating strong suction to fix them to rocks.

The team theorised that similar suckers could be added to dentures, allowing them to fix to the soft mucosa of the mouth. They designed 3D-printed models using computer-aided design (CAD) of upper and lower dentures. When the models were analysed, they showed greater retention than standard dentures – though, thankfully, not so strong that users could not remove them from their mouths entirely. The models had twice the amount of retention as normal dentures.

The suction cups are a step forward

The scientists then explored how chemical changes could be used to help fix dentures in place. With dentures made from plastic, they showed how covering them with a thin lining of keratin – the same protein found in skin and hair – forms a chemical bond with the keratin of the skin in the mouth.

Dr Sherif Elsharkawy, lead author, said: "I first had the idea to replicate sticky surfaces in nature while biting into a peach. I noticed how the furry skin stuck to the palate of my mouth and decided to investigate other sticky surfaces in nature. Octopus suckers seemed like the perfect place to start. This research bridges nature and technology to tackle a long-standing challenge for denture wearers."

NSK
Create it

Implantology and Oral Surgery

Go Beyond!

RELIABILITY & CONNECTIVITY

Implant/Oral Surgery Micromotor System

- Stylish design with compact motor
- Advanced high-resolution LED optics significantly improves visibility
- Simplified procedures - Control both a Surgic Pro2 and also the new VarioSurg 4 ultrasonic bone surgery system with one wireless foot control
- Optional integration of NSK's Osseo 100+ ISQ device

I have recently joined NSK and have in-depth knowledge of the NSK Surgic Pro range from my previous roles and look forward to discussing this and any other NSK products with you.

Stephanie Gilliland
NSK Territory Manager Ireland

Osseo 100+
Osseointegration
Monitoring Device

2 FREE ADDITIONAL 20:1 CONTRA-ANGLES

OR A FREE Osseo 100+

Full offer details

NSK United Kingdom LTD www.mynsk.co.uk
Office 4, Gateway 1000 Arlington Business Park, Whittle Way Stevenage, SG1 2FP, UK - info@nsk-uk.com - 0800 6341909
Call Stephanie Gilliland on **+44 (0)7435 840097** or email **sgilliland@nsk-uk.com**

Link found between gum disease and brain function

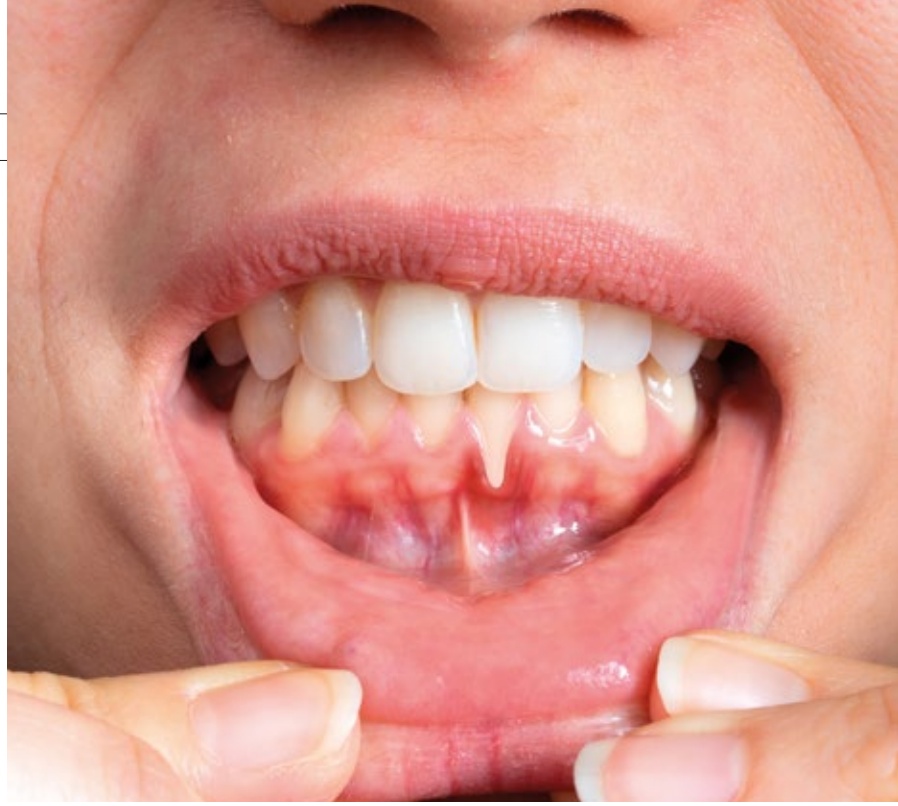
Gum disease appears to disrupt brain activity, potentially increasing cognitive decline

PEOPLE with gum disease can experience altered connections between different brain regions, compared with people with good oral health, MRI scans have shown in a new study of middle-aged and elderly people[1].

"These differences suggest that periodontitis may negatively affect brain function even in normal cognition," concluded the research team led by Xiaoshu Li, an Associate Professor of Radiology with the First Affiliated Hospital of Anhui Medical University in Hefei, China.

The results also indicate that "periodontitis might be a potential risk factor for brain damage and provides a theoretical clue and a new treatment target for the early prevention of Alzheimer's disease," the team wrote in its report, published in the *Journal of Periodontology*.

For the study, researchers studied the oral health and brain activity of 51 people, including 11 with healthy gums, 14 with mild gum disease, and 26 with moderate-to-severe gum disease. The people with moderate-to-severe gum disease displayed changes in connections between and within different brain regions, the researchers found. Overall, gum disease was associated with impairment of network function within the brain.



Gum disease can affect brain performance

"To the best of our knowledge, the present study is the first to compare brain function changes in elderly individuals with normal cognition with different severity levels of periodontitis from the perspective of brain networks," the researchers wrote.

These changes might be caused by brain inflammation promoted by gum infections.

Bacteria from diseased gums can invade brain tissues, promoting an immune response, the researchers said.

"These findings not only enrich our understanding of periodontitis but also contribute to the development of potential imaging biomarkers and may provide new approaches for the early prevention and treatment of AD [Alzheimer's disease]," the researchers wrote.

[1]aap.onlinelibrary.wiley.com/doi/10.1002/JPER.24-0264

Mozart strikes a chord in dental schools

TWO studies[1] have shown that low-tempo background sound, such as classical music, can significantly enhance the learning experience and performance of dental students during preclinical training.

At the University of Eastern Finland, researchers found that low-tempo background music during preclinical exercises led to reduced stress levels, improved cavity preparation quality and increased motivation among students.

A study by the Gulhane Faculty of Dental Medicine in Ankara, Turkey, involving students using virtual reality and haptic technology for endodontic preclinical training showed that those who listened to Mozart during cavity preparation process experienced significantly decreased stress levels and demonstrated enhanced precision in dental procedures.

The findings suggest that integrating classical music into dental training programmes could:

- Create a more relaxed learning environment
- Provide an effective tool for managing student anxiety during challenging procedures
- Potentially enhance manual dexterity and concentration, leading to better preclinical and clinical outcomes.

A spokesperson said: "While further research is needed, these initial results present an intriguing avenue for innovation in dental education methodologies.

"As the field evolves, the integration of music may prove to be a valuable addition to the dental curriculum, potentially improving both the educational experience and the quality of care provided by future dental professionals."

[1]https://irispublishers.com/ojdoh/fulltext/does-classical-music-really-rock-and-roll.ID.000685.php

Denplan.

The UK's leading dental payment plan provider

Comprehensive support

- Business
- Clinical
- Patient
- Marketing
- Practice

CPD accredited Denplan Academy

Practice ownership

Events & hospitality

Denplan
Part of Simplyhealth

Certified B Corporation

Start your Denplan journey at:
denplan.co.uk/dentists

Our philosophy is to provide each patient with the smile of their dreams. We use the latest in dental technology to give you your most confident smile in under two hours.

Feeling conscious about your teeth can be damaging to one's self-confidence. Our Signature Smile service can help to solve many areas of concern and are fantastic value for money.

Innovative technology

Traditional approaches to providing composite bonding or veneers are technically demanding, technique sensitive and time consuming. However, using specialised software, we can now provide reproducible smile designs that allow us to obtain high quality and rapid results every time.

With this in mind, we would like to introduce "Signature Smile". This treatment provides you with up to 10 composite veneers, created using facially driven smile design principles. You can even try out the look and feel of your new smile with the 'smile trial' template.

Benefits of Signature Smile

Pain free and no local anaesthetic – due to 95% of cases not requiring any adjustment to the teeth or tooth substance, there is no requirement for injections

- Quick turnaround – this treatment is rapid and can be carried out in 90 minutes
- Patient input – you can tell your dentist what you are looking to improve in your smile, which is incorporated into the design and highlighted during the 'smile trial'
- High quality – through our Signature Smile stents, your dentist can faithfully reproduce your new smile design into your mouth
- Inexpensive – compared to porcelain restorations, Signature Smile can give you results similar to porcelain veneers for a fraction of the price
- Repairability – if you incur any damage to your Signature Smile teeth, it is very straight forward to repair your original specification

Introducing Mary Catherine

Mary Catherine is an Enniskillen native, who was initially drawn to dentistry because of her interest in art and design. After graduating from undergraduate study at Queens University Belfast, Mary Catherine moved to Edinburgh where spent time honing advanced skills within specialist departments; specifically, special care dentistry, paediatric dentistry, oral and maxillofacial surgery and restorative dentistry.

Following training in Restorative and Surgical specialities, Mary Catherine provides advanced dental treatment such as dental implants, surgical extractions, crown and bridgework. At present her most popular treatment is the Align, Brighten and Contour procedure, which entails Invisalign, Whitening and Composite Bonding, a skill that she honed by learning from Dr Monik Vasant.

Building on a knowledge base of surgical and restorative techniques, Mary Catherine is currently undertaking training in dental implantology, and is on course to complete a postgraduate diploma in 2023. She is also studying for a master's degree in advanced aesthetic restorative dentistry, accredited by the University of Portsmouth.

028 9009 7625 • reception.bluesky@portmandental.co.uk
www.blueskydentist.com

Ireland and UK Colleges update specialties

New examinations to be introduced in autumn 2026

THE FIRST Chair of the Dental Specialty Fellowship Examinations Board has been appointed.

The appointment of Professor Sondos Albadri follows an agreement between four Royal Colleges in the UK and Ireland to work together on a new, joined-up approach to assessment covering 10 dental specialties.

New examinations, which will be introduced in autumn 2026, will support trainees in demonstrating the specialist knowledge, skills and capabilities required for progression.

Professor Albadri, an honorary consultant in Paediatric Dentistry and Vice Dean at the University of, will support the continued development of the new exams, ensuring they meet General Dental Council (GDC) principles and standards, and evolve to meet the changing needs of dental training and assessment.

"The next few years present an exciting opportunity to modernise dental specialty training.

"I am grateful to be given the opportunity to support the development of an assessment strategy that is fair, inclusive, robust and agile.

"There is a lot of change on the horizon, however I am excited to harness the opportunities that come with change and will be working with the specialties and the trainees ensuring their voice is heard, and that their interest is at the heart of this change."

The Royal College of Physicians and Surgeons of Glasgow and the Royal College of Surgeons of Edinburgh, England and Ireland announced they are working together to introduce an Intercollegiate approach to assessment in May last year.

Currently, most dental specialties have multiple versions of the specialty exam, administered by individual royal colleges, or a combination of colleges.

Having a single exam for each specialty will enable consistency for trainees across and will provide a clearer training pathway for all specialties.

Ireland and UK colleges work together, page 24

Confidential support service for dentists

IRELAND'S Dental Council has highlighted a strictly confidential support service for dentists and other medical professionals.

The Practitioner Health Matters Programme (PHMP) in Ireland offers a service to doctors, dentists and pharmacists. It has a confidential telephone line and email contact point for an expert clinical advice service. The programme welcomes contact from any individual whether they are the person in need of help, a family member, a colleague or a friend.

"Practitioners can go through difficult periods in their lives and may experience stress, burnout, depression, anxiety or other conditions such as alcohol or drug misuse," said a spokesperson. "Seeking confidential medical help is the most appropriate way to deal with these conditions.

"Adverse incidents or complaints can also be very stressful for practitioners. They can impact negatively on mental health with feelings of incompetence, isolation, and guilt to name but a few. In some instances, the practitioner can become the second victim and can feel isolated and alone.

"Often these are temporary feelings but talking with a professional in a confidential setting can help with processing these understandably distressing emotions. PHMP can offer support in these."

The PHMP is fully independent and separate from the Dental Council, but its work has been endorsed by the Council and its work is supported by representative organisations and training bodies.

Contact the PHMP at confidential@practitionerhealth.ie or by calling 085 7601274.

For more information, visit practitionerhealth.ie

Northern Ireland dental system reform on the agenda

Growing the dental workforce and improving the population's oral health

REPRESENTATIVES of Northern Ireland's dental profession have met Mike Nesbitt MLA, the Health Minister, to discuss reform of the health system.

Addressing the true cost of providing care at practice level, including additional cost from imminent National Insurance and National Living Wage increases, and replacing a "flawed" approach to expenses were laid out in their case for reforming General Dental Services (GDS).

They emphasised that goodwill among General Dental Practitioners "has run out", evidenced by the move away from Health Service (HS) dentistry underway. They added the imperative of meaningful action by the Department to address significant financial pressures on practices, and to start to rebuild confidence in HS dentistry.

The Minister cited the forthcoming Cost-of-Service Review, which he said will be followed by negotiations. He also referred to short-term support measures for GDS in 2025-26 which the department says will help to stabilise and maintain HS dentistry. The Minister agreed to instruct officials to look at the approach to determining uplift to expenses which coincides with the Review Body on Doctors' and Dentists' Remuneration (DDRB) process.

The delegation urged the Minister in the context of GDS 2025-26 to ringfence all underspend within the GDS budget and that it be re-invested into dentistry rather than be lost from the service, thereby maximising GDS activity and spend.

The Minister committed to "make it his business" to look into issues relating to the GDS budget further. He also accepted the delegation's request that a twin-track approach of prioritising financial sustainability of practices alongside maximising patient outcomes should drive forward GDS reform.

A delegation spokesperson said: "Ultimately, whether dental services in Northern Ireland will be in a better place by March 2027 - the end of this Assembly mandate - remains to be seen. What is clear is we have pointed out the key areas where reform is needed. Dental system reform is long overdue; we believe it should be an integral part of the Minister's approach to wider health and social care reform."

We hope this constructive meeting translates into a more informed assessment of what dentistry requires, and we soon see tangible outcomes aimed at putting Health Service dentistry across all crafts on the road to a better future.

First WHO global oral health meeting

THE WORLD Health Organization held its first global meeting on oral health last November.

The meeting in Bangkok was regarded as key in preparing for the 4th UN High-Level Meeting on NCDs (non-communicable diseases) to be held in September.

The aims of the meeting were: to strengthen the capacity of ministries of health to fulfil the commitments they made in the World Heath Assembly's 2021 resolution on oral health (WHA74.5) and accelerate implementation of the Global Oral Health Action Plan 2023-2030 as part of broader NCD and UHC (universal health care) agendas.

The 89-page document 'Global strategy and action plan on oral health 2023-2030' had been published earlier in 2024. The meeting fallowed discussion on this document and urged member states to take the many action points forward and, second, to agree the 'Bangkok declaration' which would inform preparations for the 4th UN high-level meeting on NCDs so as to ensure better recognition and integration of oral diseases in the future global NCD agenda.

The meeting considered the six strategic objectives given in the WHO document:

› Oral health governance: for example, ensuring that oral health is represented within the national governmental health agency in member states
› Oral health: promotion and oral disease prevention
› Health workforce
› Oral health care: ensuring universal health care for oral health
› Oral health information systems
› Oral health research agendas.

DENTAL ADVISOR ++++

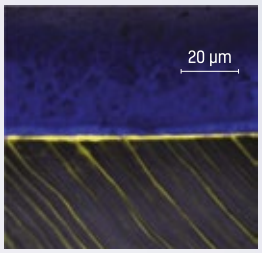
27 CLINICAL EVALUATORS
468 TOTAL USES
86% CLINICAL RATING

THE FUTURE OF COMPOSITES

SDI | STELA

DA RESEARCH AWARD 2024

- ✔ Unlimited depth of cure (self cure)
- ✔ Gap-free interface
- ✔ Only 2 steps: 15 sec prep
- ✔ High strength
- ✔ Choose: capsule or automix

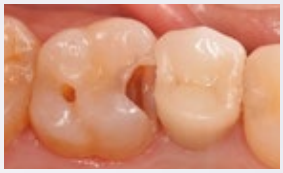


STELA GAP-FREE BONDING INTERFACE

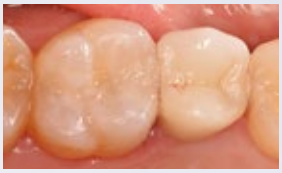
A confocal micrograph of a gap-free Stela-dentine interface. Note the penetration depth of Stela Primer (yellow) within the dentine tubules.

Source: Dr Salvatore Sauro

BEFORE



AFTER



Photos courtesy of Prof Dr Rocio Lazo (Peru)

Find out more

SDI | YOUR SMILE. OUR VISION.

Call Amy on
+ 44 083 806 0228
(Republic of Ireland)
Amy.costigan@sdi.com.au

Call Lesley on
07887 930 923
(Northern Ireland)
Lesley.Mckenzie@sdi.com.au

Flossing once a week could reduce the risk of stroke

FLOSSING once a week may be linked to a lower risk of stroke caused by a blood clot blocking brain blood flow and irregular heartbeats, according to a preliminary study to be presented at the American Stroke Association's International Stroke Conference 2025.

"A recent global health report revealed that oral diseases — such as untreated tooth decay and gum disease — affected 3.5 billion people in 2022, making them the most widespread health conditions," said Souvik Sen, the study's lead author.

"We aimed to determine which oral hygiene behavior — dental flossing, brushing or regular dentist visits — has the greatest impact on stroke prevention."

The study assessed the home use of dental floss through a structured questionnaire of more than 6,000 people. Among those who reported flossing, 4,092 had not experienced a stroke, and 4,050 had not been diagnosed with an irregular heartbeat known as atrial fibrillation.

The analysis found that flossing was associated with a 22% lower risk of ischemic stroke, 44% lower risk of cardioembolic stroke (blood clots traveling from the heart) and 12% lower risk of an irregular heartbeat.

The associated lower risk was independent of regular brushing and routine dental visits or other oral hygiene behaviors.

Flossing is a healthy habit

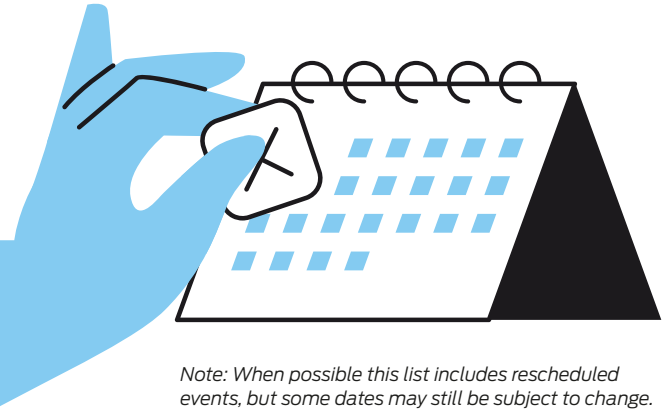
Drill-free treatment financing announced

vVARDIS, a Swiss dental company, and OrbiMed, a healthcare investment firm, have announced the closing of a $35 million financing deal to support the dental company's growth initiatives and global expansion.

The company (eu.vvardis.com) is a developer and manufacturer of unique dental products under the Curodont brand, including its innovative drill-free treatment for early tooth decay. The products allow dental practices to treat early tooth decay in five to 10 minutes, saving dental professionals and patients hours of chair time. Last year's rapid expansion of sales, with an initial focus on the US, already has thousands of dental clinics using the product and more than 300,000 teeth treated in 2024.

It's technology has been incorporated in lectures of universities in the US and Europe as a new standard of care for the treatment of early tooth decay. Drs Haley and Goly Abivardi, founders of vVARDIS, said in a joint statement: "We are thrilled about the partnership with OrbiMed. The funding and the expertise they bring will enhance our ability to better serve dental professionals and patients and to fulfil our vision to create a world where treatment of early decay is pain-free, regenerative and accessible to everyone." Matthew Rizzo, General Partner at OrbiMed, added: "We are confident that vVARDIS has the scientific knowledge and capabilities to become a global powerhouse in the dental market."

DATES FOR YOUR DIARY



Note: When possible this list includes rescheduled events, but some dates may still be subject to change.

2025

15-17 MAY
IDA Annual Conference
Lyrath Estate, Kilkenny
www.dentist.ie

20-21 JUNE
Scottish Dental Show
Braehead Arena, Glasgow
sdshow.co.uk

20-21 JUNE
Dental Golf Tour Ireland
Adare Manor, Limerick
tinyurl.com/8zbtzefb

20-22 AUGUST
ADEE Annual Meeting
Dublin Dental University Hospital
adee.org/annual-meetings/dublin-2025

23-24 AUGUST
International Conference on Oral Dermatology and Oral Pathology
Dublin, venue tbc
waset.org/oral-dermatology-and-oral-pathology-conference-in-august-2025-in-dublin

Practice Management Software

We Care About You

... and how **YOUR** cloud-based practice performs.

HALF-PRICE
3 months set-up.

In-House SUPPORT

Our services include the below:

CLOUD based

AWS Platform

In-House TECH-TEAM

TREATMENT Plan Comparison

ANYTIME ANYWHERE Usability

NO-BOTS Personal Service

KPI'S/DATA Analytics

REPORTS 100+

CLOUD based

UK-IRELAND Team based

Charting+ and Perio Charting

Patient Portal

Empower Your Patients

Design & Sign

Design Your Own Consent Forms

www.aerona.com
Cloud DPMS

- Integration with a wide range of X-Ray Software.
- Integration with communicative platforms e.g. DAN (Dental Audio Notes)
- Integration with various financial payment providers.
- Continual staff training and access to application information.

... and much more

Tel: +44 (0)28 7000 2040 (ROI)
Tel: 028 7000 2040 (UK)

aerona dental

Eurus | S6

Discreet doctors table **positioning reduces patient anxiety** and our **folding legrest** enables **closer consultations**

Experience our **Eurus treatment centres** on **Stand H31** at the **BDIA Show London March 14th & 15th**

Belmont

Perfecting the art of dentistry

belmontdental.co.uk

DENTAL EDUCATION CENTRE GETS EQUIPPED

RCSI and Henry Schein sign agreement for supply of state-of-the-art dental education equipment

The Royal College of Surgery Ireland's School of Dentistry has entered into an agreement with Henry Schein, the world's largest provider of health care solutions to dental and medical practitioners, to provide a wide range of equipment for students enrolled in the university's new Bachelor of Dental Surgery programme. Through Henry Schein Ireland, the company will supply world-class dental equipment to RCSI's Dental Education Centre in Sandyford, Dublin, which is currently under construction, and will welcome its first students in September.

The centre will have with an extensive range of dental equipment, such as dental chairs and state-of-the-art patient simulators, supplied and installed by Henry Schein Ireland, providing a protected environment where clinical skills can be acquired and developed.

It will also host a community-based clinical facility, which will include 12 dental chairs for treating patients. The centre's simulation unit will have 55 phantom heads, and a dental laboratory to support the dental students' learning journey.

Professor Albert Leung, Head of the RCSI School of Dentistry, said: "We are delighted to enter into this agreement with Henry Schein Ireland. We are committed to ensuring our students have the opportunity to be trained using state-of-the-art equipment in an excellent environment during their education. Our clinical simulation facilities will be amongst the most advanced in Ireland, reflecting our ambition to deliver a world-class education experience for our students."

The Bachelor of Dental Surgery (BDS) at RCSI will be the first community-based dentistry degree programme in Ireland. This approach reflects a major international trend in dentistry and other healthcare professions, with clinical training shifting from traditional dental hospitals to community settings. The programme, which has been awarded funding from the Higher Education Authority for 20 European Union student places in the first instance, will significantly increase the number of dentistry training places available nationally and expand access to dental services.

Its curriculum, which has been developed in partnership with the award-winning Peninsula Dental School at the University of Plymouth, will use a blend of teaching and learning methods, combining clinical skills training with the acquisition of knowledge, skills and professional attributes.

"We are honoured that RCSI chose Henry Schein Ireland to supply and install the dental equipment required by RCSI to operate the new Dental Education Centre in Sandyford for the new BDS programme," said Paddy Bolger, Managing Director of Henry Schein in Ireland. "We are convinced that our team's expertise and dedication, and the close collaboration with RCSI and the building contractors, will help to ensure a successful programme in Sandyford, as well as the next project at Connolly Hospital."

RCSI has a strong heritage in dental education and training, having run an undergraduate dentistry programme between 1878 and 1977, granting a Licentiate in Dental Surgery (LDSRCSI) practicing qualification, and appointing the first Professor of Dentistry in England or Ireland in 1884.

> "WE ARE COMMITTED TO ENSURING OUR STUDENTS HAVE THE OPPORTUNITY TO BE TRAINED USING STATE-OF-THE-ART EQUIPMENT"
>
> – PROFESSOR ALBERT LEUNG

Paddy Bolger (left), Managing Director of Henry Schein in Ireland, with Professor Albert Leung, Head of the RCSI School of Dentistry.

Picture: Conor Healy, Picture It Photography.

WORDS WILL PEAKIN

PUSHING THE BOUNDARIES

Faculty of Dentistry's session was a key highlight of the RCSI Annual Charter Meeting

WORDS
WILL PEAKIN

The RCSI Annual Charter Meeting 2025 took place on 4-8 February at the Royal College of Surgeons in Ireland (RCSI) in Dublin, with the theme of 'Next Generation Surgery'. Delegates explored the future of robotic surgery, engaged with cutting-edge technology in the RCSI's new Robotic Learning Village and heard from top experts on the evolving landscape of surgical practice.

Throughout the week, the meeting highlighted the achievements of early-career surgeons and explored the growing impact of transparency, societal expectations and changing healthcare governance on professional practice in surgery.

Professor Fergal J. O'Brien, RCSI Deputy Vice Chancellor for Research and Innovation, delivered the 100th Colles Lecture, 'From Colles' Fracture to Gene-Activated Biomaterials: A Journey Through Tissue Engineering at RCSI'. Professor O'Brien and his team are at the forefront of designing implants and biomaterials that will shape the next generation of surgical practice.

RCSI Charter Week took place at the College's St Stephen's Green campus in Dublin, commemorating the anniversary of the granting of the Royal Charter to RCSI in 1784. RCSI President, Professor Deborah McNamara, welcomed delegates as the meeting began, saying: "Our focus this year is on the future of surgical practice. We are exploring the technological advances in surgery and the evolving expectations of patients and healthcare systems. I'm particularly excited to hear from early-career surgeons who represent the next generation of surgical leaders." The meeting opened with the National Office of Clinical Audit (NOCA) conference, themed 'Data-Driven Healthcare: Planning, Delivering, Improving'. The following day saw the National Clinical Programmes in Surgery, Trauma and Orthopaedics, and Emergency Medicine hosted their annual quality improvement and innovations conference.

The annual Johnson & Johnson Lecture was delivered by Dr Carla Pugh, Professor of Surgery at Stanford University, on 'Precision Learning & Data Sharing Through Wearable Technology. What's AI Got to Do With It?'

The week also included the 35th Annual Videosurgery Meeting and a keynote session on 'Trust and Truth in Healthcare'. Professor Deirdre Madden, Professor of Law at University College Cork, delivered the 32nd Carmichael Lecture. The 100th Colles Lecture followed a symposium on 'Pioneering the Future of Surgery: Medical Technology Innovation'.

Parallel sessions spanned various surgical specialties, including general surgery in childhood, trauma and orthopaedic surgery, neurosurgery, ophthalmic surgery and more.

The Irish Surgical Training Group (ISTG) meeting wrapped up the Annual Charter Meeting, followed by the Bosco O'Mahony Lecture delivered by Ms Dilly Little, entitled 'Grasp the Nettle'. The final day concluded with the first-ever RCSI Family Fun Day, offering a range of activities for more than 40 families, including face painting, a giant game of Operation and tours of the RCSI SIM Centre.

A key highlight of the week was the Faculty of Dentistry Session, focusing on 'Pushing the Boundaries in Dentistry'.

This session provided valuable insights into various aspects of dentistry, from advanced treatment techniques to the integration of new technologies. It underscored the importance of staying informed and adapting to the evolving landscape of dental care.

Dr Kate Farrell, Vice-Dean of the Faculty of Dentistry, RCSI, chaired the session, which included the following presentations:

- Osteoradionecrosis – Current Concepts and Management by Dr David McGoldrick, Consultant Oral & Maxillofacial Surgeon, discussing the latest concepts in the pathophysiology, diagnosis, and management of osteoradionecrosis.

- LPRF (Leukocyte and Platelet Rich Fibrin) – A Game Changer in Periodontics and Implant Dentistry by Dr Rory Maguire, Periodontics and Implant Dentistry Specialist, highlighting the benefits of LPRF in enhancing healing and improving clinical outcomes.
- The Orthodontic Management of the Cleft Patient by Dr Tim McSwiney, Consultant Orthodontist, outlining the interdisciplinary approach required for managing orthodontic treatment in cleft patients.
- The Evolution of Clinical Photography – The Past, the Present and the Future by Dr Patrick J. Byrne, Periodontics Specialist, exploring the history, current practices, and future trends in clinical photography.

The session concluded with a Q&A segment, allowing attendees to engage with the speakers and discuss the topics presented.

Following the Faculty of Dentistry Session, Professor Christopher Lynch, Dean of the Faculty of Dentistry, joined the Deans of the Faculty of Nursing and Midwifery, Faculty of Radiologists and Radiation Oncologists, and Faculty of Sports and Exercise Medicine for a 'Dean's on the Couch' combined faculties session, featuring a series of engaging questions directed at the Deans of the faculties at RCSI.

This session provided a comprehensive overview of the Deans' roles, their faculties' unique contributions, and their visions for the future.

It also offered personal insights and practical advice, making it a valuable and engaging discussion for all attendees.

Commenting on the Faculty's involvement in the RCSI Annual Charter Meeting 2025, Professor Lynch said: "The Faculty of Dentistry was honoured to participate in RCSI's flagship event, to showcase the evolving landscape of dental care.

"I would like to thank our Vice-Dean, Dr Kate Farrell for chairing the session and the speakers for their insightful presentations and contributions. Their expertise and dedication have provided invaluable knowledge and inspiration to all attendees."

L-R Professor Christopher Lynch, Dean, Faculty of Dentistry, Professor Mark White, Executive Dean, Faculty of Nursing & Midwifery, Ms Mary Godfrey, Vice-Dean, Faculty of Nursing & Midwifery, and Professor Mick Molloy, Dean, Faculty of Sports & Exercise Medicine.

RCSI Honorary Fellowships awarded

Professor Rowan Parks, President, Royal College of Surgeons of Edinburgh (RCSEd) and Dr Clifford Y. Ko, Medical Director, Division of Research and Optimal Patient Care at the American College of Surgeons (ACS) were awarded Honorary Fellowships of the Royal College of Surgeons in Ireland at the 2025 Charter Day Dinner.

Honorary Fellowship of RCSI is the highest distinction the College bestows, recognising outstanding achievements in surgery and beyond.

Professor Rowan Parks is a distinguished leader in surgical education and research. A graduate of Queen's University Belfast, he trained in Northern Ireland before specialising in hepato-pancreato-biliary (HPB) surgery at the Royal Infirmary of Edinburgh. A committed educator, he has held senior roles in NHS Education for Scotland and played a pivotal role in surgical training and workforce development.

Currently President of RCSEd, Professor Parks has also served as General Secretary of the International Hepato-Pancreato-Biliary Association and has led key surgical organisations, including the Association of Surgeons of Great Britain and Ireland. His contributions to research include more than 180 published papers, 48 book chapters, and 11 textbooks. He has been awarded honorary fellowships from multiple prestigious surgical colleges worldwide.

Dr Clifford Y. Ko is a leading authority on surgical quality improvement and patient safety. A double-boarded surgeon, he specialises in colorectal diseases and is a Professor, Vice Chair of Surgery, and Chief of Colorectal Surgery at the David Geffen School of Medicine at UCLA, as well as a Professor of Health Services Research at the UCLA School of Public Health.

As Director of the Division of Research and Optimal Patient Care at ACS, he oversees initiatives such as the National Surgical Quality Improvement Programme and the Commission on Cancer, shaping surgical standards in the US and globally.

A highly respected researcher, Dr Ko has published over 500 peer-reviewed articles in top medical journals, with his work influencing national policies and performance measures in healthcare. His commitment to mentorship and education has guided the careers of numerous leading academics and clinicians.

LEARNING ON THE SHANNON

HSE's dental surgeons meet for two-days of lectures and workshops

WORDS
WILL PEAKIN

The Irish Health Service Executive's Dental Surgeons Group Annual Seminar was held at the Radisson Blu Hotel on the banks of the River Shannon in Athlone, Co Westmeath, last autumn.

It featured an outstanding line-up of speakers and workshops covering a wide range of clinical and practice management topics. After a welcome from Dr Maura Cuffe, Group President, Dr Grace Kelly addressed the topic of dental anxiety management.

Dr Kelly's presentation aimed to improve dentists' confidence in the use of behavioural support, with tips on how to recognise and assess anxious patients, the development of an appropriate treatment plan, and techniques to ease anxiety, both in the surgery and for patients to use at home to prepare for their appointment.

Professor Siobhan Barry was up next with a two-part presentation on paediatric dental trauma in both the primary and permanent dentitions.

She took the unique approach of using popular fairytales to make very practical points, with plenty of detailed case studies to illustrate the issues and recommended treatment options (as well as when not to treat). Professor Barry also discussed safeguarding issues, urging colleagues to raise any concerns they might have regarding dental or other neglect, or abuse.

Dr Kate Farrell addressed the topic of infection, particularly in paediatric patients. She discussed the presentation of infection in a paediatric population, which can be very different to adult populations.

Dr Farrell outlined how to carry out an infection work-up, and appropriate treatment approaches, recommending both the Paediatric Early Warning Scale (PEWS), and the Clinibee app as sources of further information and advice.

After lunch, there was a change of emphasis, as Dr Noel Kavanagh took on the sometimes fraught topic of avoiding complaints. He stated that 80% of the dentolegal cases that Dental Protection deals with originate in poor communication, and used the acronym CLEAR (Connect, Listen, Empathise, Ask, Review) as a model to prevent and manage complaints.

Dr Shane Higgins then took the conference back to clinical, with a presentation on anterior open bite malocclusion. He used a range of case studies to demonstrate the various aetiologies of this condition, and its management, including assessment, arch alignment, orthodontics and, where appropriate, the combination of orthodontics and orthognathic surgery. He said that aetiology often dictates treatment and determines prognosis, and recommended **www.yourjawsurgery.com** as a resource for patients.

Practical applications

Dr Edward Cotter began proceedings on the second day, with an interactive presentation on Maryland bridges, which he said were an extremely versatile tool, and a great ally for dentists.

Maryland bridges can act as either interim or definitive restorations, and Dr Cotter used case studies (and audience participation) to illustrate their many possible applications, as well as offering helpful guidance on how to ensure success.

Dr Catherine McKinley followed with a fascinating presentation on the tongue and restricted oral frenulum. She spoke of the importance of an empathetic multidisciplinary approach to determine whether intervention is needed. She also discussed functional assessment and treatment of older patients. Her take home message was: think of the role of the tongue, do not leap to frenectomy as a treatment, and focus on collaborative care.

Dr Hugh Byrne took delegates through optimising adhesive principles of the biomimetic approach. He said that the goal should always be to restore the tooth in a way that has regard for the natural tooth and natural tooth function, and does not make things worse (restoration failure, he said, is preferable to tooth failure). He looked at the science and evidence behind restorative principles and outlined his approach.

The final speaker on Friday was Dr Brian McClean, who took things from the clinical to the personal with a talk on building resilience. He outlined breathing techniques that activate the parasympathetic nervous system, helping people to rest and recharge, and described two ways to become more resilient: learning to name what we are feeling in order to start to address it; and, using mindfulness to focus our attention and take the time to stop.

In the afternoon, delegates had the opportunity to attend three clinical workshops:

- Dr Andrew Bolas presented on hints and tips to get the most out of film holders.
- Dr Isabel Olegário focused on restorative materials in paediatric dentistry.
- Drs Catherine Gallagher and Caroline McCarthy covered medical emergencies.

Seminar programme: tinyurl.com/3yb7aczn

BEECHVIEW
DENTAL CARE

Welcoming referrals in:

- Oral surgery
- Dental implants
- Surgical extractions
- Bone grafting

Dr Jordi Marques Guasch
DDS,MSc

Implantologist and Oral Surgeon
GDC: 263032

Jordi graduated as a dentist at International University of Catalunya (UIC). He also completed a Master's Degree in Clinical Research and a three-year International Master's Degree in Oral Surgery and Implantology at the same institution. Since then, he has collaborated with several clinics in London, Spain, and recently Belfast. Jordi's clinical practice is in the field of implant dentistry. He has significant experience and expertise in the treatment of bone tissue regeneration, implant related surgical procedures, as well as soft tissue management. Jordi is a university professor and a clinical lecturer at UIC where he teaches only masters and postgraduate students from the Oral and Maxillofacial Surgery department. He regularly attends congresses, lectures, and conferences, on all aspects of implantology to maintain his knowledge in this field. Jordi's aim is to always make patients' oral surgery experiences as pleasant as possible. In his spare time, he enjoys practicing a variety of sports and travelling.

If you would like to discuss referring a patient to **Dr Marques,** please contact our friendly reception team on **028 9024 3107,** visit us at **cosmeticdentists-belfast.co.uk** or email **reception.beechview@portmandental.co.uk**

Beechview Dental Care, 451-453 Falls Rd, Belfast, BT12 6DD

a part of PORTMAN dental care

IRELAND AND UK COLLEGES WORK TOGETHER

New examinations covering 10 dental specialties will be introduced in autumn 2026

WORDS
WILL PEAKIN

Professor Sondos Albadri, an honorary consultant in Paediatric Dentistry and Vice Dean at Liverpool University, has been appointed as the first Chair of the Dental Specialty Fellowship Examinations Board.

The appointment follows an agreement between the four Royal Colleges in the UK and Ireland to work together on a new, joined-up approach to assessment covering 10 dental specialties.

New examinations, which will be introduced in autumn 2026, will support trainees in demonstrating the specialist knowledge, skills and capabilities required for progression. Professor Albadri will support the continued development of the new exams in the UK and internationally, ensuring they meet General Dental Council (GDC) principles and standards, and evolve to meet the changing needs of dental training and assessment.

She said: "The next few years present an exciting opportunity to modernise dental specialty training. I am grateful to be given the opportunity to support the development of an assessment strategy that is fair, inclusive, robust and agile. There is a lot of change on the horizon, however, I am excited to harness the opportunities that come with change and will be working with the specialties and the trainees ensuring their voice is heard, and that their interest is at the heart of this change."

Professor Albadri is Vice Dean for Research and Postgraduate Studies at Liverpool University's School of Dentistry. Her research focuses on improving the quality of clinical outcomes, care pathways, and improving patients' outcomes and experience. She has a special interest in dental trauma and patients with complex health conditions.

Clinically, she works at Liverpool University Dental Hospital within Liverpool and Alder Hey Children's Hospital, where she is Interim Co-Chair of the specialist managed clinical network of paediatric dentistry in the region.

At the University, she is also the lead for integrated clinical academic training which includes recruitment and career development. This role involves continuous collaborative work with a wide range of organisations including NIHR and Health Education England.

She is a Past President of the British Society of Paediatric Dentistry and serves as the UK Councillor on the European Academy in Paediatric Dentistry and a member of their Educational Committee.

Christine Goodall, Dean and Vice President Dental Royal College of Physicians and Surgeons of Glasgow, said: "On behalf of the four Colleges, I'm delighted to welcome Professor Albadri as Chair of the Dental Specialty Examinations Board. Professor Albadri has a wealth of experience – both clinically and in the research environment, as well as in training and education. We look forward to working with her to develop a clearer training pathway for dentists in the year ahead."

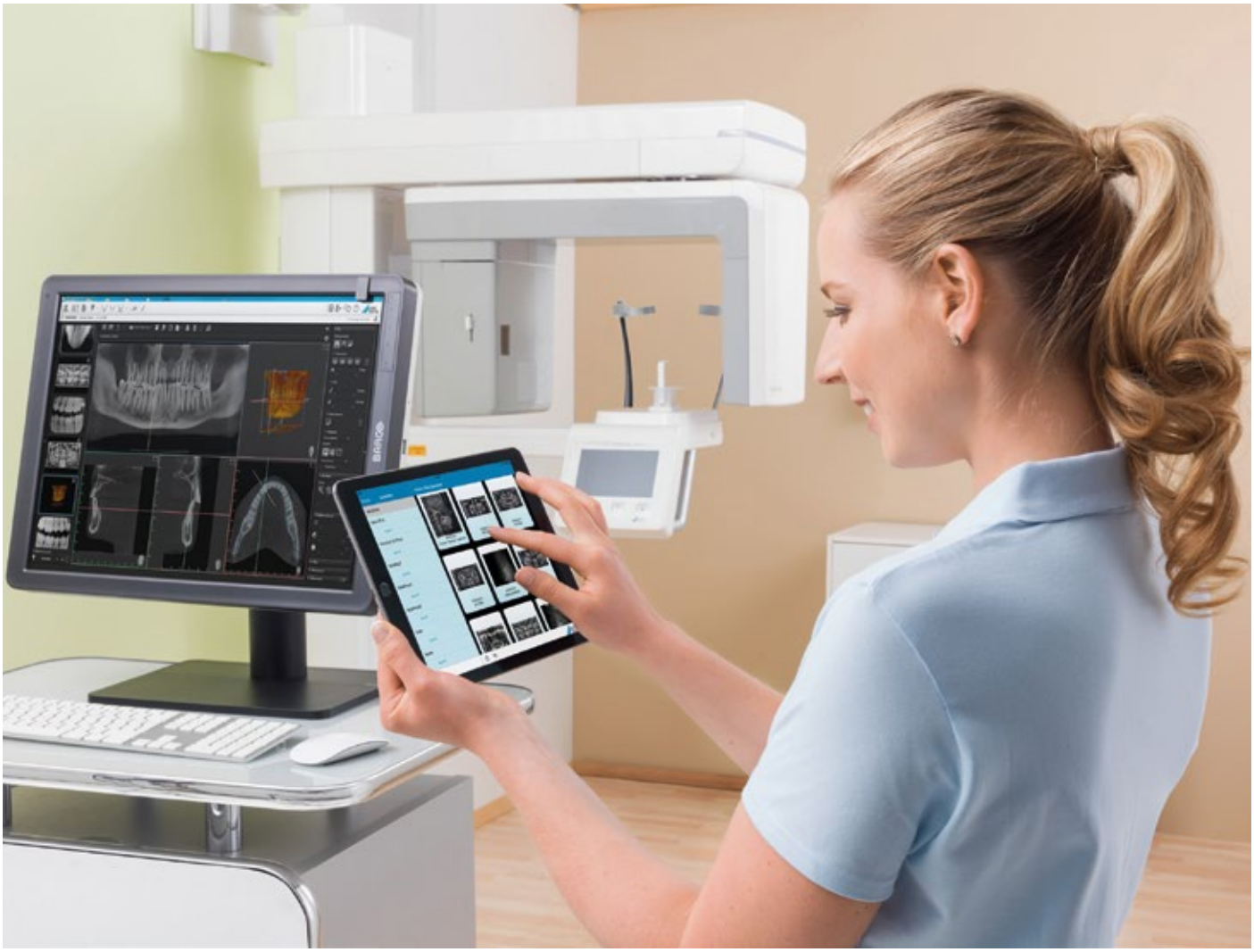
The Royal College of Physicians and Surgeons of Glasgow, the Royal College of Surgeons of Edinburgh, and the Royal College of Surgeons of England and the Royal College of Surgeons in Ireland announced they are working together to introduce an Intercollegiate approach to assessment in May last year.

Currently, most dental specialties have multiple versions of the specialty exam, administered by individual royal colleges, or a combination of colleges. Having a single exam for each specialty will enable consistency for trainees across the UK and will provide a clearer training pathway for all specialties. Among Professor Albadri's first engagements will be to help appoint the specialty exam board chairs in March, with one chair being recruited for each of 10 specialties.

More information about the exams, including answers to frequently asked questions, can be found on the Dental Specialty Fellowship Examinations website dsfe.org.uk

Picture Perfect

VistaVox is accurate in both 2D & 3D



User-friendly design eliminates operator error

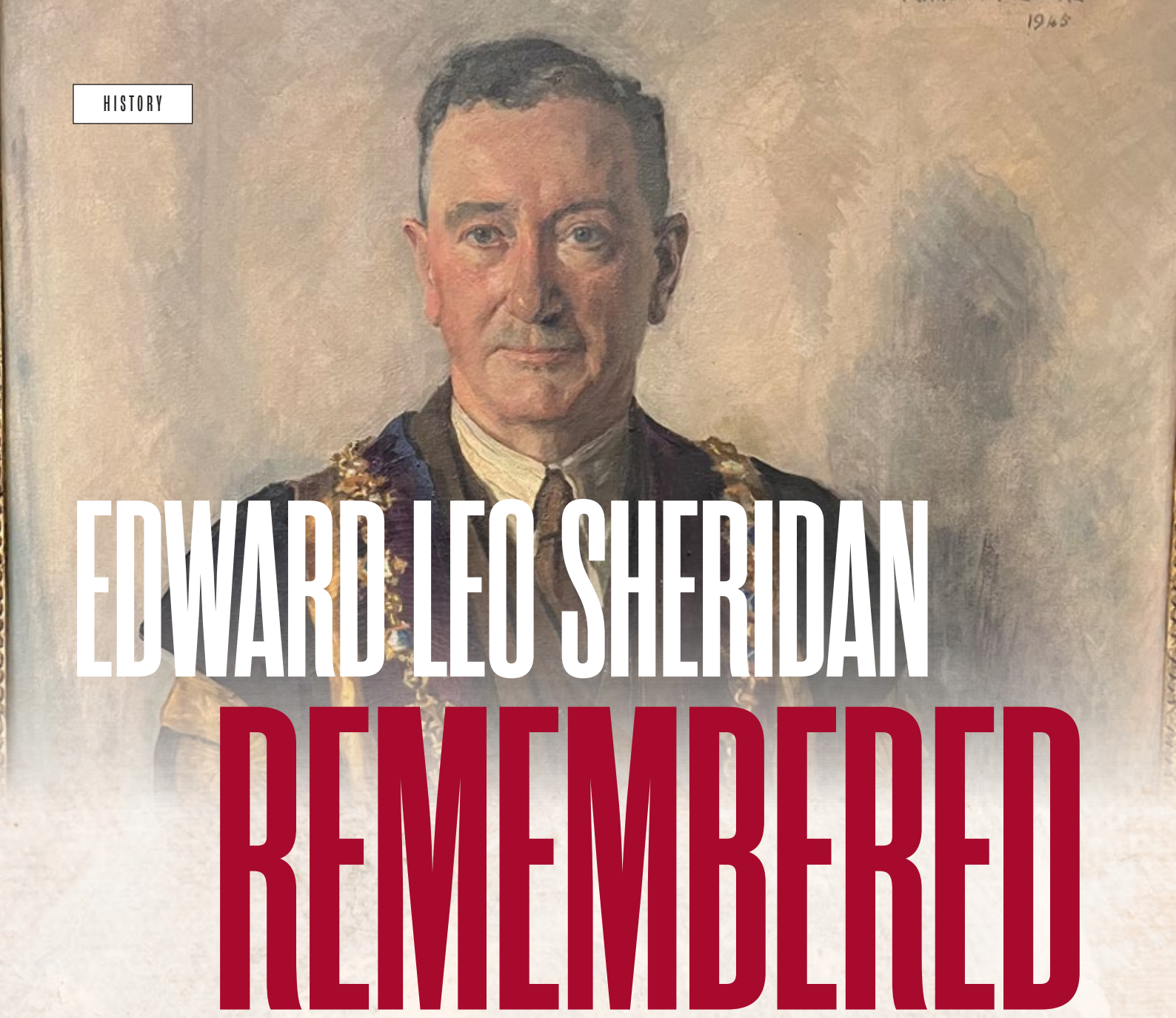
Perfect 3D volume allows you to see all of the dentition, but with reduced radiation dose for the patient

A true hybrid machine, giving the same clarity on both 2D and 3D images

Reassurance of German manufacturing standards

@durr_dental_uk Duerr Dental UK

For more information visit **www.duerrdental.com/en/products/imaging/x-ray-units**



EDWARD LEO SHERIDAN REMEMBERED

Extracts from A History of the Northern Ireland Branch of the British Dental Association

WORDS
RICHARD
GRAHAM

1928
The Irish Free State Dental Act

In the Irish Free State at this time the Dental Act was going through the Dail (Irish Parliament) and reached the statute book on the 3 August 1928. Because the Government of Ireland Act 1920 pre-dated the Dentists Act 1921 there was always a question mark over the application of the Dentists Act within the Irish Free State. Reputable dentists within Ireland were retained on the register held by the General Medical Council (GMC) and there was a place on the Dental Board for a registered dentist from the Irish Free State. This position was held by Edward Leo Sheridan who retained his British Dental Association (BDA) membership and attended some of the Northern Ireland Branch meetings and functions. The Irish Free State Dental Act allowed for the formation of an Irish Dental Board which first met on the 19 November 1928 and its first act was to establish a Dental Register within the Irish Free State. The British Dental Register was accepted with a provision giving power to the new Board "to register those dentists who failed to apply under the 1921 Act but who have received training and possess qualifications not inferior to the standard of qualification necessary for obtaining the right to be registered". This section was apparently introduced to meet the case of those who may have had conscientious objections to putting their names on a British Register or who may have been serving with the Irish Volunteers. The new Dental Board of the Irish Free State was to look after the new Register as well as institute any disciplinary inquiries. Any action that might be taken was still to be decided by the GMC and responsibility for dental education was to remain under the control of the GMC.

1934

At the AGM of the Northern Ireland Branch of the BDA on Friday 7 December 1934, Edward Leo Sheridan, of Dublin, read a paper on diathermy and the following day gave a demonstration of this treatment at the Royal Victoria Hospital before a large number of members and students. Sheridan was a remarkable man and probably deserves a chapter all of his own. He qualified for his Licence in Dental Surgery (LDS) from the Royal College of Surgeons in Ireland in 1902 and obtained his Fellowship of the Royal College of Surgeons (FRCS) Ireland in 1908. He joined the staff of the Incorporated

Dental Hospital of Ireland directly after qualification. In 1903 he joined the BDA and even though he became a founder member of the Irish Dental Association he retained his BDA membership attending many of the Northern Ireland Branch meetings and functions. In 1921, when the Dental Board of the United Kingdom was formed, Sheridan was elected to represent dentists in the South of Ireland and was subsequently returned to the Board as the elected Representative for Ireland on four occasions.

1938
Dental board protest

The *Northern Whig* newspaper carried a story in which a Labour MP, Josiah Wedgewood, of Newcastle-under-Lyme, had protested about an Irish Chairman of the United Kingdom Dental Board. The Lord President of Council (I assume the Privy Council) had invited Sheridan, by then Professor of Dental Surgery in the National University of Ireland, to accept the appointment as Chairman of the Dental Board of the United Kingdom, in succession to the late Sir Francis Acland. Sheridan had accepted the invitation. Mr Wedgewood asked: "Is the noble Lord aware that there is great resentment among British dentists, in view of Irish hostility to Great Britain, at the appointment as Chairman of the British Dental Board of a Sinn Fein Irish Catholic living in Dublin?"

There was some resentment from British dentists that the honour of being the first Chair of the Dental Board was an Irish dentist working in Dublin even though having been a member of the Board since its inception his experience made him the obvious choice. Professor Sheridan undoubtably felt the opposition of his colleagues, to his appointment, keenly. However, the manner in which this had been raised in the House of Commons was strongly resented by dentists generally, including those who were opposed to the appointment. Professor Sheridan had been a member of the BDA since 1903 but on his appointment as Chair of the Dental Board he resigned on principle as he felt it was undesirable that the Chairman of the Dental Board should be a member of a body which might be concerned in proceedings before the Board.

1946
Professor Edward Leo Sheridan

Professor Edward Leo Sheridan had been Chair of the Dental Board of the United Kingdom from 1939 through 1944 and even though, as we have seen, his appointment had been controversial, his conduct of the business of the Dental Board, during the war period, amply justified the choice of the Privy Council. When he resigned in 1944, on his appointment as President of the Royal College of Surgeons Ireland (RCSI), for 1944-45, he was the last of the original board members appointed in 1921. In addition to his membership of the Dental Board he also served for a time on the GMC as a representative of the RCSI. He was the first (and to date only) practising Dental Surgeon to be elected as President of the RCSI and after his term of office he was elected as an Honorary Member of the BDA in 1946. He was also honoured by the IDA who presented him with his portrait painted by Margaret Clark R.H.A., at the IDA Annual Dinner. As busy as his professional life was, he had many interests outside of dentistry. He was a member of the Royal Irish Academy, a Council Member of the Royal Zoological Society of Ireland and had been the President of the Dublin Naturalists Field Club. He was also a keen fisherman and a good shot.

1949
Death of Edward Leo Sheridan

On the 10 April 1949 Edward Leo Sheridan died at the age of 68. He had been president of the IDA in 1926, the first Dental Chairman of the Dental Board of the United Kingdom, the first (and to date only) practising dentist to have been President of the RCSI in 1944–1946 and made an Honorary Member of the BDA in 1946. He was a frequent visitor to Northern Ireland Branch events and annual meetings, contributing as a lecturer, an after-dinner speaker and an attendee.

Extracted from A History of the Northern Ireland Branch of the British Dental Association by Richard Graham. The book is £50 (with £25 to cover printing and publishing costs and £25 going to the BDA Benevolent Fund) and postage is £6.99. Please contact Richard at r.graham@bda.org to buy a copy, or for more information.

Edward Leo Sheridan by Margaret Clarke

The portrait

As a footnote to the story of Edward Leo Sheridan, I had trouble finding an image of the man to use in the book. I asked Rachel Bairsto, of the BDA Museum, and Helen Nield, of the BDA Library, if they could help. Rachel said that she believed they had a portrait of Sheridan in the museum storage and sent me an image of the painting. When I saw the image, I realised that the portrait was by Margaret Clarke and showed Sheridan in the regalia of the RCSI.

I realised that this must be the portrait that the IDA had presented to him on his election as President of the IDA in 1945, but how did this come to be in the hands of the BDA Museum? Rachel said that they were keeping the portrait on behalf of the General Dental Council who had found it surplus to their requirements and were going to dispose of it. Rachel persuaded the GDC that it was an important piece of dental history and managed to save the portrait.

The question then comes, as to how the GDC had the portrait in their possession. It is here that I must use some supposition. The General Dental Council and The Dental Board, which was its predecessor, have always had portraits painted of their Chairs. I am assuming that when they asked Sheridan to have his portrait painted, he demurred and presented them with the portrait he had just been presented with by the IDA.

Margaret Clarke RHA was one of the foremost portrait artists of the time, having painted, among others, President De Valera and Archbishop John Charles McQuaid. She was married to Harry Clarke who was, himself, probably the most famous stained-glass artist in Ireland. Her work can be found in The National Gallery of Ireland and The Ulster Museum. The National Gallery of Ireland had a retrospective exhibition of her work in 2017.

It begs the question, why the GDC had found it surplus to requirements and that perhaps it deserves to be back in Ireland.

SALIVA PROTEINS LINKED TO GUM DISEASE PROGRESSION

Finding may lead to a saliva test kit that periodontitis patients could use at home

WORDS
WILL PEAKIN

Measuring levels of key proteins in patients' saliva may be a relatively easy way for dentists, and even patients themselves, to track the progression of gum disease, suggests a new study led by researchers at the University of Pennsylvania.

In the study, the researchers monitored and tested saliva samples from more than 400 patients for up to a year and a half.

They found that on average, patients who experienced progression of periodontitis showed substantially more elevated levels of nine inflammation-related signalling proteins in saliva when compared to those that did not.

The study was published in the December issue of the *Journal of Clinical Periodontology*[1].

"One can imagine a saliva test kit, based on such findings, that dentists could use and even periodontitis patients could use at home. It could be a very useful personalised dentistry tool for assessing risk and tailoring care delivery," said study lead author Flavia Teles, Associate Professor in the Department of Basic and Translational Sciences at Penn Dental Medicine.

Periodontitis is one of the most common medical conditions, with an estimated prevalence of between 20% and 50% of the global population.

Researchers have not had a good way to predict periodontitis progression from a mild state to one that is more severe and threatens tooth loss. In principle, periodic testing of saliva and/or blood samples might yield molecular clues.

However, prior studies of this strategy had significant limitations, including small numbers of patients enrolled, small numbers of molecules measured, and the taking of samples at just one time-point instead of over a long interval. Teles's new study was designed to surmount those limitations.

The researchers enrolled 302 individuals who had signs of early to moderate to severe periodontitis, and 113 individuals without periodontitis signs.

Each subject received a detailed checkup with standard assessments of periodontitis status and progression every two months for a year.

Subjects also had saliva and blood samples taken at each check-up; the saliva samples were tested for levels of

10 different inflammation-linked proteins, and the blood samples for five different inflammatory proteins.

When the year was up, researchers gave the periodontitis subjects standard non-surgical periodontal therapy and checked them again three and six months later.

The results showed that periodontitis patients who had the most disease progression during the year – defined as three or more sites with loss of clinical attachment (i.e., loss of fibres that help maintain the tooth in place) – had significantly higher levels of several inflammation-related signalling proteins in their saliva samples. These included interferon-gamma, IL-6, VEGF, IL-1 and MMP-8. Following treatment, these levels subsided.

The levels of such proteins in subjects' blood did not differ significantly by degree of disease progression, although several, including MMP-8, MMP-9, and C-reactive protein, did fall significantly following treatment.

The findings suggest that changes in levels of inflammation-related proteins in saliva over time can help patients and doctors assess the risk of periodontitis progression as well as the effectiveness of treatment – and that blood levels also may be helpful in the latter case.

Teles and her colleagues in follow-on research are analysing, in samples from the same patients, bacterial species and related small molecules called metabolites, to see if these too can help in tracking periodontitis status.

"We are also using artificial intelligence to analyse broader sets of clinical and laboratorial data," she said. "Our hope is that through this data analysis, we can further refine this approach and provide more tailored and accessible oral care."

Reference

[1] onlinelibrary.wiley.com/doi/10.1111/jcpe.14048

THE X FACTOR

An Xtra powerful team for direct fillings!

Perfectly coordinated products with easy and efficient application for safe and aesthetic results – that is the SHOFU X-Factor, for the added plus in your daily practice.

BeautiBond Xtreme

Universal all-in-one adhesive

BEAUTIFIL Flow Plus X

Injectable hybrid composite in 2 viscosities

Super-Snap X-TREME

Superior finishing and polishing disks

SHOFU

www.shofu.co.uk

For further information, please contact the SHOFU office
01732 783580 or
sales@shofu.co.uk

Visit us on stand H15 at the Scottish Dental Show 20 & 21 June at Braehead Arena, Glasgow.

GUIDED BIOFILM THERAPY®

94%
OF ALL PATIENTS PREFER GBT

Join the movement & elevate your practice today

Backed by a global survey involving 278,000 patients, the results speak volumes – 94% of respondents express enthusiasm for GBT and would recommend this treatment to their family and friends.

Join the ranks of practitioners who have witnessed the success and positive impact of GBT. Elevate your practice by scanning the QR code to embark on a journey of discovery.

Book a demo today, and witness first hand how GBT can transform your patient care, boost your practice's reputation, and create a ripple effect of satisfied patients eager to recommend your services.

Don't miss out on the opportunity to revolutionise your approach to dental care. Let GBT be the driving force behind your practice's success.

BOOK A GBT DEMO

www.ems-dental.com

info@ems-unitedkingdom.com

EMS

THE ABSOLUTE IMPORTANCE OF AGILITY

Individuals and teams are self-organising and capable of making good decisions when given autonomy and trust

AGILITY is defined as being quick or nimble in movement or having the capacity for mental quickness or acuity. It marks the successful from the less so. This is not my original theory, but it is certainly borne out by my observations. The ability to think on one's feet, to change direction when needed and to take quick decisions is one of the marks of a good leader, a useful follower and a surgeon – the "S" of BDS lest you forget.

For two-and-a-half years after qualifying with my own BDS, I worked on a 1-in-2, on-call rota at three different hospitals. The first six months were at a big London teaching hospital where I was at the bottom of the tree. I saw much, including the initial presentation of more than a hundred facial fractures. I had to be organised, flexible and always available, gaining invaluable experience, but doing little of the 'S', I learned that "bleeders come first" and how to differentiate the urgent from the less so.

Next came a year in a quieter district general hospital, where there was just the consultant and myself. I got to make decisions, to get my gloved hands wet and to stretch my skills and knowledge. The 'boss' was fantastic, supportive, encouraging and always there for me. He provided feedback, was fair but bluntly honest when both he and I needed him to be.

What I learned in those early years were some of the agile 'basics' needed for success. Agile leadership is based on the belief that individuals and teams are self-organising and capable of making good decisions when given autonomy and trust. Agile leaders empower their teams by providing a clear vision and goals, encouraging collaboration and removing obstacles.

WORDS
ALUN K REES

Alun K Rees BDS is The Dental Business Coach. An experienced dental practice owner who changed career, he now works as a coach, consultant, trouble-shooter, analyst, speaker, writer and broadcaster. He brings the wisdom gained from his and others' successes to help his clients achieve the rewards their work and dedication deserve.

Every individual within a dental business can, and should, be empowered to reflect the core values of the principal. This happens organically because the team members learn what works best for the patients and the practice. They understand that the person who is working in the mouth, delivering the care, can be supported to give the very best for the patient, whose experience will be enhanced by clarity and understanding of the procedures and processes.

Good teams understand that not everything is perfect every time and that each patient is an individual whose needs should be understood in order to serve them best. Flexibility is vital as no two patients are the same. In the same way that a successful surgeon works in an environment where colleagues have autonomy and are trusted, so every team member understands, not only their role, but also knows and respects everyone else on the team.

Clinical elements aside, the model of any successful small business means that changes can be made quickly to adapt to alterations in outside conditions. With trust between team members, slight and greater changes of direction can be made using the communications that are practiced on a daily basis.

Agility is desirable and should be easy to achieve and maintain when the person who is in charge is known, recognised and takes responsibility. When the culture of the organisation reflects the integrity and core values from the top down, then clarity flourishes.

We live in a modern, often corporatised (dental) world where chains of command are often stretched, and decisions that once could be taken and communicated during a lunchtime and discussed at the regular weekly team meeting go unaddressed.

Among my (many) concerns around the increasing corporatisation of dentistry is that the 'local leadership' which is claimed to lie with individuals is a way of bouncing back blame for poor policy and management because of the much larger structure.

How can an organisation be said to be truly agile and effective when layers of bureaucracy delay decision-making. I live on the coast and, while no sailor myself, know many who sail – anything from a dinghy to ocean going yachts. They understand the importance of knowing their craft, understanding the weather conditions, reading charts and comprehending the limitations of themselves, their crew and their vessels. They know that they have to be alert and, yes, agile if sailing in busy waters because otherwise they will perish.

Sailing a supertanker through the same waters and conditions is a totally different thing. It may survive bigger blows and ride out the storms but it is definitely not agile. The limits to where you can dock and external pressures on performance are much greater. It can take several miles and many minutes to make a course adjustment; in the same time the more agile, smaller craft has anticipated conditions, changed direction, avoided the squalls and sailed into calmer waters.

Managing large perforated internal root resorption with partial pulpectomy

Saeed Asgary

Introduction

Internal root resorption (IRR) is a rare but significant pathological process characterised by progressive loss of dental hard tissues originating from within the root canal[1,2]. This resorption is mediated by odontoclastic activity, where clastic cells degrade dentin along the inner root canal walls. IRR often remains asymptomatic and progresses slowly, making early detection challenging. It is typically diagnosed incidentally through routine radiographic imaging. Radiographs of IRR cases commonly reveal oval or round radiolucent areas within the pulp chamber or root canal space, indicating the characteristic enlargement of the affected area[3].

The exact aetiology of IRR remains poorly understood, though it is considered multifactorial. Known contributing factors include dental trauma, recurrent or incipient carious lesions, periodontal infections, and thermal injury during procedures like crown preparations. Additionally, orthodontic movement, cracks, insufficient remaining dentin after preparation, marginal leakage from restorations, and idiopathic changes within otherwise healthy pulps have all been implicated in IRR development. Some researchers also suggest anachoresis, the attraction of microorganisms to inflamed tissue, as a contributing factor[4]. While IRR remains rare, its diagnosis and treatment pose significant challenges, especially given the limitations of two-dimensional radiographs in detecting early lesions.

Histologically, IRR involves an inflammatory reaction within the pulp, disrupting the odontoblastic layer and predentin, facilitating the adhesion of clastic cells capable of resorbing dentin. Pulp inflammation may arise from infection or trauma, with inflammatory cells transported by the pulp's vascular supply. Odontoclastic cells, similar to osteoclasts, are responsible for resorption, although they are smaller and form less extensive lacunae. Two types of IRR are commonly described: Inflammatory IRR, characterised by dentin loss with a granulation tissue response, and replacement IRR, where resorption is accompanied by the deposition of hard tissue resembling bone or cementum[5].

The management of IRR primarily focuses on halting the resorptive process by eliminating the pulp's vascular supply, which nourishes the clastic cells. Nonsurgical root canal therapy (RCT) is the most common treatment approach, with early diagnosis being key to success[5]. Advancements in imaging, particularly with cone beam computed tomography (CBCT), now allow for more accurate assessment, enabling better visualisation of the lesion's extent and location[6,7].

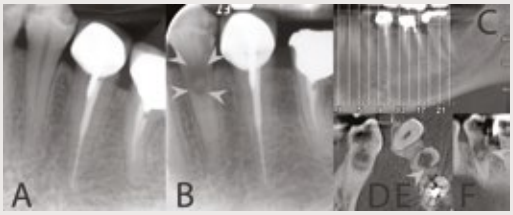
Recent developments in endodontic biomaterials, such as mineral trioxide aggregate (MTA) and calcium-enriched mixture (CEM) cement, have further improved prognosis in simple IRR cases[8,9]. CEM cement is a biocompatible, tooth-coloured material known for its antibacterial, antifungal, and sealing properties. It also promotes osteogenesis, dentinogenesis, and cementogenesis, offering enhanced biological sealing and protection against microbial invasion[10].

This case report presents the ultraconservative management of a perforating IRR lesion in tooth #34 using partial pulpectomy (PP) and CEM cement. This approach effectively halts the resorptive process, preserving tooth structure and function, while offering a long-term solution for managing advanced IRR.

Case history and examination

A 49-year-old female patient was referred to our endodontic clinic following a routine dental check-up that revealed an asymptomatic lesion on her left first premolar. Radiographs taken five years ago during a previous visit showed no abnormalities or signs of resorption (Figure 1A). At the time of referral, the patient was asymptomatic, reporting no pain, sensitivity, or discomfort in the affected tooth, except for occasional food impaction during mastication.

Figure 1: Radiographic and CBCT Images of Tooth #34. (A) Initial radiograph of the left first premolar taken 5 years prior, showing no signs of resorption or pathology. (B) Diagnostic periapical radiograph displaying a deep distal carious lesion and a significant resorptive defect in the coronal portion of the root of tooth #34 (white arrow heads). (C–F) CBCT images (in coronal, axial, and sagittal plans) of tooth #34, showing a large resorptive lesion extending into the mid-root, with a distal perforation (white arrow heads) covered by surrounding bone. The lesion's extent is clearly demonstrated, aiding in accurate diagnosis and treatment planning.



Upon clinical examination, the only significant finding was a carious lesion on the distal aspect of tooth #34. Sensibility testing on all regional teeth showed normal or positive responses, indicating pulp vitality. Notably, there was no history of orthodontic treatment or trauma to the tooth. A diagnostic periapical radiograph revealed a deep distal carious lesion along with a substantial resorptive defect involving the coronal portion of the root of tooth #34 (Figure 1B). These findings prompted further investigation. A CBCT

G-CEM ONE™

Self-adhesive universal resin cement

G-Premio BOND
(optional, to maximise bond strength)
Universal bonding for all
direct and indirect workflows
Can be used instead of
Adhesive Enhancing Primer

Adhesive Enhancing Primer
(optional, to maximise bond strength)
Accelerated and high-degree dark-cure

SCAN HERE
for more information
about G-CEM ONE™

Invisible margins
High wear resistance and colour
stability in 4 convenient shades

Universal self-adhesive
resin cement
For all indications and all
types of restorations

Smile for the World
Since 1921
100 years of Quality in Dental

GC UNITED KINGDOM Ltd.
info.uk@gc.dental
01908 218999
www.gc.dental/europe/en-GB

scan confirmed the presence of a large resorptive lesion extending into the mid-root area, with a perforation on the distal aspect of the root (Figure 1C–F).

The clinical and radiographic findings led to the diagnosis of a perforated IRR with asymptomatic pulpitis in tooth #34. This indicated extensive resorption of the coronal dentin and pulp, with the involvement of the mid-root region. The diagnosis of perforated IRR was established based on clinical and radiographic findings, differentiating it from external root resorption.

Treatment options were discussed, including surgical intervention, RCT, or tooth extraction. However, the patient opted for a conservative approach involving vital pulp therapy (VPT) with biocompatible materials. After thorough discussion, written informed consent was obtained from patient, and the treatment plan was finalised.

Methods

The procedure commenced with local anaesthesia using 2% lidocaine with 1:80,000 epinephrine (Dentsply Sirona). The carious tissue was carefully removed, and an access cavity was prepared to expose the pulp and resorptive tissue. Upon exposure, the resorptive tissue was thoroughly debrided, but excessive haemorrhage was encountered.

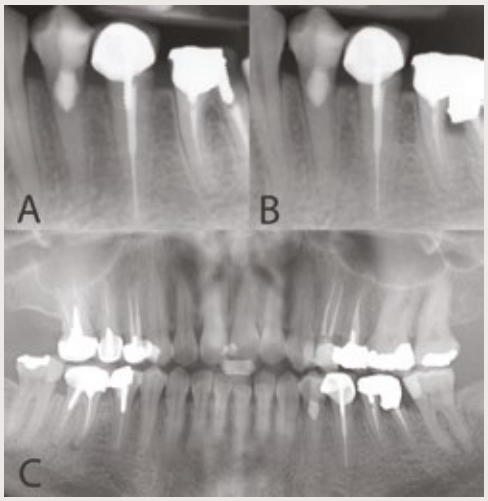
Despite the application of normal saline for two minutes and 5.25% NaOCl for another two minutes, the bleeding persisted. To manage the bleeding and facilitate uninterrupted treatment, CEM cement (GC Dental) was used as the pulp-protecting and reparative biomaterial in a tampon approach[11]. The CEM cement was prepared according to manufacturer's instructions and inserted to fill and seal the remaining pulp stump and the prepared cavity (Figure 1E).

Results

An immediate postoperative periapical radiograph was obtained to confirm the success of the pulp-protecting and the proper sealing of the resorptive defect (Figure 2A). The coronal cavity was then restored with composite resin to re-establish the tooth's function and aesthetic appearance.

The patient was reviewed periodically over a two-year follow-up. One week post-treatment, the patient remained asymptomatic, and the tooth was functional. At the two-year recall, the patient reported no discomfort or discoloration. Radiographic examination at the recall visit showed arrested resorption with a healthy periapical area and normal PDL, confirming the long-term success of the treatment (Figure 2B, 2C).

Figure 2: Treatment and follow-up images of tooth #34. (A) Immediate postoperative periapical radiograph showing successful pulpotomy and proper sealing of the resorptive defect with CEM cement. (B) Two-year post-treatment radiograph revealing arrested resorption with a healthy periapical area of tooth #34. The periapical radiograph confirms the effectiveness of the treatment in halting further resorption. (C) OPG at the two-year recall, showing no signs of recurrence or additional resorption in the affected tooth. The radiograph highlights the stability of the treated tooth and surrounding structures.



Discussion

Root resorption, particularly IRR, is a rare yet significant condition that can severely compromise tooth vitality and structural integrity. In this case, a 49-year-old female presented with an asymptomatic lesion in the left first mandibular premolar, which was diagnosed as perforated IRR with asymptomatic pulpitis based on clinical and radiographic evaluation. IRR, characterised by the progressive loss of dentin and potential involvement of the pulp, presents a challenge for management, especially when extensive resorption with perforation has occurred.

The diagnosis of IRR in this patient was made following a comprehensive diagnostic workup, including conventional radiographs and advanced imaging with CBCT. The use of CBCT was crucial in assessing the extent of the resorptive lesion, which extended into the mid-root with a distal perforation, aiding in the decision-making process for treatment. This underscores the importance of advanced imaging in complex IRR cases, providing a more accurate assessment of lesion size, location, and the involvement of surrounding structures, which are vital in formulating an appropriate treatment plan[12].

Treatment options for complex IRR typically range from more invasive approaches, such as surgical intervention or RCT, to extraction, depending on the severity[13]. However, recent advances in regenerative endodontics and the use of biocompatible materials offer promising conservative alternatives. In this case, the patient opted for an ultraconservative approach involving PP with CEM cement. CEM cement is a biomaterial based on calcium-silicate; it is highly bioactive and biocompatible with excellent mechanical properties for endodontic use10. CEM cement is manufactured using calcium oxide, phosphorus, and silicon. Upon hydration, it forms a colloidal gel that sets rapidly, is converted into hydroxyapatite, and consequently provides excellent tissue integration and mineralisation. Its sealing properties avoid microleakage and bacterial penetration, essential for successful procedures. According to the manufacturer, the biomaterial's capability to set in a wet environment suits its use for all VPT techniques, root-end surgery, repair of root/furcal perforations, and management of internal/external root resorption.

CEM cement is a calcium-silicate-based material similar to MTA, inducing the formation of hydroxyapatite and thus supporting its biocompatibility[14]. It has a smoother consistency, greater flowability, thinner film thickness, and a shorter setting time[15]; hence, it improves handling

> "ROOT RESORPTION, PARTICULARLY IRR, IS A RARE YET SIGNIFICANT CONDITION THAT CAN SEVERELY COMPROMISE TOOTH VITALITY AND STRUCTURAL INTEGRITY"

Not 'Just' A Compressor

It stops, you stop. All compressors are not the same

As all Dürr Dental compressors are registered medical devices class IIa, and have been since 2015, their air quality is in accordance with ISO 22052

ULPA U16/ISO 65 U virus-bacterial filter included

No service requirement, just an annual filter change

5 YEARS WARRANTY

Up to 5-year warranty

Remote monitoring possible via VistaSoft Monitor app

Medical Device status for 9yrs

DÜRR DENTAL

For more information visit **www.duerrdental.com/en/products/compressed-air**

@durr_dental_uk Duerr Dental UK

and adaptability by streamlining clinical workflows. Its minimal positive dimensional changes when set reduce microleakage, an important attribute for the long-term success of the restoration. Whereas MTA is still the gold standard, the profound advantages of CEM cement make it a very valuable alternative for both routine and complex endodontic procedures.

In this case, due to time constraints, the access cavity was filled during the same appointment. This is contrary to the recommendations of the manufacturer for a delay before the permanent restoration in order to allow the material to be set completely. However, an immediate restoration did not seem to compromise the clinical outcomes. This demonstrates the robustness and adaptability of the biomaterial in less-than-ideal clinical situations; however, adherence to guidelines is recommended for reproducibility.

This case demonstrates the potentials of CEM cement in ultraconservative endodontics, showing its efficacy for the achievement of haemostasis, sealing of resorptive defects, and maintenance of tooth vitality. Protocols should be tailored for the clinical scenario, recognising their limitations. The results are in agreement with the literature that supports the use of CEM cement in the treatment of (perforated) internal/external root resorption[16-19]. Its regenerative potential, ease of handling, and durable sealing properties make it an important tool in contemporary endodontic practice, though further research is required to confirm its long-term success and wider applicability.

Despite encountering excessive haemorrhage due to exposure of resorptive tissue, the tampon technique using CEM biomaterial effectively achieved haemostasis, allowing the procedure to proceed without delay[20,21]. The biomaterial sealed the pulp stump and resorptive defect, facilitating immediate haemostasis through physical pressure and ensuring pulp preservation. Postoperative radiographs confirmed a successful filling and sealing, and the patient remained asymptomatic.

These findings align with previous studies that demonstrate the tampon technique with CEM cement provides reliable sealing in VPT, effectively managing resorptive defects and preventing further tooth damage. The tampon technique has been shown to yield favourable clinical and radiographic outcomes, including symptom resolution and arrest of the resorptive process, offering a promising alternative to conventional methods, particularly in cases complicated by haemorrhage.

The two-year follow-up revealed that the resorption had arrested, with no signs of recurrence or further damage to the periapical tissues. Radiographic findings showed a healthy periapical area with no evidence of continued resorption, confirming the success of this conservative approach[22]. These results are consistent with similar cases in the literature, where vital pulp therapy has effectively halted internal resorption progression, preserved tooth vitality, and avoided more invasive treatments.

Although this case demonstrates successful outcomes, it is important to recognise that conservative treatments may not be suitable for all cases. The decision to pursue such approaches should be carefully evaluated, considering the extent of resorption, the patient's preferences, and the availability of biocompatible materials. Additionally, patient compliance and long-term monitoring are crucial to ensuring continued effectiveness and stability.

The lack of a control group and the limited sample size in this case highlight the need for further research, including larger case series and randomised controlled trials, to validate the efficacy and long-term success of ultraconservative methods for IRR management.

Conclusions

This case illustrates that with appropriate diagnosis, advanced imaging, and biocompatible materials like CEM cement, conservative treatment options for IRR can be highly effective. Vital pulp therapy, particularly partial pulpectomy, offers a promising approach to managing IRR and preserving tooth vitality, especially in patients who are not candidates for more invasive treatments. Further long-term studies are needed to validate the success rates of ultraconservative approaches and expand their application in clinical practice.

References

[1] P. Sanaei-Rad, M. Bolbolian, F. Nouri, and E. Momeni, Management of Internal Root Resorption in the Maxillary Central Incisor With Fractured Root Using Biodentine, Clinical Case Reports 9 (2021): e04502, https://doi.org/10.1002/ccr3.4502

[2] J. Darcey and A. Qualtrough, Resorption: Part 1. Pathology, Classification and Aetiology, British Dental Journal 214 (2013): 439–451

[3] M. Haapasalo and U. Endal, Internal Inflammatory Root Resorption: The Unknown Resorption of the Tooth, Endodontic Topics 14 (2006): 60–79

[4] A. Heboyan, A. Avetisyan, M. I. Karobari, et al., Tooth Root Resorption: A Review, Science Progress 105 (2022): 368504221109217, https://doi.org/10.1177/00368504221109217

[5] M. Ramazani, S. Asgary, N. Zarenejad, and J. Mehrani, Interdisciplinary Approach for Management of Iatrogenic Internal Root Resorption: A Case Report, Iranian Endodontic Journal 11 (2015): 71.

[6] Z. Madani, E. Moudi, A. Bijani, and E. Mahmoudi, Diagnostic Accuracy of Cone-Beam Computed Tomography and Periapical Radiography in Internal Root Resorption, Iranian Endodontic Journal 11 (2016): 51–56, https://doi.org/10.7508/iej.2016.01.010

[7] S. Asgary and N. Emadi, Cone-Beam Computed Tomography Analysis of Lingual Mandibular Bone Depression in the Premolar Region: A Case Report, Clinical Case Reports 8 (2020): 523–526, https://doi.org/10.1002/ccr3.2713

[8] S. Asgary, Successful Arrest of Internal Root Resorption Using Partial Pulpotomy: A Case Report, Cureus 16 (2024): e71157

[9] S. Asgary and M. Kemal Çalıkan, Vital Pulp Therapy of a Mature Molar With Concurrent Hyperplastic Pulpitis, Internal Root Resorption and Periradicular Periodontitis: A Case Report, Iranian Endodontic Journal 10 (2015): 284–286, https://pubmed.ncbi.nlm.nih.gov/26523145/

[10] S. Asgary, M. Aram, and M. Fazlyab, Comprehensive Review of Composition, Properties, Clinical Applications, and Future Perspectives of Calcium-Enriched Mixture (CEM) Cement: A Systematic Analysis, Biomedical Engineering Online 23 (2024): 96, https://doi.org/10.1186/s12938-024-01290-4

[11] A. Ardavan, L. Roghanizadeh, and S. Asgary, Tampon Vital Pulp Therapy in the Management of Excessive Haemorrhage in Inflamed Pulps: A Hypothesis, Iranian Endodontic Journal 18 (2023): 274–276, https://doi.org/10.22037/iej.v18i4.43232

[12] E. Mahmoudi, Z. Madani, E. Moudi, A. Bijani, M. B. Hashemian, and S. Solati, Diagnostic Accuracy of High Resolution Cone-Beam Computed Tomography and Standard Mode Cone-Beam Computed Tomography in Internal Root Resorption, Iranian Endodontic Journal 14 (2019): 211–215, https://doi.org/10.22037/iej.v14i3.25005

[13] D. Abdullah, F. Eziana Hussein, and H. Abd Ghani, Management of Perforating Idiopathic Internal Root Resorption, Iranian Endodontic Journal 12 (2017): 257–260, https://pmc.ncbi.nlm.nih.gov/articles/PMC5431715/

[14] S. Asgary, M. J. Eghbal, M. Parirokh, and J. Ghoddusi, Effect of Two Storage Solutions on Surface Topography of Two Root-End Fillings, Australian Endodontic Journal 35 (2009): 147–152, https://doi.org/10.1111/j.1747-4477.2008.00137.x

[15] S. Asgary, S. Shahabi, T. Jafarzadeh, S. Amini, and S. Kheirieh, The Properties of a New Endodontic Material, Journal of Endodontics 34 (2008): 990–993, https://doi.org/10.1016/j.joen.2008.05.006

[16] E. Esnaashari, A. Pezeshkfar, and M. Fazlyab, Nonsurgical Management of an Extensive Perforative Internal Root Resorption With Calcium-Enriched Mixture Cement, Iranian Endodontic Journal 10 (2015): 75–78

[17] S. Asgary and L. Roghanizadeh, Successful Management of a Typical Class 3 Invasive Cervical Root Resorption With Modified Pulpotomy: A Case Report, Iranian Endodontic Journal 19 (2024): 56–60, https://doi.org/10.22037/iej.v19i1.44253

[18] S. Asgary, Management of Pink Spot due to Class IV Invasive Cervical Root Resorption Using Vital Pulp Therapy: A Case Report, Iranian Endodontic Journal 18 (2023): 110–112, https://doi.org/10.22037/iej.v18i2.41772

[19] S. Asgary, Management of an Unrepairable Root Perforation due to Inflammatory Root Resorption: A Case Report, Journal of Dental Sciences 17 (2022): 1409–1410, https://doi.org/10.1016/j.jds.2022.05.001

[20] S. Asgary, Successful Tampon Pulpotomy in a Molar With an Endodontic Lesion: A Case Report, Cureus 16 (2024): e55006, https://doi.org/10.7759/cureus.55006

[21] S. Asgary and L. Roghanizadeh, Tampon Pulpotomy: Long-Term Successful Results of a Molar With Irreversible Pulpitis and Previous Vital Pulp Therapy Failure, Iranian Endodontic Journal 18 (2023): 165–167, https://doi.org/10.22037/iej.v18i3.42508

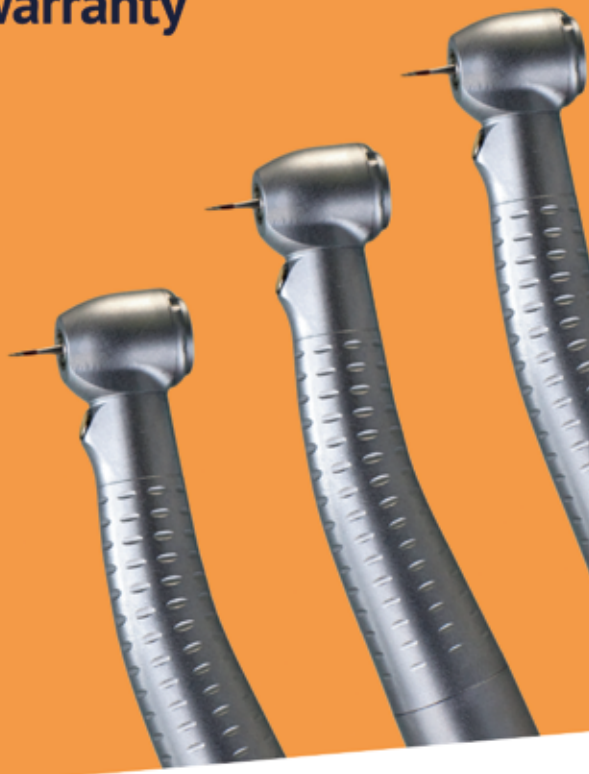
[22] S. Asgary and A. Parhizkar, Healing of Large Endodontic Lesions Using a New Combination of Triple Antibiotics: A Case Report, Clinical Case Reports 11 (2023). e6879, https://doi.org/10.1002/ccr3.6879

BF Mulholland

DENTAL HANDPIECE REPAIRS

FROM ONLY **£62.50** + VAT

Includes free postage and 9 months warranty



Bearing repairs from only

£62.50 + VAT

Turbine repairs from only

£112.50 + VAT

We aim to repair and return all handpieces **within 48-hours***

We can also repair your

- Slow speeds
- Motors
- ProphyFlex
- Scalers
- Couplings
- and more...

SCAN CODE
to request your free-post repair pack

www.bfmulholland.com
+44 (0) 28 94 452 668
service@bfmulholland.com

DENTAL MARKET UPDATE 2025: NORTHERN IRELAND

In this article, Cathy Murphy, Senior Agent – Dental at Christie & Co, gives an overview of the 2024 dental market in Northern Ireland and what to expect in the year ahead

MARKET OVERVIEW

Over the past 12 months, Christie & Co has witnessed a broader range of buyers looking for practices across Northern Ireland. We have seen strong interest from first-time buyers, existing groups and new investors, all attracted by the sector's stability.

We have been fortunate to engage with a diverse range of practice owners. It's clear that rising costs have affected the day-to-day operations of many practices. The main challenge has been recruitment, particularly in acquiring clinicians and ancillary staff members. However, last year's BDA campaign successfully ensured that trainees are recruited at standard pay scales, and the consultant pay disputes were resolved. As a result, practices have weathered this storm. Over the past six months, most sites have either achieved or are working towards a stabilised workforce. This stability supports the current growth in strong private income.

As practices continue to flourish, operators have adapted to incorporate specialisms and alternative income streams, such as plan income or hygienist treatments, which have further fuelled the increased profitability we are now seeing. Given the low-cost base for these services, as this profitability grows, we expect a further increase in appetite from buyers.

Cathy Murphy
E: cathy.murphy@christie.com
M: +44 7756 875 133

EXPECTATIONS FOR 2025

In the last five years, we have successfully advised on 144 healthcare businesses in Northern Ireland. Given the current strong market conditions across the UK, we expect a considerable increase in dental transactions over the next 12 months. Additionally, we anticipate a rise in M&A activity from both corporate operators and independent groups looking to expand their portfolios in the coming years. Alongside this, new investors are likely to emerge, driven by the strong profit levels that operators can achieve. For more information on the Northern Ireland dental market, or for a confidential chat about your business options, contact me.

NEW

x-mind optima 3D

For more information or to speak to your local representative, scan the QR code.

acteon imaging suite

RealGUIDE™ UNIVERSAL OPEN SYSTEM

The smartest. The smallest. The ultimate.

Call us for a no-obligation consultation
on 0800 038 9840 or email info.uk@acteongroup.com

acteon

Enhancing your workflows through innovation

RCSI FACULTY OF DENTISTRY

MASTERCLASS SERIES

FUNDAMENTALS OF ORAL SURGERY

This interactive programme offers dentists of all experience levels the opportunity to learn and practice the principles and techniques of dentoalveolar surgery. Participants will gain theoretical and practical experience for managing cases encountered in daily practice.

Saturday, April 26th, 2025
RCSI, 26 York St.

Course Faculty: Prof. Gerard Kearns, Prof. John Marley, Dr. Kate Farrell & Dr. Harriet Byrne