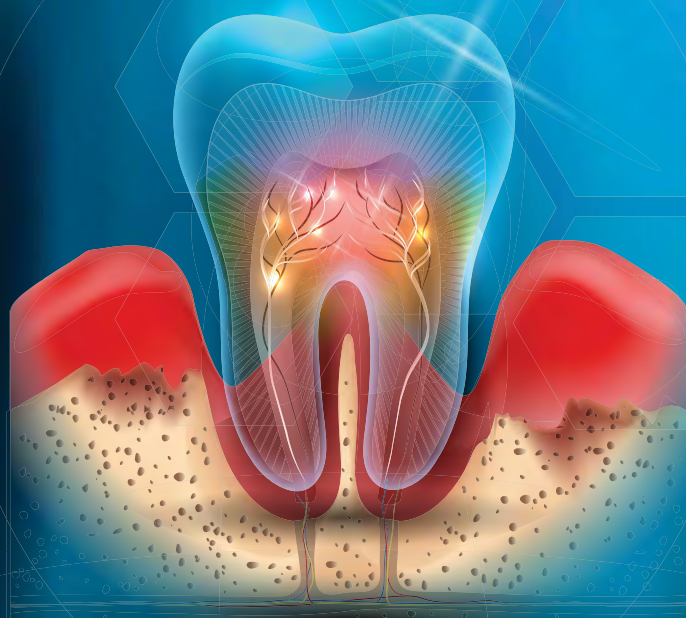


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R7

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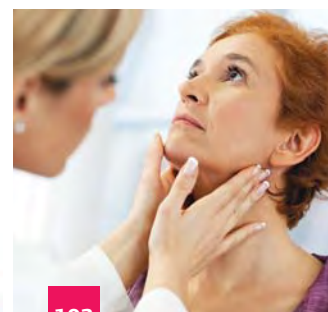
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Dr Ciara Scott
Honorary Editor

The path to truly patient-centred care

Dental care cannot be truly patient centred unless we focus on prevention and adopt an integrated approach to treatment of disease.

The primary goal of Smile agus Sláinte is to “enable every individual to achieve their personal best oral health”.

Much of the media coverage on improving healthcare focuses on the need to reduce waiting lists and provide access to patient-led, demand-driven services. This can take the focus away from the opportunities to reduce the burden of care by enabling patients to prevent disease. Sometimes delaying diagnosis or treatment can increase the need for treatment. In July, *The Lancet* published two papers focused on the global challenge of tackling oral health. The authors highlight the key limitations of the current treatment-dominated models of dental care and the urgent need for system reform. Despite increasingly high-technology options, the interventionist, demand-led approach is not tackling the major underlying causes of poor oral health or the inequalities in oral health.

The papers highlight that much of the global oral health burden is preventable disease, but that oral health has been largely neglected in healthcare. The President of the Dental Council of Ireland, Dr Gerry McCarthy, echoes this sentiment in his interview in this issue and shares some insights for the opportunities to review scope of practice, and for changes in legislation to improve the regulation and development of the profession. Dr Michael Freedman’s letter highlights the opportunity for oral surgeons to provide services at specialist and consultant level in the new advanced care centres proposed in the oral health strategy. Philip McGrath of the Clinical Dental Technicians Association of Ireland (CDTAI) describes in his letter some of the serious challenges the CDTAI has faced in taking action to stop individuals offering dental services outside their scope of practice.

Patient-centred care is not as simple as improving access to intervention. While many of the risk factors for oral health are common to poor general health, such as poverty, diet and habits, and infections, inflammatory and immune responses also contribute to the progression of disease. In a true patient-centred model, reducing the burden of care through research and patient engagement can improve access to treatment of disease. To really enable patients to improve their oral health, we need to learn from patients and understand the barriers to health.

Special focus

Aside from dental caries, the two major oral health diseases are periodontal disease and oral cancer. In this issue, Drs Richard Lee Kin and Ian Reynolds have summarised the key changes that the 2017 periodontal classification have introduced to support the diagnosis and management of periodontal disease. We also have a number of features on oral cancer in this issue. The incidence

of oral cancer is rising in Ireland, and the demographic of patients with oral cancer is changing. This September will see another Mouth Cancer Awareness Day. I would like to sincerely thank Dr Jeff O’Sullivan for sharing some of the significant research he and his team are doing here in Ireland in understanding the progression of oral cancer, to develop tools to improve diagnosis and potential new therapies. Dr O’Sullivan and his team have published extensively in this area. Research can be expensive and competitive, and raising awareness of this work among the profession and with our patients is valuable in supporting the continued drive for new innovations. This research can enable patients to achieve better oral health by improving prevention, earlier diagnosis or better patient outcomes.

Etain Kett describes the work of the Dental Health Foundation and other stakeholders in targeting at-risk groups and people who may not have regular access to dental care to improve awareness of oral cancer and enable better oral health. Dr Eimear McHugh’s paper highlights that some patients did not know that cancer affected the mouth until their diagnosis. Her work gives us a really valuable insight into understanding patients who are diagnosed with oral cancer. Listening to what matters to patients on their journey from diagnosis through treatment can help us to enable and engage patients to have better treatment outcomes and better oral health in the long term.

Dr Danielle Dineen has also shared some case reports on oral health following treatment for oral cancer. Surgery and radiation therapy can significantly affect oral health and quality of life, and I thank the authors for sharing some tips to enable this patient group to achieve better oral health. Aside from the delivery of treatment, there are many ways that we can work as a profession, and with other professions, to enable patients to improve oral health.

We continue to be grateful to all our contributing authors and the dentists who support the peer review process. As the format of the *Journal* has evolved, we have recently updated our guidelines to authors and these are available on the IDA website. We welcome ideas for future issues and expressions of interest from readers who may wish to join our panel of reviewers.

Further reading

Peres, M.A., Macpherson, L.M., Weyant, R.J., Daly, B., Venturelli R., Mathur M.R., *et al.* Oral diseases: a global public health challenge. *The Lancet* 2019; 394 (10194): 249-260.

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“Lip and oral cavity cancers are among the top 15 most common cancers in the world. In addition to lower quality of life, oral diseases have a major economic impact on both individuals and the wider healthcare system, and are the third most expensive condition in the European Union behind diabetes and cardiovascular diseases. Despite this substantial burden, oral health has been woefully neglected.”

The Lancet 2019; 394 (10194)

It is significant that one of the most respected scientific journals in the world, *The Lancet*, has chosen to publish a two-part series on oral health. The authors argue that, despite the major global burden on public health of oral diseases, oral health has been isolated from traditional healthcare and health policy for too long. They are right. And while untreated tooth decay is the most common global oral health condition, it is appropriate for the *Journal of the Irish Dental Association* to produce a special feature on oral cancer. As most of you know, I have spent the majority of my working life surgically treating patients with oral cancers. I want to thank every dentist who has contributed to raising awareness of oral cancers among the public. The effort, especially Mouth Cancer Awareness Day, is always worthwhile as detecting an oral cancer early will often save the patient's life and, in some cases, save them from devastating and disfiguring surgery. And our work is life saving. I recently had a card from a patient of 30 years ago whom we had treated for an oral cancer. She survived and wrote me the most beautiful note to thank us for the gift of being able to see her little boy grow up, graduate with a master's degree in engineering, and recently she and her husband celebrated their golden wedding anniversary.

One very welcome piece of news is the confirmation that the HPV vaccination is to commence being administered to boys this September. The vaccine is essential for boys and girls in our fight against the alarming rise in oropharyngeal cancers.

Oral health policy and membership

Members will be aware that I led a delegation from the Association to meet the Department of Health in recent weeks. Drs Christine Myers and Kieran O'Connor, together with Association executives Fintan Hourihan and Roisín Farrelly, and myself, had a constructive meeting with Department officials, including the Chief Dental Officer, Dr Dymna Kavanagh. Full details of our

response to that meeting are published in the Members' News section of this *Journal*. For those of you who are not members, this is probably the time when solidarity is most needed in the profession as we respond to the Government's proposed oral health policy. I would ask you, most humbly, to consider joining your Association today – just give IDA House a call. It is essential that every dentist reads and re-read the national oral health policy (the full document). Let Christine, Kieran, Roisín, Fintan or me know your opinion.

The Association, in the meantime, continues to improve its governance. Members are asked to attend the Special and Extraordinary General Meetings to be held on September 19. The Extraordinary General Meeting will consider changes to our rules that will facilitate the development of better regional structures in the Association. The Special General Meeting will consider the candidacy of Dr Anne O'Neill for the Presidency in 2020/21. We are lucky to have a candidate of the calibre of Dr O'Neill available to the members in the light of the unexpected ill health of Dr Sean Ó Seachnasaí to whom we send our collective best wishes for a speedy return to full health.

And staying with good reasons to be in the Association, we all face the uncertainty and now likely challenging circumstances of Brexit. We have been assured that Brexit will not affect recognition of training and especially postgraduate training, at least in the first few years. Some material supplies may be affected and we are currently assessing that situation. Dentists are welcome to get in touch with us if they have concerns.

Additionally, the Association has made a submission to the Department of Business, Enterprise and Innovation on behalf of members seeking to change the status for employing dental nurses and hygienists from outside the EU from ineligible for general work permits to eligible. The DBEI is currently reviewing the list of employments that are ineligible for general work permits.

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Clinical dental technicians

Dear Editor,

As you and your readers may be aware, the Clinical Dental Technicians Association of Ireland (CDTAI) has taken successful legal cases against dental technicians who were known to be treating members of the public.

Since the recognition and registration of clinical dental technology in Ireland in 2008, there are two fields of practice for technicians: clinical dental technicians (CDTs) registered with the Dental Council of Ireland and dental technicians whose services are limited to the manufacture and repair of dentures. The main difference between the two is that only CDTs are authorised to deal directly with members of the public. Notwithstanding this critical difference, there are dental technicians who have refused to train and educate themselves to treat patients but nonetheless do so.

The primary role of the Dental Council is to protect the public and to regulate the profession. It introduced the scheme to register CDTs and therefore, it has a duty of care to CDTs to protect our profession and to the public to protect them from inadequate or unsafe practices.

Despite being pressed for several years to take action against offending dental technicians, the Dental Council has failed to act. Dental technicians who continue to treat patients illegally are acting with impunity. The CDTAI has afforded every opportunity to those technicians who wished to train to become CDTs, but when the course in Trinity College did not run because no one was applying, it was time for the Dental Council to take action.

The Dental Council's response was that the current legislation is not sufficient to allow them to take action against those technicians acting unlawfully and dealing directly with the public. We asked them to pursue their role as the enforcement authority, certainly in respect of relevant advertisements. The Dental Council did refer four adverts to the Advertising Standards Agency and all four were found to be misleading as they made the consumer believe these dental technicians were qualified to treat patients.

At the time it was believed that this was a course of action that would continue to tackle the illegal practice. However, nothing further happened.

Patients still present to our members describing treatment by identifiable dental technicians and the unsatisfactory conditions of their treatment. These conditions include technicians who didn't wear gloves, and dirty non-clinical environments with dentures for different individuals discarded in open containers with a risk of cross-contamination. We continued to demand that the Dental Council take action. Again the response was that the legislation was not sufficient and that if we wanted to take legal action we could do it ourselves. This is a very strange position for a regulator to take as it is the primary role of the Dental Council to protect the public.

We also met with the then Junior Minister for Health, Alex White. He said he did not understand the position of the Dental Council as his opinion is that the 1985 Dentists Act is clear and unambiguous.

Given that the Dental Council would not do anything, the CDTAI decided that the only avenue left for us was to instigate legal proceedings ourselves. This is not a decision we took lightly as, not only would we be going against other members of the dental team, there were the obvious financial commitments.

We initially obtained legal opinion from a senior counsel and his opinion was the same as Alex White's, i.e. the legislation is clear and unambiguous. His opinion was that the weakness is not in the current legislation but in the

willingness to use it. We were advised that we could use the Consumer Protection Act 2007 to take civil cases to obtain court injunctions to prevent untrained technicians from treating patients.

The CDTAI compiled a list of those technicians who we felt were the most blatant at advertising and treating patients. Through the offices of M.P. Moloney Solicitors, we sent out a number of cease and desist letters. Some technicians signed these letters and others did not. The cease and desist letters were clear and uncomplicated: stop treating patients and only work within your scope of practice. The CDTAI elected to instigate legal proceedings in two cases. In both instances following the institution of proceedings both technicians committed to the undertaking.

When the Dental Council advised that we should take legal action ourselves it stated that it would support us in any way it could. Unfortunately this was not the case. When our legal team contacted them for information or input, the Dental Council's response was to decline participating in the proceedings. Even the simple request to provide a letter to explain what the law states in relation to illegal practice and the scope of practice, was not provided. It wasn't until a parliamentary question was made to the Minister for Health that the requested letter was provided.

Questions now remain to be answered as to the role of the Dental Council in enforcement against rogue practitioners. Its track record to date is not supportive of a view it will fulfil its duty as the enforcement authority. They have said that if they receive a complaint from a member of the public and it deems it to be a risk to the public, it will take action and refer it to the Gardaí. In 2014 it did receive such a letter detailing illegal and unsafe practices by a technician. It does not appear to have been referred to the Gardaí. Nor does it appear the dental technician was held to account in any fashion.

It is clear that unhygienic and unsanitary practices pose a risk to the public. In addition non-clinically trained personnel performing clinical treatment is not only by its nature reckless, but a considerable risk to public health.

The Dental Council is now a prescriber under the Consumer Protection Act 2007. This means that it appears to have all legislative power required for it to prosecute illegal practices. It remains to be seen as to what grounds the Dental Council can put forward to support its inaction. We hope that inadequate funds or manpower are not the reasons.

How do we move on from here?

The CDTAI has shown that a campaign of lawful action can produce results. We believe the Dental Council must simply now take action. If not, the CDTAI will continue its legal cases against practitioners.

This is against the backdrop of complaints by members of the profession that it appears technicians from outside the country are being recruited to come to Ireland and are then 'trained' by other non-qualified technicians on how to treat patients. The fundamental nature of this activity, if shown to be true, shows a worrying presumption by dental technicians that they can continue to expand their unlawful practices without fear of prosecution. This cannot be allowed to continue. Their patients are often the most vulnerable members of our community.

We in the CDTAI are also very cognisant of the fact that this is the *Journal of*

the Irish Dental Association. However the secret of success for these rogue technicians is the inaction of the Dental Council, the lack of knowledge of the public and it appears referrals from some dental practices. We have seen some evidence of referral in the cases taken so far and it is very worrying.

All clinicians referring patients have a duty of care to those patients. They must ensure that the person being referred to is qualified and competent to carry out the treatment. It is no excuse to suggest that the dentist in question was unaware as to the status of the service provider. All practitioners can see the list of qualified CDTs contained on the public register available from the Dental Council and accessible from its website.

Dentists should be cognisant of the consequences for their own practice of referring patients to parties not authorised to provide treatment. We are advised by our legal team that any patient who has been treated by a dental technician and suffered injury may have a right of action for compensation against that dental technician and/or the dentist that referred him or her.

Following the coverage of our successful legal action a number of patients have made contact with us and we have passed their details to our legal team.

The process of enforcement by the CDTAI, a private organisation funded by its members has been a costly exercise. It is now time for the regulator in the form of the Dental Council to respond to its mandate and for the whole dental community to shine a light on what is no longer acceptable and cannot be ignored.

Yours sincerely

Philip McGrath

Chairman

Clinical Dental Technicians Association of Ireland

Right of reply

Dear Editor,

Thank you for allowing the Dental Council a right of reply to the letter from the Clinical Dental Technicians Association of Ireland (CDTAI) concerning our actions. The CDTAI is already aware of most of the points I make here.

The Dental Council's attitude to illegal practice

The Dental Council takes its role to protect the public very seriously and, if there is enough evidence, it will prosecute instances of illegal practice. To demonstrate this claim, I cite the fact that we have opened four files of allegations of illegal practice in 2019 (none concerning illegally practising dental technicians). Illegal practice concerns more than dental technicians and, to my mind, the biggest risk to public safety is the risk of unregistered individuals practising as dentists.

I agree with the CDTAI on one point in that the legislative framework is not suitable to properly address this concern because at present the Dental Council has no power to inspect practices or to attach a sanction – up to and including a closure order – to a dental practice. The Food Safety Authority of Ireland can close a restaurant because it poses a contamination risk, but no one can close a dental surgery for the same reason. According to the national oral health policy, this power will be a cornerstone of the new dental bill and I welcome this.

Evidence

The CDTAI seems to equate a lack of evidence with a lack of enthusiasm to act. It makes several third-party allegations in its letter, but the Dental Council needs first-party evidence to act, and almost always this must come from a patient. The letter mentions some of the comments made by patients when they attend their clinical dental technician, but these people are not contacting the Dental Council. His members are failing their own profession by not asking patients who witness illegal practice to contact the Dental Council.

We receive very few communications from patients concerning treatment provided by illegally practising dental technicians. And of those that do contact us, some do not want to appear in court as a witness, which is understandable, and, in some cases, the evidence is just not sufficient to initiate a prosecution: the bar is high for the Council on enforcement matters as we are obliged to prove allegations beyond reasonable doubt.

What the CDTAI wants and what the Dentists Act, 1985 provides for

Section 51 of the Dentists Act, 1985 makes it an offence, subject to some exemptions, to practise dentistry while not registered, and it provides for a fine of £1,000 (now €1,500) and up to 12 months in prison. On this point I agree entirely with the CDTAI's senior counsel and former Junior Minister Alex White (also a senior counsel) that this section of the Act is clear and unambiguous. But the CDTAI has repeatedly called on the Dental Council to stop illegal practice. This is not provided for in the current Act and it is beyond what we can legally do.

CDTAI legal action

It is simply wrong for the CDTAI to say that we only assisted it because we were forced to by way of a parliamentary question. The Dental Council answered each and every one of the many letters sent to us by the CDTAI's solicitors during the process.

The CDTAI used the Dental Council postal address in its legal notices giving a misleading impression that its action was being taken by or on behalf of the Dental Council (something which, at the time, we were statutorily barred from doing). It also listed us as a notice party in its action. Both decisions were taken by the CDTAI unilaterally and effectively forced the Dental Council to incur pointless legal expense dealing with these matters.

If the press reports of the CDTAI court action under the Consumer Protection Act are correct, it is worth noting that the case was struck out with no admission of liability. This is an important point as nobody has been found by the Court to be practising illegally. The CDTAI is in the same position as the Dental Council in requiring provable evidence.

Dental Council resources

The Dental Council will not, and never has cited a lack of financial or manpower resources as an excuse for inaction. We are clear in our role and we will defend the public interest to the best of our ability, and we will act where there is evidence. There is a price for regulation and enforcement, and while the Dental Council will continue to defend the public interest, it is worth noting that one single prosecution costs a multiple of the amount the clinical dental technicians contribute to dental regulation annually. In New Zealand, these costs would be recovered, by law, from the clinical dental technician profession.

The future

The clinical dental technician profession is facing an existential threat. The profession remains small and it is difficult for it to achieve the critical mass necessary to either meet the countrywide needs of the population or to properly sustain itself as a profession into the future. The national oral health policy recognises that this unmet treatment need requires immediate attention and it has prioritised a review of the scopes of practice for both clinical dental technicians and dental technicians. It is noteworthy that the Department of Health regards this work as a separate exercise from the review of the scopes of practice for the rest of the auxiliary professions. In fairness to the clinical dental technicians, there is a structural problem with their education pathway that does require attention.

The question being asked is how to increase patient access to treatment and increase trainee access to the profession. Answering this question will require all stakeholders to engage constructively.

I thank you for allowing me the opportunity to respond.

Yours sincerely,

David O'Flynn

Registrar

Dental Council of Ireland

Oral health policy

Dear Editor,

I write to you on behalf of the Irish Association of Oral Surgery and in response to the recent publication of 'Smile agus Sláinte – National Oral Health Policy'.¹ While the development of an updated oral health policy in Ireland is welcome, we share the concerns raised by Irish Dental Association members as outlined in the last edition of the *Journal* and raised in the recent Oireachtas Joint Committee on Health debate.² Our largest regret is the lack of engagement that the Irish Association of Oral Surgery had in the development of this policy. We note that this has been mirrored in other fields of dentistry and in general with dental service providers at all levels. In our opinion, this represents a missed opportunity to create a policy that all stakeholders were invested in. Despite this, we are committed to being part of the solution. We would welcome engagement in addressing the problems that exist in oral surgery services in Ireland.

In relation to the current system of oral surgery provision in Ireland, it is typically available to patients as a secondary- or tertiary-level service. Large discrepancies in access to care exist between the private sector and the public sector. Within the public sector, there is considerable variation in access to care from one geographic area to another. This is provided in some cases as an *ad hoc* arrangement between a local HSE unit and an oral surgeon, or at a hospital level. Hospital-level care is only available via long waiting lists. In many cases, relatively simple treatments are being provided by highly specialised units, where care is costly, burdensome to an already overstretched service, and may only be available under general anaesthetic.

Within the hospital system and the HSE, there is a complete lack of consultant-level oral surgeons. The historically small number of oral surgeons meant that a HSE oral surgery service was never developed. With the development of robust specialist training pathways over the last decades, this has changed. The current lack of oral surgery appointments, either at specialist or consultant level, within the HSE is anomalous and vexing. It is at odds with international trends, where the appointment of specialist and consultant oral surgeons and the development of oral surgery-led care pathways are being actively developed.³ It is also inconsistent with the HSE's approach to the only other recognised dental specialty of orthodontics. Overall, there is a larger problem of a lack of recognised pathways for consultant training in all dental specialties in Ireland as well as a lack of recognition of all specialist fields.

Concerning the new oral health policy, we note the overall trend to provide dental services at a primary level where possible. This is a welcome development and we fully support the move to provide access to care to patients at a local level where possible. We also acknowledge that some patients will require care in more complex settings. While this is addressed in the policy as advanced or complex care, we regret the lack of any detail about what will define these terms. There is also a lack of detail and clarity about what would constitute an advanced healthcare centre.

Specialist oral surgeons have particular experience in providing treatment under local anaesthetic with or without sedation and, when needed, under general anaesthetic. In our ability to provide treatment out of hospital, we can reduce the burden of care that currently exists within the hospital system. Most oral surgery treatments can be carried out in a community setting at reduced cost and reduced waiting time. This would free up valuable resources at hospital level. We are also trained and experienced in the provision of hospital-based care, which will always be needed for the most complex care and where general anaesthetic is required. Specialist oral surgeons operating at specialist and consultant level within the HSE would offer considerable value and savings for HSE budgets and help alleviate pressure on outpatient and surgical waiting lists.

The Irish Association of Oral Surgery would welcome engagement in the translation of the oral health policy into action. We can only hope that, through engagement at this stage, change can be realised to address our concerns and, most importantly, to improve the quality of care that can be provided to our patients.

Yours sincerely,

Michael Freedman

President

Irish Association of Oral Surgery

References

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2. Oireachtas Joint Committee on Health debate. May 2019. Available from: https://www.oireachtas.ie/en/debates/joint_committee-on-health/2019-05-15/2/.
3. **NHS England.** Guide for Commissioning Oral Surgery and Oral Medicine. September 2010. Available from: <https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2015/09/guid-comms-oral.pdf>.

Inaugural meeting of the BISOM

The inaugural meeting of the British and Irish Society for Oral Medicine (BISOM) was held in Bristol on May 2-3. The British Society for Oral Medicine was established in 1981 but became the BISOM after a proposal was made and carried at the Dundee ASM in 2018 to reflect Irish membership and involvement.

The organisation seeks to improve the quality of life of patients who fall within the scope of the specialty by promoting excellence in clinical care, research and education. Its ASM has been hosted in Ireland on three occasions: Dublin in 1993 and 2017; and, Cork in 2009. In recent years, an oral medicine specialty trainee forum has been held on the day preceding the ASM and this was hosted by the Dublin Dental University Hospital in 2017. The 2019 meeting saw the launch of the new society logo and website: <https://bisom.org.uk/>.



At the BISOM ASM 2019 held in Bristol recently were (from left): Dr Richeal Ní Riordáin, Locum Consultant in Oral Medicine, Cork University Dental School and Hospital; Dr Christine McCreary, Consultant in Oral Medicine and Dean, Cork University Dental School and Hospital; Prof. John Gibson, President, BISOM; Dr Pepe Shirlaw, Immediate Past President, BISOM; and, Dr Claire Healy, Consultant in Oral Medicine, Dublin Dental University Hospital. (Not pictured: Dr Sheila Galvin, Consultant in Oral Medicine, Dublin Dental University Hospital).

EPA appointed regulator for amalgam separators


The Environmental Protection Agency (EPA) has been designated the competent authority with national oversight for hazardous waste substances containing mercury. Local authorities have been assigned responsible, in their own areas, for monitoring amalgam separators in dental facilities.

How the local authorities will undertake this monitoring has not yet been finalised. One option under consideration is a self declaration. In this instance, later this year dental practices would report on their amalgam management systems and used water discharge.

Dr Jane Renehan at Dental Compliance Ltd reminds practice owners of their legal obligation to install CE-marked amalgam separators that fulfil the ISO 11143 standard for retention and collection of at least 95% of amalgam particles from used water. Separators should be maintained in accordance with the manufacturer's instructions and serviced only by an authorised hazardous waste management company.


Dr Renehan advises that documentary evidence demonstrating a practice's adherence to legislation should be readily available in the event of an unannounced inspection. In circumstances where dental practices do not produce waste amalgam particles (e.g., an orthodontic practice) Dr Renehan advises that there is a documented reason in the practice safety statement for the non-installation of an amalgam separator.





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Diary of events

SEPTEMBER

- 17 Munster Branch Meeting and AGM**
Maryborough Hotel, Douglas, Cork
- 27 Getting long in the tooth – retirement seminar**
Crowne Plaza Hotel, Santry, Dublin
- 27 Snoring/sleep apnoea course**
Crowne Plaza Hotel, Santry, Dublin
- 28 Young dentist/new graduate event**
Crowne Plaza Hotel, Santry, Dublin

OCTOBER

- 10-11 HSE Dental Surgeons Seminar**
Midlands Park Hotel, Portlaoise, Co. Laois
- 18 Kerry Branch ASM**
Europe Hotel, Killarney
- 19 Basic life support and medical emergencies – Galway**
Clayton Hotel, Ballybrit, Galway
10.00am – 4.00pm
- In order to comply with Dental Council regulations, you are obliged to have both basic life support (BLS) and medical emergencies certification. By completing this one-day course you will fulfil your Dental Council requirements. SafeHands will offer a one-day, interactive, practical course on how to deal with any medical emergency in the dental setting. It will also detail what drugs you should have in your drug kit and how/when to use them. Cost: €195 IDA members, €390 non-IDA members.
- 19 Metro Branch meeting/IDA EGM and SGM**
Hilton Hotel, Charlemont Place, Dublin 2 *From 6.00pm*
- Speakers will include Dr David McReynolds on 'Case-based learning', Fintan Hourihan, IDA CEO, on the national oral health policy and the IDA, and Dr Anne O'Connell on 'Clinical and biological aspects of root resorption'. At this meeting, Extraordinary and Special General Meetings of the IDA will also take place in order to ratify the candidacy of Dr Anne O'Neill as President-Elect of the Association, and also to approve certain governance changes.
- 25 Irish Academy of Aesthetics meeting**
Titanic Event Centre, Belfast
- 26 Basic life support and medical emergencies – Dublin**
Radisson Blu Dublin Airport *10.00am – 4.00pm*
See details October 19 above.



Sleep apnoea and snoring course



Dr Roy Dookun, a GDP from Guernsey, will give a full-day course on sleep apnoea and snoring in Dublin on Friday, September 27. For further details and to book, please log on to: www.dentist.ie.

Colgate Caring Awards 2019

Will you or your dental team be named Colgate Caring Dentist or Dental Team of the Year for 2019? Encourage your patients to nominate you now and they could win €1,500. Entries are open at: www.colgatecaringawards.ie. The gala awards night takes place in the Clayton Hotel, Leeson Street, Dublin 4, on Saturday, December 7. Make sure and put the date in your diary. All those nominated are welcome to attend and bring their dental teams. Let's celebrate all the good things about dentistry!

Mouth Cancer Awareness Day 2019

Mouth Cancer Awareness Day this year is on Wednesday, September 18. This year the awareness programme will focus on younger people and teenagers. The campaign has partnered with youth organisation SpunOut to raise awareness through a social media campaign and short video. The campaign will focus on the risk factors such as smoking and drinking, and also highlight the link with the HPV virus and mouth cancer. For further information, see article on page 198 or log on to www.mouthcancerawareness.ie.



Review of consultant orthodontist eligibility criteria

The Irish Dental Association has been asked to contribute to a review of the current eligibility criteria for consideration in appointment to the role of consultant orthodontist. The review has been organised by the HSE after the Commission for Public Service Appointments (CPSA) recommended that the HSE conduct such a review.

If you have any views that you want to submit for consideration by the Association in preparing its submission, please email oralhealth@irishdentalassoc.ie.

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CED Meeting with EU Commission

At the recent meeting of the Council of European Dentists (CED) and the EU Commission on the phase down of amalgam were (from left): Dr Susie Sanderson, British Dental Association/CED; Lea Pfefferle, CED secretariat; and, Dr Jane Renehan, IDA/CED.



Hanging up your handpiece?

A day-long seminar for those contemplating retiring over the next few years will take place on Friday, September 27, at the Crowne Plaza Hotel, Santry, Dublin. The event is suitable for anyone in the private, specialist or HSE/hospital services. There will be presentations on dealing with legal matters, writing a will, succession planning, pensions and tax, as well as a talk from a dentist who has recently retired. Members' partners/spouses are also welcome to attend also. Not to be missed by those thinking of retiring over the next few years. Only open to IDA members. Kindly supported by Omega Financial Management.

Young dentists'/new graduates' seminar

The IDA will hold its second seminar for young dentists/recent graduates on Saturday, September 28. Following on from a very successful inaugural event in 2018, the day will include presentations on finance, taxation, employment law, how to sign up for medical card (DTSS) and social welfare (DTBS) contracts, plus talks from peers who have chosen certain pathways in dentistry. This event is an absolute must for anyone recently graduated, thinking of buying a practice, or recently returned to Ireland. The seminar is also open to final-year undergraduate dental students of the Cork and Dublin dental schools. For more information, contact aoife@irishdentalassoc.ie. Kindly supported by KBC Bank.

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Quiz

Submitted by Dr Denise MacCarthy

Dry mouth

Salivary hypofunction is defined as the objective reduction in stimulated/unstimulated saliva production. Xerostomia is defined as the subjective complaint of dry mouth, although there may not be signs of hypofunction.

Questions

1. What are the functions of saliva?
2. What are the normal saliva flow rates and percentages from various saliva glands?
3. What causes dry mouth?
4. What are the management options for a patient who suffers from dry mouth?
5. What are the complications of salivary gland hypofunction?
6. List four questions you should ask your patient to establish if they have salivary hypofunction.

Answers on page 212.

IDA at the Department of Health



An IDA delegation held a meeting with Department of Health officials on July 16 to discuss matters including the new national oral health policy. Read more about the meeting in the Members' News on page 189. Pictured are (from left): IDA Vice President Dr Kieran O'Connor; Manager of IDA Communications and Advisory Service Roisín Farrelly; IDA President Prof. Leo Stassen; HSE Dental Surgeons Group President Dr Christine Myers; and, IDA Chief Executive Fintan Hourihan.

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

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

inhibiting drug, an anti-inflammatory drug and thiazide diuretic at the same time increases the risk of renal impairment. Blood dyscrasias have been rarely reported. Patients on long-term therapy with ibuprofen should have regular haematological monitoring. Like other NSAIDs, ibuprofen can inhibit platelet aggregation. GI bleeding, ulceration or perforation, which can be fatal, has been reported with all NSAIDs at anytime during treatment. Combination therapy with protective agents (e.g. misoprostol or proton pump inhibitors) should be considered. Use with concomitant NSAIDs including cyclooxygenase-2 selective inhibitors should be avoided. NSAIDs may lead to onset of new hypertension or worsening of pre-existing hypertension and patients taking antihypertensive medicines with NSAIDs may have an impaired anti-hypertensive response. Fluid retention and oedema have been observed in some patients taking NSAIDs. NSAIDs may very rarely cause serious cutaneous adverse events such as exfoliative dermatitis, toxic epidermal necrolysis and Stevens-Johnson syndrome. Products containing ibuprofen should not be administered to patients with acetylsalicylic acid sensitive asthma and should be used with caution in patients with pre-existing asthma. Adverse ophthalmological effects have been observed with NSAIDs. For products containing ibuprofen aseptic meningitis has been reported only rarely. NSAIDs may mask symptoms of infection and fever. **Interactions:** Warfarin, medicines to treat epilepsy, chloramphenicol, probenecid, zidovudine, medicines used to treat tuberculosis such as isoniazid, acetylsalicylic acid, other NSAIDs, medicines to treat high blood pressure or other heart conditions, diuretics, lithium, methotrexate, corticosteroids. Refer to summary of product characteristics for other interactions. **Fertility, pregnancy and lactation:** Easolief Duo is contraindicated during the third trimester of pregnancy. **Driving and operation of machinery:** Dizziness, drowsiness, fatigue and visual disturbances are possible after taking NSAIDs. If affected patients should not drive or operate machinery. **Undesirable effects:** Dizziness, headache, nervousness, tinnitus, oedema, fluid retention, abdominal pain, diarrhoea, dyspepsia, nausea, stomach discomfort, vomiting, flatulence, constipation, slight gastrointestinal blood loss, rash, pruritus, alanine aminotransferase increased, gamma-glutamyltransferase increased, abnormal liver function tests, blood creatinine increased and blood urea increased. Refer to Summary of Product Characteristics for other adverse effects. **Pack size:** 24 tablets. **Marketing authorisation holder:** Clonmel Healthcare Ltd., Clonmel, Co. Tipperary. Marketing authorisation number: PAD126/294/1. Medicinal product not subject to medical prescription. For retail sale through pharmacy only. A copy of the summary of product characteristics is available upon request. **Date prepared:** March 2018. 2018/ADV/EAS/036H.

Keeping your Council

Dental Council of Ireland President Dr Gerry McCarthy spoke to the *JIDA* about a range of topics including the new oral health policy, the Council's role, and the expected new dental bill.



The Dental Council welcomes the recently published oral health policy 'Smile agus Sláinte', according to its President Dr Gerry McCarthy: "Finally, oral health is getting some attention and that can only be a good thing. We've been neglected for a long time, our Act is way out of date".

Dentistry is still stuck with the Dentists' Act, 1985, while the acts covering medical GPs and pharmacists were both updated in 2007. Gerry says one consequence of the policy from the Council's perspective is that it will require that the 1985 Act be replaced: "The implementation of the policy, however, is what is going to require a lot of thought and consideration".

He highlights what the Council would like to see in the new act: "The two big gaps are the lack of statutory CPD schemes and practice regulation. We feel that the policy does address these. Other areas we'd like to see [addressed] would be enhancing the rules around regulation, expanding the grounds for fitness to practise [hearings], and mentoring new registrants – not just graduates – into practice in Ireland".

He says another welcome development with the policy may be the introduction of the power for the Council to inspect practices: "Even now, the Council

should have this ability. It's something that we need to be able to do".

When asked how the policy and its recommendations fit with current Council regulations regarding scope of practice, e.g., the suggestion that general dental practitioners would carry out "simple orthodontics", he says: "If a general practitioner wants to do orthodontics, there's no reason he shouldn't do it within his abilities. As to how somebody could be forced to do something they didn't think was within their abilities, I can't see how that could be".

Dental specialties

The new policy also opens the door to the recognition of further specialties and Gerry explains: "At this time, the Council recognises two specialties, oral surgery and orthodontics. In 2014, we submitted a more extensive list of specialties to the Minister for approval".

The Council wrote to the Minister requesting that an additional nine specialties be recognised (see panel). The letter was acknowledged and the Council, through periodic follow-ups, has learned that its list of proposed specialties is being considered in the context of the oral health policy.

With recent media coverage on consultant training and appointments in the medical profession, Gerry speaks about improving professional pathways in dentistry: "The Council would be broadly supportive of any system that formalised pathways. Consultant posts are a matter for the employer and the Department of Health, they're not a matter for the regulator. We regulate specialists rather than consultants".

At the recent Oireachtas Committee hearing on oral health, the Chief Dental Officer Dr Dymrna Kavanagh advised that the Dental Council will lead in developing the advanced centres of care framework for specialists proposed in

Colm Quinn
Journalist with Think Media



the policy. Asked for his view of this approach, Gerry says: "Any view that the Council will form will be informed by how the policy will be implemented. It's not clear at this point".

Gerry explains the Council's position on changes/developments in the scope of practice for ancillary professionals, e.g., direct access to hygienists, orthodontic technicians, etc.: "This is something that requires a change in the legislation. We'll work with the Department on safely implementing the policy goals".

In the policy, it is suggested that the Council would be given jurisdiction over private dental schools: "We're only aware of one such school in this jurisdiction. They don't do any clinical training and so we don't have any oversight. The latter part of that course is done elsewhere and the qualification is awarded in another EU country, so another regulator would be responsible. It's somewhat funny, the question, because the Dentists Act of 1985 would have to be amended to allow any institution, Irish or international, to establish another dental programme in Ireland. If this did happen, such a programme would be subject to the Council's rigorous accreditation process".

Beyond the scope

Recent cases have drawn attention to a small group of dental professionals operating outside their scope of practice, such as the recent civil case where the Clinical Dental Technicians Association Ireland (CDTAI) successfully

Proposed specialties the Dental Council submitted to the Minister for Health for approval

1. Oral medicine
2. Oral and maxillofacial pathology
3. Oral and maxillofacial radiology
4. Paediatric dentistry
5. Prosthodontics
6. Endodontics
7. Periodontics
8. Special care dentistry
9. Dental public health

brought to court a dental technician who was undertaking work on patients when he was not qualified to do so. Gerry explains where the Council sees its role in these cases: "The Dental Council takes allegations of illegal practice seriously and will take appropriate steps where there is sufficient evidence to proceed. The bar is quite high in terms of evidence and that is one of the difficulties".

The Council is in the process of reviewing all of its codes of practice. New and emerging techniques are also on its regulation radar, such as Botox and non-surgical aesthetics. Gerry says: "All that sort of stuff needs to be looked at as well, because dentists are actually doing it, even though at the moment our guides say it is not the practice of dentistry. We need to consider these things".

On the issue of whether it is time to regulate services along with professionals, he says that within the constraints of the current Act, this is not something the Council can do. Regulating medical appliances is the territory of the Health Products Regulatory Authority (HPRA) and there is quite significant regulation in this area. According to the Council, there is a gap in practice regulation at the moment which will be plugged, but regulation across the whole profession is likely to be spread between the Council and the HPRA.

Registration fees

Gerry is clear that if the role of the Council expands there will have to be an increase in registration fees for dentists: "Since the crash, we've kept the fees the same until this year... I think we have the lowest registration fee of any healthcare regulator in the country so it is inevitable that there will be some increases. If and when the role of the Council expands, there will be an increase in the costs, and these will have to be funded so the fees will go up".

He lists what he considers the Council's main achievements during its current term of office, including: the revision of its accreditation processes; administering the work of the Irish Committee for Specialist Training in Dentistry; and, the renewal of the mutual recognition agreement with Canada. Finally, Gerry says there is one thing he would like to bring to the attention of dentists: "Come the end of next year, there will almost certainly be an election for a new Council because I don't see the [new dental] act coming into place before then. I would like people to consider putting themselves forward. I would also wish that more people would vote than voted in the past to elect people onto the Council while we have that gift as a profession".

Gerry is a GDP in Kenmare, Co. Kerry, where he has been practising since 1989, and was President of the IDA in 2005.

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VITA products from Quintess Denta



Quintess Denta states that it is proud of its partnership with VITA, which enables the company to supply a range of VITA products including blocks, furnaces and Easyshade. Enamic is a hybrid block and mixture of ceramic and polymer, and is available

in translucent (T), high translucent (HT) and super translucent (ST). Quintess Denta states that these blocks can be used for all single restorations, for all indications (except long-span bridges) and can absorb a high masticatory force in the posterior region. According to the company, with this block, clinicians can save time using a CAD/CAM system, as it does not need any firing process in a ceramic furnace and can only be hand polished, resulting in a high glossy image. The company believes it is ideal for minimally invasive restorations and custom implant abutments. Quintess Denta states that it won't be beaten on price on these products.

Thinking differently about dentistry

The organisers of the first Dental Innovation Symposium – Henry Schein Dental, Software of Excellence, BioHorizons and MediEstates – state that the event brought together a first-class line-up of experts.

According to the companies involved, the event, which took place from June 7-8 in London, was for practices open to thinking differently about how to boost their business and meet patient needs.

Around 300 delegates were greeted by Ben Flewett, Managing Director at Software of Excellence, who launched the event by reminding dentists of their preventive responsibilities in the wider healthcare arena and giving some tips to improve efficiency and boost business performance.

Throughout the two days, there were presentations and breakout sessions covering a wide range of topics including: digital dentistry; practice performance; teamwork; and, dental implants.

On show at the Symposium was Primescan, the new intraoral scanner from Dentsply Sirona. This was one of the first chances for UK clinicians to see the new technology in action.



Ben Flewett, Managing Director at Software of Excellence, spoke on improving efficiency and business performance.

Grey's Anatomy collection from Diamond Designs



Readers may remember that in 2018, the *Journal of the Irish Dental Association* reported that Diamond Designs had been awarded the exclusive rights to distribute Grey's Anatomy brand dental scrubs, tunics and trousers in the UK and Ireland.

These are now available and according to Diamond Designs, offer unrivalled flexibility and durability. The company states that whether you are treating patients, or running between appointments, you will stay comfortable and look professional. Diamond Designs is a family-run company, with 30 years' experience in supplying uniforms to the healthcare sector.

Professor O'Connell honoured



Professor Brian O'Connell (centre), with Dr Terry Brewick, President-Elect, Pierre Fauchard Academy (right), and Dr Paul O'Dwyer, Irish Section Head (left).

Prof. Brian O'Connell, Dean of Dental Studies at Trinity College Dublin and prosthodontist at Northumberland Dental Care, was recently awarded a fellowship of the Pierre Fauchard Academy (PFA), an international honorary dental organisation. The award was presented by Dr Terry Brewick, current president-elect of the PFA, during a three-day visit to Ireland from the US in June. Dr Brewick was accompanied on the trip by the PFA CEO Loralie Lowder, and executive assistant Kayla Shoemaker.

The Academy declares itself to be dedicated to fostering service and leadership in dentistry. It is a non-profit educational organisation, comprising 137 sections across North America, South America, Europe, Asia, Africa and Australia. Membership exceeds 10,000, representing 11 regions and 85 countries. Previous Irish section heads include Prof. Robin O'Sullivan, RCSI, and Prof. Christopher Lynch, UCC.

Awards for Irish dentists at IADR



President of the IADR and first dental officer of the National Institutes of Health. The award is given for meritorious research in epidemiology and public health. It is one of the highest honours bestowed by the IADR.

Sponsored by The Borrow Foundation, the IADR E.W. Borrow Memorial Award

Two Irish dentists received prestigious awards at the Annual Congress of the International Association for Dental Research (IADR) in Vancouver in June. Prof. Helen Whelton, Head of the College of Medicine and Health at UCC, was the 2019 recipient of the Distinguished Scientist H. Trendley Dean Memorial Award and the International Association for Dental Research EW Borrow Memorial Award.

The Distinguished Scientist H. Trendley Dean Memorial Award is supported by the Colgate-Palmolive Company in memory of H. Trendley Dean, the 21st

recognises and stimulates research in oral health prevention for children, with a priority for caries prevention where fluoride in different formats is utilised.

Dr Peter Harrison, Assistant Professor and Lecturer in Periodontology at the Dublin Dental University Hospital, also received an award. Peter, who is President of the Irish Society of Periodontology and the junior officer of the European Federation of Periodontology (EFP) Postgraduate Education Committee, received the IADR Karring-Nyman Sunstar Guidor Award, which aims at supporting research within the field of oral tissue regeneration.

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Digital Symposium

DMI has been chosen by Dentsply Sirona as new agents in Ireland for the sale and service of the entire range of Sirona equipment. Over the past few months, DMI says that it has been busy upgrading its showrooms, training staff and stocking up on Sirona spare parts to ensure that it is ready to offer dentists a comprehensive service.

According to Pat O'Brien, Managing Director, DMI: "Now we are ready to go. Indeed, we could not have picked a better time as Dentsply Sirona has just launched its new Primescan intra-oral scanner, which sets new standards in

dental scanning technology. We have the new Primescan and Cerec mill solution in our Dublin showroom, so please contact us if you would like a demonstration".

To celebrate the launch of its appointment as Dentsply Sirona agents, DMI, in association with the IDA, will host a Digital Symposium in the Aviva Stadium, Dublin, on September 12. It will showcase how Sirona equipment can integrate into and augment current dental workflow, bringing increased efficiency and accuracy to everything a dental surgery does. Places are limited and to book please log on to www.dentist.ie.



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Dr Jeff O’Sullivan, Director of Research at the Dublin Dental University Hospital, talks about some of the research taking place there and its place in global efforts to combat oral cancer.



Invested in finding a cure

When we think of the Dublin Dental University Hospital (DDUH), we might think of patients waiting to be seen at one of its many clinics, or of its status as a leading educator of Ireland’s dentists, dental nurses, hygienists and technicians. However, alongside its educational and clinical work, the DDUH is also a hive of research activity, with projects right across the spectrum of dental science. Director of Research Dr Jeff O’Sullivan and his team focus on the area of oral cancers, specifically diagnosis and prognostic markers. They recently published a paper in the journal *Glycobiology* on their work on carbohydrate structures in saliva and how they might be used to predict whether a patient will transition from dysplasia to cancer: “We also look at different underlying mechanisms – the cellular functions that underpin carcinogenic transformation, such as cell death pathways like apoptosis, autophagy, necrosis, and so on. How are they modulated in different conditions? One of my PhD students is

currently looking at drug resistance in oral cancer and whether a dysfunction in these pathways might be involved in a particular patient cohort becoming chemoresistant. We are also working with research teams looking at novel compounds that might be used as therapies in the future”. This is *in vitro* research on cancer cell lines from characterised tissue samples/cell banks that will hopefully result in clinical trials down the line.

This work is only a small part of the oral cancer research in the DDUH. Other researchers are looking at the oral microbiome and whether the presence of certain bacteria may precipitate cell transformation. There are teams designing new and better obturators and prosthetics for patients post treatment, as well as quality of life studies, and a wealth of non cancer-related research too.

Winding road

While the ultimate aim of all of this research is to improve early diagnosis, treatment and post-treatment care of oral cancers, it’s a long road, where the destination is not always clear: “It’s always evolving. You identify a problem you want to come up with a solution for, you design experiments, and invariably when you’re doing this you discover something else, or you notice something else”.

Some of the projects have tremendous potential to translate to the chairside in the future. Jeff mentions a project looking at Raman spectroscopy as a mechanism for identifying premalignant lesions. This involves collaboration with a researcher in Brazil who is working to downscale the cumbersome Raman microscope so that it could be a chairside diagnostic tool: “The idea is that eventually we will be able to see a patient in a chair, use a downscaled Raman microscope to look at a piece of suspect tissue and say ‘that’s normal’, or ‘that’s not normal’. [In our research] we try to split between the diagnostics, which are more clinically translatable, and what’s going on in the cell at a molecular level. We look at the different processes that are physiologically going on in the cell”.



Ann-Marie Hardiman
Managing Editor,
Think Media

Research in immunology also has a role to play: “A lot of head and neck cancers, mainly in the oral cavity, can arise due to a persistent inflammatory response. So controlling these inflammatory events can be key to reducing transformation. Cancer isn’t just one mutation in one cell, it’s multifactorial; the inflammatory part is just a component of a larger fight against cancer. If you can control the immune response in the mouth, whether it’s topically or through an IV, that’s going to reduce the chance of inflammation, reduce the chance of damage”.

Global reach

Cancer research is of course a huge global endeavour, and some of the major developments, while not specifically in the area of head and neck cancers, have the potential to be game changing. Jeff mentions the move towards combination drug therapies as one such innovation, and also therapies that target particular genetic or protein abnormalities. Early diagnosis in oral cancers is a key aim of research: “The most common treatment for oral cancer is surgery, largely because of its late diagnosis, making it hard to treat. If we can get to the stage where we have early diagnosis coupled with targeted therapy, we should be able to improve patient outcomes”.

Another tool that has implications far beyond oral cancer is the area of salivary diagnostics and the use of so called liquid biopsies. Using saliva samples, it is becoming possible to test for a range of systemic disorders, from Alzheimer’s disease to diabetes, further cementing the link between oral and general health.

Researchers at the DDUH collaborate with scientists in institutions all over the world. Jeff’s team is part of the Horizon 2020 TRACT (Training in Cancer Mechanisms & Therapeutics) project, which involves teams in Dublin, at Queen’s in Belfast, and in the Universities of Valencia in Spain and Sienna in Italy.

There are also industrial, non-academic collaborations, and the teams at the DDUH work to disseminate their research at international conferences, and through publication in international journals. Jeff is also involved in the Association of Science Educators in Dentistry (ASEiD), the European Association for Cancer Research (EACR), and is currently president of the Irish division of the International Association for Dental Research (IADR). This last organisation in particular is important because of its dental focus: “If you go to any EACR meeting, out of 5,000 participants, there might be a few dozen researchers working on the biological aspects of oral cancer. We have a particular oral medicine pathology group within the IADR, and you’ll find a good cohort of cancer researchers there, so it’s essential for us to be involved in that and for our students to get such exposure, and to take on board other people’s research and develop collaborations. It’s the only way forward, because the days of the solo researcher are gone”.

Future challenges

The world of research is not a static one, and faces its own challenges. Among the most pressing for Jeff and his colleagues are regulatory issues: “The big issue at the moment would be dealing with the likes of GDPR, and health research regulations, which, in terms of accessing patient samples and historical samples, are going to be problematic. Patients are entitled to consent to their use, and rightly so, but the red tape and paperwork surrounding these issues is mountainous, and it will potentially put researchers off working directly with clinical samples”.

Loving the lab

Jeff graduated from the then Dublin Institute of Technology in 1999 with an honours degree in biochemistry and molecular biology. After a brief stint as a pathology lab technician in the then Adelaide and Meath Hospital in Tallaght, he decided to pursue a PhD and came to TCD, where he worked with Prof. Keith Tipton in the Department of Biochemistry. Roles as a problem-based learning tutor and postdoctoral fellow followed in the DDUH, and since 2008 Jeff has been an Assistant Professor in Biosciences, and is currently also Director of Research in the School of Dental Sciences.

And of course there’s the perennial issue of funding, especially for a less ‘popular’ cancer like oral cancer: “There’s lots of funding out there, predominantly targeted towards the more familiar cancers (breast, lung, prostate, etc.) as the main focus of research, so trying to sell oral cancer as a target worthy of funding is tricky. The H2020 grant we were awarded was one of the first major ones targeted towards oral cancer, along with oesophageal cancer – that was close to €3 million over four years and it is funding 11 PhD students throughout Europe. [Research] gets more and more expensive: the technology develops but it comes at a price”.

Getting the message out

Jeff is keen to remind people that dental graduates in Ireland are graduates in dental science, and this emphasis on science should inform their thinking, and their ability to interact with their patients: “If they don’t understand the underlying scientific concepts in the first place, they won’t be able to explain them or enhance their skills”. He’s in favour of more targeted CPD to help dentists stay informed about breakthroughs in research and treatment: “It’s beneficial for them to familiarise themselves with these new breakthroughs, and that way they can explain it better to their patients, especially if you’re treating a patient with a cancer issue. I see lots of courses advertised for new techniques in implants or perio, but there’s never really an add-on course for new biochemical techniques, new diagnostic tools, and so on”.

With the incidence of oral cancer rising, and the demographic changing, it’s more important than ever that dentists are informed: “It used to be considered an elderly male’s disease but now we’re seeing a lot of younger women presenting with it. [GDPs] might get some questions: ‘can I get this treatment, or that treatment; why can’t I do this?’ It’s just about keeping abreast of the latest information”.

Raising public awareness of scientific research in Ireland is also important. What would Jeff like the public to know about what they do?: “That we’re doing our best to try and understand the causes and the effects of these diseases. It is difficult to explain the technical language behind exactly what we do, but we are making progress, little by little, which hopefully will develop into a bigger picture. There is a significant amount of work ongoing in oral cancer in this country. We have clinical specialists and scientists working on these conditions with the expertise needed to drive advancement in the area, and the commitment and the desire to drive that progress, and we will keep on going. “We can only contribute a small portion to global knowledge in oral cancer. Then other people can take what we’ve done and develop that, whether it is through drug companies or groups that have much greater funding. We do our piece and hope that we can build on it – our research won’t change anything overnight, it’s the long-term benefits that we look at”.

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The patient perspective

Irish Cancer Society research sought to determine patients' experiences on the mouth, head and neck cancer journey.

The Irish Cancer Society recruited patients to attend a discussion with the aim of determining the patient experience of the pathway for mouth, head and neck cancer patients in Ireland, from referral through diagnosis, treatment and follow-up, and to identify service gaps. The discussion was organised around a number of themes, including:

- pre-diagnosis;
- treatment and physical issues;
- psychological issues;
- follow-up.
- diagnosis;
- support;
- practical issues; and,

Pre-diagnosis

When did you realise that something was wrong?

All participants responded to this topic by describing clear initial symptoms. Some patients' problems were continuous and concomitant. Persistent symptoms were a recurrent issue. Some mentioned that they were not aware of anything being wrong but most described symptoms such as swelling, sore throat, dry throat, painful mouth, and a lump. Some patients noted a reluctance to attend a medical professional despite feeling that something was wrong.

Going to the GP or dentist

One patient attended different doctors for two years with a concurrent problem. He was diagnosed when the cancer had spread. Another went to two different dentists over a period of eight months. This patient was initially treated for another, less sinister condition and felt that her diagnosis was delayed because the treating dentists did not suspect cancer, as she did not fit the profile of a typical patient with mouth, head and neck cancer.

Two patients mentioned going to their GP after attending funerals of people who had died from other types of cancer. Another mentioned attending the GP with a complaint of a sore ear for years. The symptoms were treated over a long period of time with creams for a less serious condition. Another patient



Most described symptoms such as swelling, sore throat, dry throat, painful mouth, and a lump.

mentioned having symptoms that he ignored for several months before going to a GP. There was limited discussion about support and information provided by dentists and GPs at the referral stage of the pathway. Many agreed that the timing and amount of information provided early in the cancer pathway was crucial, as most patients felt that too much information could have a negative impact.

Were you seen quickly when you were referred for a specialist appointment?

The response to this question was mixed. Approximately half of the patients felt that the referral process was rapid and efficient, while others felt that their referral was delayed by a number of factors including lack of suspicion by the GP, referral by post rather than over the telephone or direct referral to an A&E service, or waiting for an appointment at a clinic rather than attending a rapid access clinic. Something as simple as a GP taking the correct route of referral can expedite the process. Referral ranged from a matter of days to several months.

Earlier detection of malignancy and stage of disease

Patients all agreed that the most important aspect of the pathway was early detection of the disease. Some felt that the treatment they had would not have been so extensive had they been diagnosed sooner. Patients who presented with late-stage disease required more extensive treatment and experienced poorer outcomes.

Raising public awareness about mouth, head and neck cancers

None of the participants were aware of mouth, head or neck cancer before their diagnosis. Three claimed that they did not know you could get cancer there. Others said that they were more likely to ignore something in their mouth, as they might a toothache, hoping that it would go away.



Dr Eimear McHugh BA BDentSc MFD RCSI DChDent (OS) FFD RCSI (OS)

Prof. Leo Stassen FRCS (I) FDSRCS MA FTCD FFSEM FFDRCI FICD

The authors wish to express their thanks to all of the patients who agreed to take part in this process





None of the participants were aware of mouth, head or neck cancer before their diagnosis.

Raising awareness among groups at higher risk of developing mouth, head and neck cancers

The group of patients in attendance ranged from smokers and ex-smokers to non-smokers at the time of diagnosis. Similarly, the group contained patients who consumed moderate to higher amounts of alcohol, but equally there were patients who did not fit the usual criteria expected of mouth, head and neck cancer – younger, non-smoking and non-drinking patients.

Patients were now aware of public health campaigns directed towards warning about the hazards of smoking and consuming alcohol in relation to mouth, head and neck cancer, although many felt that they were more tuned in to this information than someone who is not aware of mouth, head and neck cancer might be.

All participants were supportive of public health education strategies in the form of leaflets, posters, and targeting the public through media campaigns.

Raising professionals' awareness

While several patients mentioned that their experience had involved a number of visits to their GP, and having undergone treatments for other diseases, one patient mentioned seeing two different dentists, and the possible need for education of other healthcare professionals was highlighted. A key area for consideration was further education of general practitioners and pharmacists.

Diagnosis

How did you react to the news? What worries did you have?

Patients unanimously described the overwhelming feelings of shock and despair following their cancer diagnosis. Some felt that it was dealt with in the best way possible while others felt that the news was delivered poorly. All patients described how they came to terms with the diagnosis and what helped them in this respect. A few patients mentioned that genuine kindness from the team helped them. Clear information, sensitivity and kindness were all appreciated at this stage of the pathway.

The essential ingredient for an acceptance of the diagnosis appeared to be reassurance from the treating team, as this helped to instil confidence in the patient for their future. It was agreed that this was probably best achieved by a discussion between the patient and the treating consultant, and in the presence of a specialist nurse.

Some mentioned that they received their diagnosis alone, while some had family members waiting for them or with them. For all patients, it was agreed that diagnosis with cancer was a life-changing moment.



Patients unanimously described the overwhelming feelings of shock and despair following their cancer diagnosis.

Investigations and pre-treatment assessment

Patients described how they initially had no idea about the investigations they were having, but for most patients this was explained to them adequately. One patient described how she found a notebook helpful. The Irish Cancer Society provided notebooks in all of the hospitals for patients to keep track of their appointments, investigations and treatments, and for the purposes of noting any questions they might have.

Provision of information or support by multidisciplinary teams: what did you find most useful?

The main course of the treatment plan was determined by the treating consultant for most patients. Patients felt that the timing of delivery of certain information can be crucial. Too much information at the initial diagnosis was resoundingly opposed. Patients differ in how much information they wish to have about their cancer treatment, but all felt that relevant information at a pertinent time was the key to adequate understanding of their disease. They felt that they learned about cancer slowly as they progressed along the cancer pathway, and this incremental delivery of information was sufficient.

The level of information provided to patients at this point varied significantly. Nearly all had received verbal information about the tests that were performed and some received written information. All agreed that written information that they could take home helped them to digest the information that they had been given verbally. Many felt that access to support, e.g., specialist nurses and liaison nurses, was useful or recommended at this time.

Treatment and physical issues

Provision of a named team member to ensure the treatment plan is implemented and to offer support

Patients all described the importance of having a plan in place as soon as possible to help alleviate the stress of a cancer diagnosis. The benefit of a cancer care co-ordinator was highlighted by several participants as a crucial springboard on the road to recovery. Many commented on staff being overstretched and that cancer care co-ordinators appeared to have a multitude of patients under their care, resulting in patients feeling guilty about demanding their time.

Being informed about surgery

It was clear from the discussion that patients experienced considerable anxiety in the lead-up to surgery. Patients noted that they were told the risks of



Patients described waiting for appointments in clinical areas, when tired and unwell.

surgery and many claimed that this did not alleviate their apprehension. More than two-thirds of the group felt that the treatment was explained clearly or at least in enough detail that they were capable of absorbing at the time. While they understood what was happening, three patients mentioned that they did not feel prepared for what was involved, due to the rapid development of the treatment plan. Despite availability, access and provision of information, the participants struggled with processing treatment information.

Some patients felt that the level of information provided was quite daunting, and indeed recalled their relief that many of the risks explained to them before the treatment did not actually affect them.

Treatment and support services

Patients appeared to recall aspects of their treatment that they felt strongly about, whether that was positive or negative. A few had ongoing problems, which they spoke about. At one end of the spectrum, one patient was completely satisfied with the treatment they received.

Were there delays in treatment?

There was a certain sense of awareness of the difficulties met by the team members, and workload was mentioned on a number of occasions, along with the shortages in staff, which often resulted in delays.

Did you have radiotherapy and were you happy with the treatment and outcomes?

Of the patients participating in the group forum and discussion via email, 14 patients had undergone radiotherapy treatment (87.5% of the group). All were satisfied with the treatment and how it had been explained beforehand, and were aware of the side effects of treatment. One concern was the small time window of opportunity, e.g., between surgery and radiotherapy treatment, to attend all of the necessary appointments, e.g., for dental extractions.

Side effects

All patients described the fatigue experienced as a result of treatment. Some patients felt that there was a lack of awareness among the public about the ongoing fatigue experienced by survivors of cancer.

Support

Speech and language therapy and dietetic support

All patients described ease of access to speech and language services for the



Patients from the West of Ireland were concerned about certain services being moved to the larger cities and the closing of services nearby.

purposes of speech rehabilitation and to learn swallowing techniques. Patients were positive about the impact of speech and language therapy on their treatment, although one patient felt that she wasn't completely informed about it and there was a lack of support in more rural areas, especially between follow-up appointments.

Patients were positive about the dietetic support that they received but some mentioned that they had a few problems with this aspect of their recovery. There were some concerns in relation to having a percutaneous gastrostomy (PEG) tube in place for feeding purposes, as some patients felt that the delivery of support for this particular device was not sufficient.

Percutaneous gastrostomy care guidance

Many of the patients in attendance had used or were currently using a PEG tube. They discussed the difficulties of learning how to use the PEG, the ongoing difficulties they have with them, and how the use of PEGs in cancer patients could be improved.

One patient described how she would like to have more support when she is at home and having difficulty with the PEG, rather than having to travel to hospital each time there was a problem.



Specialist nurse

The support of a nurse who had undergone training in mouth, head and neck cancer was found to be very beneficial for patients, as the specific problems experienced, while they are diverse, are particular to a number of topics that require specialist advice.

Social worker and clinical psychologist

The influence of social workers was mentioned only in relation to access to financial assistance with medical treatment. Practical support for information about benefits, e.g., medical card applications and information on travelling to hospitals, was felt to be a necessary requirement of support services.

Patients did not mention the clinical psychologist as part of their cancer treatment as an inpatient. External services, including cancer support centres

across the country, were discussed, and this appeared to be how patients accessed counselling and psychology services in the pathway. Patients found this helpful as a way to come to terms with their diagnosis and treatment.

Restorative dentist

Many patients who had radiotherapy had a dental check-up and required a number of extractions. The implications of this, the organisation of the appointment, and the impact of dental treatment in addition to the cancer treatment were discussed. Some patients said that appointments were organised for them, but others had to organise this themselves. Many felt that it was another appointment in a long list of appointments that were essential for cancer treatment to commence.

The hospital environment

Patients described waiting for appointments in clinical areas, when tired and unwell. There was a wish for a more comfortable environment, particularly in the larger hospitals, where patients could relax.

Support groups

Support groups both around and outside of the treating hospitals were discussed and attendance at these groups was generally considered favourable. Most patients accessed their local cancer support centres, although some felt that they did not cater for their particular needs as mouth, head and neck cancer is a very specific type of cancer where patients have different needs to many other types of cancer sufferers. There was general agreement that local services should be maintained and there was some disconcert about the closure of support services that previously catered for the needs of a number of participants.

Family and friends

The support derived from family and friends was strongly appreciated by all patients at the forum. The effects their diagnosis had on close family members were also explored. Patients expressed a sense of relief at being able to speak openly at the forum about their cancer experience because of the mutual understanding among all of the participants. There was a certain sense of patients not wishing to burden their families with any more anxiety than they felt was necessary.

Psychological issues

Patients mentioned the emotional difficulties when faced with their diagnosis. Some felt that they benefitted from counselling services and others relied on family and friends to help them deal with their new life. There was some division of opinion in relation to maintaining a positive outlook – some patients felt that this was essential, while conversely, others believed that a cancer patient should not feel expected to have a positive mental attitude, as this could be additionally stressful. One patient noted the added distress she experienced as a result of having chemotherapy treatment very promptly after diagnosis, without having time to consider her options in relation to fertility.

Practical issues

Did you notice a financial strain following your cancer diagnosis?

Some patients described the financial logistics involved in attending appointments and paying for medication. Those in attendance agreed that a

medical card for mouth, head and neck cancer patients was justifiable and necessary.

Co-location of services

The centralisation of cancer services was mentioned. Patients had concerns about the difficulties of managing appointments in multiple places, and felt that centralisation could be beneficial, or at least a smoother transition with the appointment order and process. Patients from the West of Ireland were concerned about certain services being moved to the larger cities and the closing of services nearby.

Working after cancer

All of the patients in attendance took some time off work and many of them are still not working. One patient mentioned that he was fortunate to have the option of working from home, although this in itself presented difficulties, as he was unable to use the telephone as a result of his speech impairment following surgery. However, his work colleagues were able to adapt to his needs and he used email for communication at work instead. Another patient mentioned that her return to work three months after her treatment allowed her to overcome her anxieties about her cancer.

Follow-up

All patients recognised that mouth, head and neck cancer requires ongoing follow-up care, unlike some other cancer types. The long-term effects of mouth, head and neck cancer were explored, including speech effects, physical disfigurement, dietary changes, and psychological effects. As a result, it was made clear that a mouth, head and neck cancer patient is never really “discharged” from medical care because they live with the after effects of their cancer in ways that patients with different types of cancer do not.

Conclusions

The emerging evidence from the forum was that while many aspects of the patient journey work well for most patients, there are areas that need improvement:

- **Greater co-ordination of patient-centred services** – through the use of liaison nurses, communication, a patient database for investigations, and information provision to patients.
- **Greater public awareness of the disease:** promotion of awareness of mouth, head and neck cancer through public media campaigns and posters in public places.
- **Education of GPs and GPs:** a clear path of referral should be distributed to GPs and dentists in continuing professional development programmes, and the importance of standardised GP support should be reiterated in training schemes, e.g., more PEG support from primary care centres.
- **Minimise delays, cancellations and waiting times for appointments:** services should have greater organisation, with reduction in cancellation of procedures or investigations, and liaison between different units to minimise delays and avoid appointment overlaps.
- **Better management of the holistic, long-term needs of the survivor:** this includes diet, speech, physiotherapy, emotional and physical care.
- **Greater access to peer support from those going through the same journey.**

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Speakers:

Dr. Eimear O Connell

Dr Eimear O'Connell received her dental degree from the University of Edinburgh. She received her MFGDP and FFGDP from the Royal College of Surgeons London and was the first female dentist in the UK to gain her implant diploma from the Royal College of Edinburgh. She is also the first woman appointed president elect of the Association of Dental Implantology and is currently the committee member for Scotland. Eimear has run her own private dental practice in Edinburgh since 1996. She is an international speaker and opinion leader for Dentsply Sirona and she is especially interested in digital dentistry. She has been using Cerec technology since 2008 and believes the increased success of her practice has much to do with the implementation of digital dentistry.



Stephen Campbell

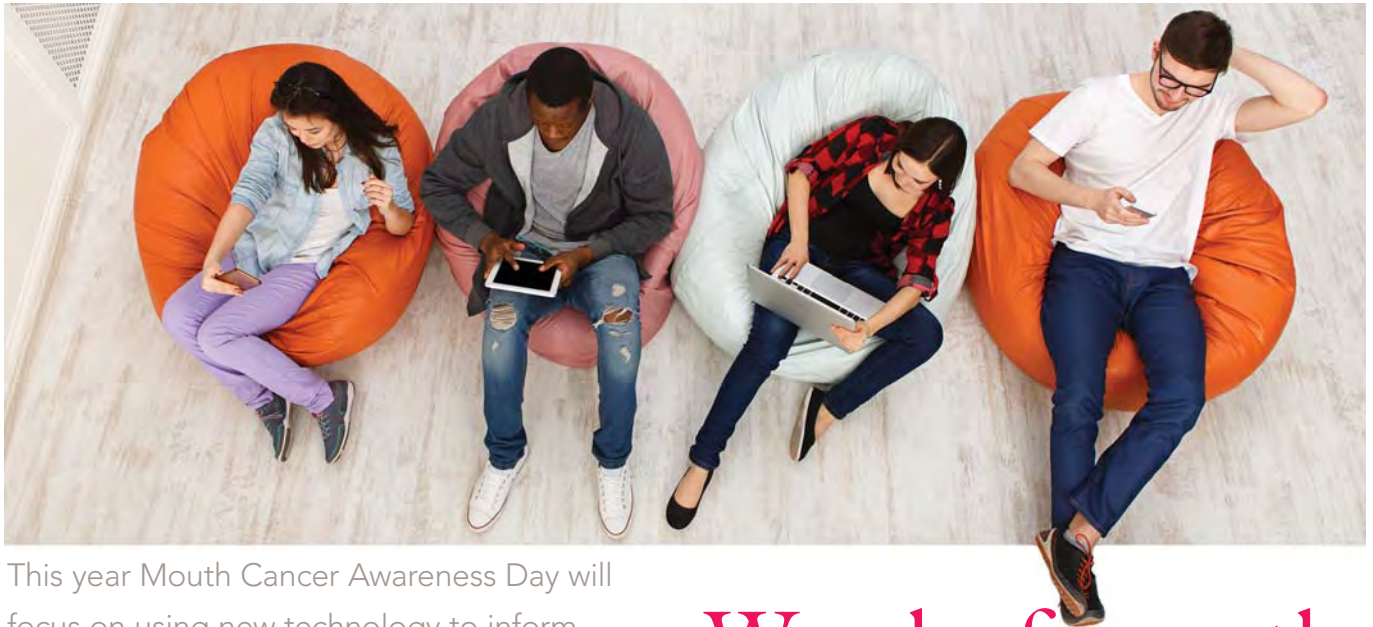
Steve is a GDC registered dental technician with a passion for the fantastic life changing service the dental team can provide to patients.

Working with some of the most highly regarded dental surgeons in the UK, Steve and his team provide solutions for all aspects of restorative dentistry, especially implants and the new digital and CAD/CAM workflows.

The advanced work that Steve undertakes with surgical teams has struck a chord with many in the profession. This has resulted in invites to share his work at presentations and study clubs across the UK and Europe.

When not in the lab, Steve can usually be found at a dental event either learning from peers or representing one of the many dental organizations that he works with, including his current role as President of the Dental Laboratories Association.





This year Mouth Cancer Awareness Day will focus on using new technology to inform young people of the dangers of mouth cancer.

The Dental Health Foundation is one of the founding members of Mouth, Head and Neck Cancer Awareness Ireland (MHNCAI), a voluntary, unfunded, community-focused group that was founded in 2009. Membership includes mouth, head and neck cancer (MHNC) survivors, the Dental Health Foundation, Dublin Dental University Hospital, Cork University Dental School and Hospital, the Irish Cancer Society, the Irish Dental Association and the National Cancer Control Programme. The mission of MHNCAI is to work collaboratively to promote public and professional awareness of MHNC. Currently, the majority of MHNC patients are diagnosed late, resulting in poor survival rates and immense suffering. Top priorities for MHNCAI include highlighting modifiable risk factors to the public to promote disease prevention and promoting early detection to improve potential outcomes. With this in mind, MHNCAI has changed the format of Mouth Cancer Awareness Day (MCAD – www.mouthcancerawareness.ie) for the last two years in order to reach and engage with those in the community who are deemed to be at risk and who may not attend the dentist.

A wide reach

We have had to think creatively, and seek more efficient and effective ways to achieve our goals, to ensure value for money, and achieve the maximum positive impact. In order to do this, we have linked and collaborated with relevant organisations who have a wide reach, and similar public interest

Etain Kett

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Word of mouth

values as ourselves. Together, we addressed the dangers associated with alcohol, smoking, HPV, unhealthy diet, and deprivation. MHNCAI recommends attending the dentist at least once a year and getting a mouth cancer examination as part of the regular check-up.

Collaborations have included rural communities in 2016, marginalised communities in 2017, and last year the Irish Men's Sheds Association, in order to specifically target men over the age of 50. This year, dentists will not be asked to provide free examinations for MCAD. For 2019, we are collaborating with youth organisation SpunOut.ie, whose vision is to: "Help create an Ireland where young people aged between 16 and 25 are empowered with the information they need to live active, happy, and healthy lives".

The recently published 'The State of Mouth Cancer UK Report 2018/2019' highlighted a lack of knowledge concerning MHNC in under 24 year olds. As part of the activities for MCAD 2019 on September 18, a two- to three-minute video piece will be produced for us by SpunOut.ie, featuring a person with lived experience of mouth cancer. The video will act as reminder to young people that it could be them or their loved ones in the future, and it will focus on three main areas: the person's own story; sharing their advice on mouth health; and, sharing advice and information on risk factors.

The video will be hosted on the SpunOut.ie YouTube channel, where it will be pushed out onto Facebook, Snapchat, Twitter, etc., in order to engage with this younger age group.

As MHNCAI is a voluntary group, the ongoing support of its own organisations and of its collaborative partners is essential in going forward and reaching its objectives. With each MCAD, we have learnt a lot and we strive to improve year on year.

The World Health Organisation recognises that: "Oral health means more than good teeth; it is integral to general health and essential for well-being". And, as there is a focus on oral health promotion and prevention in the new national oral health policy 'Smile agus Sláinte', engaging with local communities is more important than ever.

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* patients ≥ 16 years at increased caries risk.



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We need to talk about the ‘c’ word

Communicating concern to a patient about a suspicious-looking lesion can be a tricky business.

A patient declined a referral for a further investigation that was advised by their dentist. The patient was later diagnosed with cancer and sued the clinician for not having clearly explained the reason for the recommended investigation, arguing that had they known the nature of the concern they would certainly have followed the advice.

In another case, a dentist who referred a patient for an investigation of a suspicious-looking lesion received a complaint for causing “needless worry” when it turned out to be of no consequence.

Looking at these scenarios, it seems that clinicians can face a tricky balancing act when reporting an unusual finding to a patient. It might not be anything much, but then again it might.

Cancer is associated with hospitals, unpleasant treatment, anxiety and threat to life. People want to keep it at a distance and not think about it. Cancer is not generally at the forefront of a patient’s mind when visiting the dentist. Dental appointments are not everyone’s idea of fun, but they are relatively commonplace events. Most patients associate dental care with teeth. Some may understand something about gums, but the idea that a dentist could identify the presence of a serious illness has probably not occurred to many. It can therefore be a bit of a shock if the suggestion of cancer arises. Nobody wants to upset a patient, especially when it is not possible to be certain about a finding. Understandably, clinicians want to spare patients undue worry, but avoiding the truth by being ambiguous about a referral may do more harm. The patient who does not keep that oral surgery appointment because it clashed with a more attractive social commitment might have acted differently if they had known.

The ‘c’ word

If a clinician does not mention cancer, it may be from a wish to shield the patient from anxiety, particularly if there is a possibility of causing a false alarm. To avoid this, clinicians tend to avoid mentioning cancer and may be less specific, saying that the referral is to “check the appearance of something” or reassuring their patient that “it is probably nothing”. Although this may be well intentioned, such an approach is out of step with modern clinical practice,

which is based upon shared decision-making with a clearly informed patient rather than on protective paternalism.

If a patient is not told of the nature of a concern, they may decide that this does not need to be investigated.

There have been campaigns to raise awareness about oral cancer, but it remains a less well-known topic in comparison to higher-profile cancers, so universal awareness of this significant health issue should not be taken for granted.

Patients know they should get checked out for persistent coughs, lumps, changes to the appearance of moles, and blood in their urine. So should dentists really be so cautious about discussing oral cancer with patients and making that referral if there are changes noted in the oral cavity? Especially when early diagnosis can make all the difference?



Broaching the subject

Although it is a difficult subject to bring up, the Dental Council makes it clear that your main duty is to ensure the safety and welfare of your patients. There is also an obligation to maintain good communication with your patients and to respond to patient questions openly, honestly, and using language they can understand. Patients have a right to know what their clinical presentation may signify, what uncertainties there may be, and they should be told the purpose of any investigation.

Simply asking the patient “Is there anything you are worried about?” can be a useful way to prompt a discussion of specific concerns (such as the possibility of cancer) and can be an opportunity for the dentist to answer any questions as honestly and as fully as they can.

The right to refuse

A patient may decline a referral. If so, you should try to establish why and explain that the recommendation is in their best interests. If they remain adamant on refusing then this choice must be respected. However, it is necessary to check that the patient is sufficiently well informed and has enough understanding of the situation and the potential implications of declining further investigation.

It is crucial that you clearly record when a patient has declined a referral for investigation or treatment. The record should detail the discussions you have had and the reason given for the refusal. It is important to emphasise to the patient that they can change their mind at any time.

Keep it in perspective

On balance, the risk of upsetting a patient by crying wolf is better than the risk of underplaying what may be a very serious problem. If you have any concerns about how best to manage communicating with a patient about this, you should contact your dental defence organisation for advice.



Dr Martin Foster BDS MPH DipHSM

Martin is Head of Dental Services for Ireland at Dental Protection.

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Introduction to the new classification on periodontal and peri-implant diseases and conditions

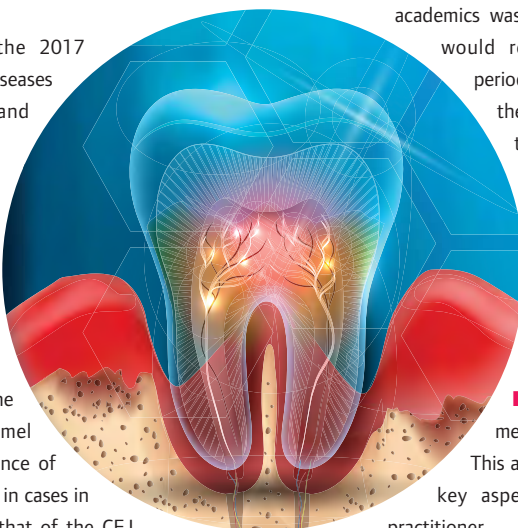
Introduction and background

This article provides a brief overview of the 2017 classification for periodontal and peri-implant diseases and conditions, addressing major changes and relevant areas for the dental practitioner.

The current system most widely applied by clinicians in practice is based on the Armitage classification of periodontal diseases.¹ The diagnosis of periodontitis was initially based on clinical attachment levels, and was described as mild, moderate or severe to categorise disease severity. The calculation of attachment levels includes the identification of the position of the gingival margin relative to the cemento-enamel junction (CEJ). This is an easy task in the presence of gingival recession; however, it is more challenging in cases in which the gingival margin is located coronal to that of the CEJ.

Although widely used for nearly two decades, limitations of the 1999 classification include the absence of a clear definition of periodontal or gingival health, considerable overlap in disease categories, and lack of emphasis on age of onset of disease and rates of progression. In addition, with the exponential growth of implant dentistry, the introduction of case definitions for peri-implant diseases and conditions was essential. This was recognised as a significant limitation of the Armitage classification, in particular for clinical and epidemiologic research.²

Under the auspices of the European Federation of Periodontology (EFP) and the American Academy of Periodontology (AAP), at the World Workshop in Chicago in November 2017, a committee of international expert clinicians and



academics was convened to propose a new classification that would reflect the current evidence in the field of periodontology and implantology.³ An important aim of the process was to provide a classification system that would be practical and flexible for application in a general practice environment. Some of the changes most pertinent to a practice setting include:

- a new description of gingival health on a reduced periodontium;
- a section describing peri-implant health and disease; and,
- most importantly, a novel staging and grading method to define periodontitis.

This article will provide an introduction to several of the key aspects that are relevant to the general dental practitioner.

Overview of the new classification system

Periodontal diseases and conditions were classified previously under eight main categories (Table 1).

The 2017 classifications are organised into two main categories:

Table 2: Periodontal diseases and conditions divided into three major categories.

- 1. Periodontal health and gingival diseases**
 - a. Periodontal and gingival health
 - b. Gingivitis caused by biofilm (bacteria)
 - c. Gingivitis not caused by biofilm
- 2. Periodontitis**
 - a. Necrotising diseases
 - b. Periodontitis as a manifestation of systemic disease
 - c. Periodontitis
- 3. Other conditions affecting the periodontium**
 - a. Systemic diseases affecting the periodontium
 - b. Periodontal abscess or periodontal/endodontic lesions
 - c. Mucogingival deformities and conditions
 - d. Traumatic occlusal forces
 - e. Tooth- and prosthesis-related factors

Table 1: Armitage Classification of periodontal diseases and conditions.

- I. Gingival diseases
- II. Chronic periodontitis
- III. Aggressive periodontitis
- IV. Periodontitis as a manifestation of systemic disease
- V. Necrotising periodontal disease
- VI. Abscesses of the periodontium
- VII. Periodontitis associated with endodontic lesions
- VIII. Developmental or acquired deformities and conditions



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Table 3: Peri-implant diseases and conditions divided into four main categories.

1. Peri-implant health
2. Peri-implant mucositis
3. Peri-implantitis
4. Peri-implant soft and hard tissue deficiencies

- A. Periodontal diseases and conditions, which are further divided into three subcategories:
1. Periodontal health, gingival diseases and conditions;
 2. Periodontitis; and,
 3. Other conditions affecting the periodontium (Table 2).
- B. Peri-implant diseases and conditions (Table 3).

A. Periodontal diseases and conditions

1. Periodontal health, gingival diseases and conditions

a. Periodontal and gingival health: Periodontal health can be observed both on an intact periodontium or reduced periodontium. A reduced periodontium can result from a history of periodontitis, gingival recession, or following specific surgical interventions (such as crown lengthening). The workshop described four categories of health that reflect different clinical situations:⁴

- ▶ pristine gingival health is characterised by no bleeding on probing (BOP) or attachment loss, probing depths of less than 3mm, and no clinical signs of inflammation;
- ▶ clinically healthy is the absence or low levels of signs of inflammation;
- ▶ periodontal disease stability is observed in cases of treated periodontitis in which the ideal outcomes are achieved (e.g., reduction of probing depth to 4mm or less, control of all local and systemic factors involved, and complete resolution or minimal signs of clinical inflammation); and,
- ▶ periodontal disease remission/control represents a compromised scenario of gingival health – following therapy, and despite some reduction in probing depths, control of local and systemic factors is not complete and resolution of the inflammation is not entirely achieved.

It should be noted that periodontal health is not only determined on the basis of clinical findings, such as probing depths and clinical attachment levels. Additional factors related to periodontal health should be considered, including: microbiological determinants (plaque composition); host determinants (tooth anatomic factors and host status); and, environmental determinants (such as smoking or stress). This is relevant, for example, where during clinical examination a dentist observes pristine gingival health but notes that the patient is a smoker.

b. Gingivitis – dental biofilm-induced: As part of the new periodontal disease classification system, the term “incipient gingivitis” was proposed. It is characterised by minimal BOP that is observed in less than 10% of sites. This condition is a variant of gingival health but, if left untreated, can rapidly progress to gingivitis.

Dental biofilm-induced gingivitis represents a common disease entity. It can be observed in patients with an intact periodontium, as well as in individuals with reduced periodontium due to periodontitis or other reasons (e.g., recession or a history of crown lengthening surgery). Clinically, these patients will present with BOP in 10% or more of the sites, while the probing depths will be in the range of 1mm to 3mm. Attachment loss may or may not be present, depending on the patient’s periodontal history.⁵

Gingivitis is generally regarded as a site-specific inflammatory condition initiated by dental biofilm accumulation.^{6–8} It holds particular clinical significance because it is considered the precursor of periodontitis.^{9–13} Preservation of attachment has been characterised by the consistent absence of gingival inflammation over time.^{14–18} This suggests that effective long-term control of gingivitis could prevent progressive attachment loss,¹⁹ with oral hygiene the mainstay of periodontal health.²⁰

Despite the fact that bacterial plaque is the aetiological factor in this disease, the clinical manifestation of gingivitis can vary based on a multitude of modifying factors that can either exacerbate or attenuate clinical signs of inflammation. Examples of exacerbating factors include puberty or pregnancy, while smoking is considered an attenuating factor. Accounting for these factors and controlling them, when possible, is critical to the successful management of gingivitis. In order for the diagnosis of gingivitis to be more descriptive of the clinical findings, it can be classified as localised or generalised (if it includes less or more than 30% of the teeth, respectively), and its severity described as mild, moderate or severe.²¹

Under the new periodontal disease classification, drug-influenced gingival enlargement is a separate clinical entity and is included as a modifying factor of biofilm-induced gingivitis. Due to the enlargement caused by specific medications (e.g., phenytoin, nifedipine or cyclosporine), oral hygiene becomes more challenging, eventually leading to increased plaque accumulation and more severe clinical inflammation.²²

c. Gingival diseases – non-dental biofilm-induced: This category includes, among others, a number of diseases and conditions of specific viral (e.g., herpes simplex I and II), fungal (candidiasis), or bacterial origin, reactive processes (e.g., fibrous epulis, giant cell granuloma), and gingival pigmentation (e.g., amalgam tattoo). A notable change compared to the 1999 classification is the removal of linear gingival erythema from the list, as it is now considered a form of candidiasis. Additionally, ascorbic acid deficiency-associated gingivitis and similar forms of gingivitis (e.g., puberty-associated or menstrual cycle-associated) were eliminated.²³

2. Periodontitis

a. Necrotising periodontal diseases: Necrotising gingivitis, necrotising periodontitis and necrotising stomatitis are listed in this category. The latter was added under the new classification and is characterised by necrosis that extends beyond the mucogingival junction. It is commonly associated with severely immunocompromised patients. The term “ulcerative” is no longer included as part of these diagnoses because ulceration is considered to be secondary to necrosis.²⁴ It is expected that the majority of such cases presenting in a general dental practice will be characterised as necrotising gingivitis.

b. Periodontitis as a manifestation of systemic conditions: The specifics of this category will be discussed in an upcoming section (systemic diseases or conditions affecting the periodontium), as it appears that some degree of overlap exists between these categories.

c. Periodontitis: The most significant changes in the new periodontal disease classification system are arguably found in this category. The terms “chronic” and “aggressive” periodontitis are eliminated and now described collectively as “periodontitis”. Although there are phenotypic characteristics that differ between chronic and aggressive periodontitis, the rationale is that the pathophysiology of the two is the same. Additionally, there is significant

Table 4: Staging of periodontitis based on severity of disease and complexity of management.

- ▶ Stage I: Mild/initial periodontitis
- ▶ Stage II: Moderate periodontitis
- ▶ Stage III: Severe periodontitis
- ▶ Stage IV: Severe periodontitis with potential loss of dentition

Table 5: Grading based on the rate of and risks for disease progression.

- ▶ Grade A: Slow rate of progression
- ▶ Grade B: Moderate rate of progression
- ▶ Grade C: Rapid rate of progression

heterogeneity to several aspects of the study designs investigating aggressive periodontitis. Overall, there is not enough evidence at this time to support the notion that aggressive periodontitis constitutes a separate clinical entity.²⁵

Three steps are now required to properly diagnose periodontitis:

- i Identification of attachment loss (pathological apical migration of the connective tissue attachment from the CEJ, measured as the distance from the CEJ to the tip of a periodontal probe during periodontal probing) in more than two non-adjacent teeth; the attachment loss should be related only to periodontitis. Other potential aetiologies should be excluded, such as recession, root fracture and defective restorations.
- ii Identification of the form of periodontitis (e.g., necrotising, manifestation of systemic conditions, or periodontitis).
- iii Description of the presentation, based on the newly introduced staging and grading system.²⁶

Following data collection from the patient's medical/dental history, and clinical and radiographic exam, periodontitis cases are categorised as stages I to IV, based primarily on attachment levels (**Table 4**). Besides clinical and radiographic findings (including attachment loss, radiographic bone loss and probing depths), the new staging system accounts for a multitude of factors that influence case management, such as teeth lost to periodontal disease, number of missing teeth, the presence of vertical bony defects, posterior bite collapse, and the extent and distribution of the disease. A higher stage should be assigned if at least one of the criteria listed in the higher stage is identified. In a simplistic way, cases of periodontitis that were previously diagnosed as mild to moderate will now be classified as Stage I and Stage II. Severe and very severe periodontitis cases will be classified as stages III or IV.

Once the disease stage is determined, the next step is to grade the disease as A, B or C, based on the risk for future progression. Grading is affected by a combination of local and systemic factors, such as ratio of bone loss to age, amount of bacterial plaque deposits, smoking, and diabetes (**Table 5**).²⁷

3. Other conditions affecting the periodontium

a. Systemic diseases or conditions affecting the periodontium: These diseases and conditions are associated with attachment and/or bone loss, and are divided into three subcategories:

- ▶ a number of systemic conditions are included in the first subcategory – in this, the changes observed in the periodontium are not related to dental biofilm, but are secondary to the patient's underlying systemic condition, e.g., Down syndrome, Ehlers-Danlos syndromes types IV and VIII, or human immunodeficiency virus infection;
- ▶ the second subcategory is dedicated to systemic modifiers of periodontitis,

e.g., smoking, obesity or osteoporosis; and,

- ▶ the third subcategory includes diseases that result in bone loss (irrespective of periodontitis), such as malignancies, e.g., squamous cell carcinoma.^{28,29}

b. Periodontal abscesses: The former distinction between gingival and periodontal abscesses is no longer followed. Under the new periodontal disease classification, periodontal abscesses are classified on the basis of their aetiology and the patient's possible history of periodontitis. Systematic reviews of periodontal abscesses indicate that most (96.3–100%) affect periodontitis patients, either untreated (7.14–81.6%) or those undergoing active therapy (6.6–42.9%).^{30,31} Peri-coronal abscess associated with semi-impacted teeth has been eliminated, as it was considered non-relevant.

c. Endodontic-periodontal lesions: In the past, combined endodontic-periodontal lesions were classified according to the primary lesion, e.g., primary endodontic with secondary periodontal. The similarities in the microbial profile and challenges associated with identifying the primary lesion were two of the reasons that led to the new classification, which is based on clinical findings, signs and symptoms.²⁴ The most common signs and symptoms associated with a tooth affected by an endodontic-periodontal lesion are deep periodontal pockets reaching or close to the apex, and negative or altered response to pulp vitality tests. The other signs and symptoms reported, in order of prevalence, are: bone resorption in the apical or furcation region; spontaneous pain or pain on palpation and percussion; purulent exudate; tooth mobility; and, sinus tract, crown, and gingival colour alterations.

d. Mucogingival deformities and conditions around teeth: The periodontal biotype and its classification as thin scalloped, thick scalloped or thick flat were added in this category. Another change from 1999 is classification of gingival recession based on severity. A table encompassing some of the aspects affecting the therapeutic outcome – such as gingival thickness, keratinised tissue width, the presence or absence of non-carious cervical lesions, and a detectable cemento-enamel junction – was also proposed as part of the new system.^{28,32}

e. Traumatic occlusal forces: This term replaced the previously used “excessive occlusal forces”. Occlusal forces are described as traumatic if they cause trauma in the periodontal tissues and/or occlusal wear of the teeth. Occlusal trauma can still be classified as primary or secondary, while the addition of orthodontic forces under this category is also noteworthy.³³

f. Prostheses and tooth-related factors that modify or predispose to plaque-induced gingival diseases/periodontitis: Root fractures, root proximity, tooth anatomical considerations, hypersensitivity, and clinical procedures related to the fabrication of restorations are among the factors included in this category. Altered passive eruption, a condition that was absent from the 1999 classification, is also included as a tooth-related factor. The negative effect of restoration margins when placed within the supracrestal tissue attachment (formerly known as biologic width), and the increase of mobility of teeth used as abutments in removable dental partials are highlighted.³⁴

B. Peri-implant diseases and conditions

1. Peri-implant health: Compared to periodontal tissues, it is more challenging to define what is considered “physiologic” in regard to peri-implant tissues. In general, probing depths should be 5mm or less, crestal bone remodelling following delivery of the prosthesis should be no more than 2mm,

and there should be an absence of clinical signs of inflammation.^{35,36}

2. Peri-implant mucositis: Peri-implant mucositis is defined as the presence of peri-implant inflammation, bleeding and/or suppuration on probing, and increased probing depths compared to baseline in the absence of bone loss beyond that expected after initial remodelling. Peri-implant mucositis is a disease of bacterial aetiology, with similar characteristics to gingivitis. However, peri-implant mucositis requires longer to resolve (approximately three weeks) after the aetiology is addressed. Additionally, compared to natural teeth, bacterial plaque will result in more pronounced inflammatory response around implants.^{35,37}

3. Peri-implantitis: Peri-implantitis is defined as: 1) increased probing depths compared to those measured at placement of supra-structure with radiographic evidence of bone loss following initial healing or in the absence of initial radiographs or probing depths; and, 2) radiographic evidence of bone loss >3mm and/or probing depths >6mm. This disease is plaque associated and characterised by inflammation of the peri-implant tissues and progressive bone loss around the implant. A history of periodontal disease is considered a risk factor for developing peri-implantitis, and any residual cement on an implant prosthesis is also a potential risk factor. Compliance with recommended periodontal maintenance intervals will reduce the risk for peri-implantitis.^{36,38}

4. Peri-implant soft and hard tissue deficiencies: These conditions are classified based on their occurrence before or after implant placement. Factors that can potentially affect hard and soft tissue deficiencies prior to implant placement include tooth loss, trauma from the extraction, infections and periodontitis. On the other hand, hard tissue deficiencies following implant placement may be affected by the positioning of the implant, peri-implantitis and soft tissue thickness (among other factors). Peri-implant soft tissue deficiencies following implant placement can be affected by the lack of buccal bone or interproximal bone, amount of keratinised tissue, and changes in the dento-alveolar complex that occur over time (Table 3).^{37,38}

Comments and implications for dental practice

The new system of staging and grading of periodontitis describes not only the extent and severity of the disease, but also takes into consideration additional aspects, such as the complexity of management, disease progression, and the patient's systemic status. This may help to identify cases that require more intensive treatment/maintenance.

The new classification system opens the door to the oral-systemic link, and will help patients to become more involved in understanding their own disease state. However, the collection of this information will be a challenging task to complete within the first and subsequent appointments, and clinicians may initially find it challenging to implement this new classification system in clinical practice.

Key points

Periodontal diseases and conditions

Periodontal health and gingival diseases and conditions – key points

- Specific criteria for gingival health are established under the new classification system. Gingival health, as well as gingivitis, can be observed in both an intact and reduced periodontium.
- Lower levels of BOP (<10%) are considered a variant of health; in fact, the term “incipient gingivitis” was introduced to describe this clinical presentation.

- Localised, slight inflammation is compatible with health and, among other criteria, BOP in 10% or more of the sites is required for the diagnosis of dental biofilm-induced gingivitis.

Periodontitis – key points

- No longer separate chronic versus aggressive periodontitis.
- Necrotising diseases are no longer characterised as ulcerative and are included in the periodontitis category, even though clinical findings associated with them are confined in the interproximal soft tissues, and there is no bone loss as a result of the disease.
- The classification includes components of not only the diagnosis, but also the management and future progression of the disease. This is consistent with the goal of a more holistic approach to managing patients. It emphasises the potential link between periodontal status and systemic conditions.
- The grading system is designed in a dynamic way, and allows for updates and modifications in case relevant evidence emerges in the future.

Other conditions affecting the periodontium – key points

- Endodontic-periodontal lesions are no longer classified according to the primary lesions.
- There is no distinction between periodontal and gingival abscesses, as the diagnosis of periodontal abscesses includes both of the above.
- In addition to the diagnosis of gingival recession, severity should also be described and included in a number of factors that will affect treatment decisions and outcomes.
- Important changes in terminology are also included in the new classification system.
- Traumatic occlusal force replaces excessive occlusal force.
- Periodontal phenotype (associated with clinical characteristics) replaces periodontal biotype (associated with genetic characteristics).
- In addition, biologic width is now replaced by supracrestal tissue attachment (and still refers to the junctional epithelium and connective tissue attachment).

Peri-implant diseases and conditions

Peri-implant health, peri-implant mucositis and peri-implantitis – key points

- The amount of crestal bone remodelling around implants and, consequently, the stability of the soft and hard tissues, are affected by multiple factors, e.g., smoking, systemic health and maintenance.
- The design of the abutment and prosthesis, placement of the implant in relation to the implant crest, implant design, implant-abutment connection, surgical technique, and thickness of the soft tissues are only some of the factors influencing peri-implant diseases and conditions.
- It is therefore critical for an accurate diagnosis and a baseline of the clinical and radiographic characteristics to be established, as this will allow for longitudinal monitoring of these characteristics and identification of possible alterations.
- For these reasons, a clinical and radiographic exam is recommended within the first year of prosthesis delivery.

For a comprehensive overview of the new classification and proceedings, we direct the reader to the series of excellent articles that has been published by the committee following the World Workshop meeting. Free access to these

papers is available directly through the link below or via the AAP and EFP websites – <https://onlinelibrary.wiley.com/toc/19433670/2018/89/S1>. In addition, the EFP has published a series of articles that helps to explain the new classification in greater detail and a decision tree for use in staging and grading of periodontitis cases.

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Oral health after radiotherapy for head and neck cancer: two case reports

Abstract

This paper reviews two cases of individuals who have had radiation treatment for head and neck cancer. The cases illustrate the importance of ongoing preventive care and support, including advice on oral hygiene, diet, fluoride use and dry mouth, to maintain oral health in this population.

Journal of the Irish Dental Association August/September 2019; 65 (4): 208-210.

Introduction

The term head and neck cancer (HNC) is used to describe a heterogeneous group of cancers affecting the oral cavity, pharynx, nasal cavity, sinuses and larynx. The National Cancer Registry in Ireland reports approximately 700 new cases of HNC annually in Ireland, with 400 of these affecting the oral cavity and oropharynx.¹ This cancer commonly affects middle-aged men; however, a notable trend is the increase in the rate of HNC presenting in women and younger individuals. Major risk factors include smoking and alcohol, with an additive effect if the individual drinks and smokes. An association between oropharyngeal cancer incidence and infection with human papillomavirus (HPV) is reported.

Treatment for patients with HNC includes surgery, radiotherapy, chemotherapy, or combinations of these treatment modalities. The standard dose of radiation administered is 60-70Gy and doses of above 40Gy are associated with irreversible damage to the salivary glands and jawbone.² The field of radiation is dictated by the staging of the cancer.

Upon completion of radiation treatment, the HNC survivor will attend the general dentist for routine dental care.³ Judicious implementation of preventive regimens, very regular oral examination of these already high-risk patients, and recognising the need for specialist care, are all of paramount importance in facilitating the maintenance of a healthy, functioning dentition and a good quality of life.

The following cases, which are similar dentally, illustrate the importance of oral health and preventive care post radiotherapy.

Case 1

A 75-year-old female attended for pre-radiation dental assessment in 2016 – the cancer diagnosis was squamous cell carcinoma of the tongue. Her cancer was treated surgically with a hemiglossectomy followed by a soft tissue skin graft to reconstruct the tongue. She then had intensity-modulated radiotherapy (IMRT) of 60Gy:30fractions to the right mandible and neck – a radiation stent was also used. Pre-radiation clinical and radiographic examination revealed a well-maintained reduced dentition with no evidence of active caries. No extractions were deemed necessary. The patient was given oral hygiene instruction, dietary advice, and was prescribed daily high-fluoride toothpaste. Due to medical complications she did not return until one year post radiation. In spite of being a previous regular dental attender, she had not attended a dentist or dental hygienist, and had not used the recommended fluoride regime. On re-examination, she had poor oral hygiene, poor diet, and rampant dental caries secondary to radiotherapy-induced severely dry mouth (**Figure 1**).

Case 2

A 67-year-old male patient attended for pre-radiotherapy dental assessment in 2010 – the cancer diagnosis was squamous cell carcinoma of the larynx. Pre-radiation clinical and radiographic examination revealed a well-maintained reduced dentition with no evidence of active caries. No extractions were deemed necessary. The patient was given oral hygiene instruction, dietary advice, and was prescribed daily high-fluoride toothpaste and chlorhexidine



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FIGURE 1: A. OPG of a 75-year-old female before commencing radiotherapy for a squamous cell carcinoma of the tongue. Note the bone fixation to stabilise the mandible following mandibular split to gain access for resection of the tongue and floor of mouth. B. The same patient one year post radiotherapy, demonstrating generalised radiation caries. Note the skin graft reconstruction on the RHS of the tongue.



(brush-on). Following surgery, he received radiotherapy (66Gy:35fractions) to the neck and mandible. The patient attended a dentist and hygienist regularly, and used chlorhexidine and fluoride daily. Upon review in 2018, the patient was clinically caries free (**Figure 2**) with excellent oral hygiene in spite of having a very dry mouth.

Discussion

The above case reports highlight the need for excellent oral hygiene, sugar-free diet, fluoride use, management of dry mouth, and regular oral review in patients post radiotherapy for HNC. The rapid deterioration in oral health seen in Case 1, where a regular preventive regimen was not adhered to, contrasts with Case 2, where the patient remained caries free at an eight-year review. These cases also highlight the fact that there is no simple formula for oral care in these patients. Consideration must be given to the complexity of the patient's cancer treatment, and possible medical complications that cannot be fully predicted at initial pre-radiotherapy assessment. The past history of oral care is also significant, and the continuing exposure to risk factors such as smoking. The need for excellent communication, with verbal and written information, is also vital.

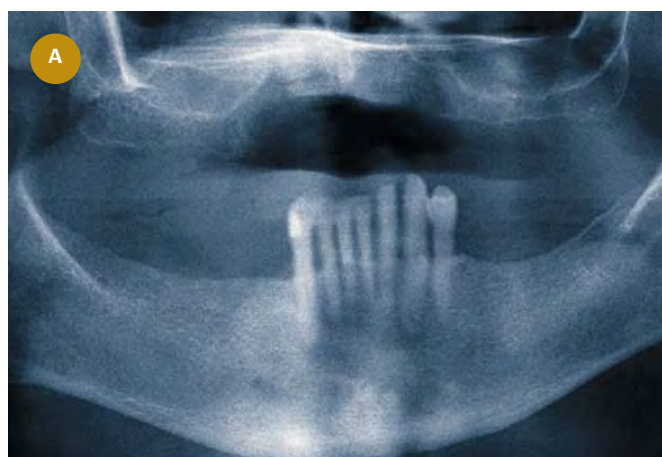


FIGURE 2: A. OPG of a 67-year-old male before commencing radiotherapy for a squamous cell carcinoma of the larynx. B. The same patient eight years post radiotherapy, demonstrating a sound dentition.

Awareness of the potential complications of radiotherapy is essential in order to deal with any side effects the patient may suffer from (**Table 1**).

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Table 1: Post-HNC radiation oral problems and practical tips for their management in the general dental practice.

Mucositis	Occurs during radiation and chemotherapy. Usually resolved six weeks following completion of treatment. There may be residual radiation damage to the oral tissues. Give careful oral health instruction (OHI) and dietary advice. Remove sharp edges from teeth, restorations and prostheses.
Trismus and tissue fibrosis	The normal range of maximum inter-incisal opening (MIO) is 40–60mm. Identify reduction of the VMO early using the ‘three finger test’, and manage immediately with wood sticks or TheraBite – early intervention is essential.
Loss of taste/altered taste and difficulty swallowing (dysphagia)	Altered taste often improves with time. Unfortunately, it may be permanent. Dysphagia can cause nutritional difficulties and weight loss due to difficulty chewing foods and forming a bolus. Always ask about difficulty swallowing as it carries the risk of fluid or microbial aspiration when using water irrigation during dental treatment. ⁴
Dry mouth	A major complaint of HNC survivors is dry mouth. Most patients report a preference for plain tap water in the long term, as saliva substitutes give only short-term relief. Dry mouth sufferers should be encouraged to try various products as it is difficult to predict which product will work best for each individual. If there is some residual salivary gland function, sugar-free, leaf-style chewing gum or pilocarpine may help. If there is no residual salivary gland function, salivary substitutes should be recommended. Salivary substitutes may also be applied to the denture-fitting surface to aid retention. Products containing citric acid should be avoided if the patient is dentate.
Dental caries and demineralisation	Dietary advice regarding sugar restriction is very important. A fluoride regimen must be in place to prevent and arrest caries, as well as to reduce sensitivity: <ul style="list-style-type: none"> ▶ Colgate Duraphat 5,000ppm or 2,800ppm NaF toothpaste is prescribed for patients post radiation to prevent dental caries. Long-term topical application at bedtime daily, either with a toothbrush and interdental brushes, or in custom-made trays. ▶ Fluoride varnish may be professionally applied every three months. ▶ Chlorhexidine liquid 0.2% may be used as a brush-on to control microflora.
Periodontal disease	Excellent oral hygiene is very important and will define long-term oral health. Chlorhexidine liquid 0.2% may be used as a brush-on if the oral health is poor or the gingiva inflamed. A small-headed paediatric toothbrush and an end-tufted brush are recommended. Interdental brushes, floss and Perio Pic for interdental cleaning. Air Floss and Water Pic are useful for removing debris in molar areas: interdental food stagnation is common when the mouth is very dry. Monitor furcation areas carefully as they are sites where osteoradionecrosis (ORN) can develop. Undertake very careful subgingival scaling due to the potential for trauma-induced ORN.
Osteoradionecrosis of the jaws (ORN)	Regular examination of the oral cavity for signs of exposed bone. ⁵ Extractions from high-dose radiation sites only if unavoidable – consider root canal treatment and decoronation if possible. If extraction is the only option, referral to an oral surgeon may be indicated. Prophylactic antibiotics should be prescribed. Remove sharp edges on dentures and place soft lining for fit and comfort.
Oral cancer recurrence	Careful oral examination must be completed at each visit.

CPD questions

To claim CPD points, go to the MEMBERS' SECTION of www.dentist.ie and answer the following questions:

1. How many new cases of head and neck cancer are diagnosed in Ireland annually?

- ☐ A: Approximately 800 cases
- ☐ B: Approximately 700 cases
- ☐ C: Fewer than 600 individuals
- ☐ D: 500–600 individuals

2. What is the normal range of maximum inter-incisal opening (MIO)?

- ☐ A: 60–70mm MIO
- ☐ B: 40–60mm MIO
- ☐ C: 20–40mm MIO
- ☐ D: Less than 40mm MIO

3. Which of the following is NOT associated with dysphagia (difficulty swallowing) post head and neck radiation?

- ☐ A: Nutritional difficulties and weight loss
- ☐ B: Speech difficulty
- ☐ C: Use of ultrasonic scaler with water causing aspiration and choking
- ☐ D: Difficulty chewing food and forming a bolus

Current concepts and novel techniques in the prosthodontic management of head and neck cancer patients

Nayar, S.

'The face is the mirror of the mind', so said St Jerome. Patients affected by head and neck cancer have to deal not only with the effects of the disease but also with the effects of the treatment for the disease. This is one cancer that is literally and figuratively 'in your face'! And it is a disease that is difficult to hide. This article attempts to summarise head and neck cancer and its treatment modalities, as well as the effects of treatment and the defects it creates. It will also attempt to explore and elaborate on the novel prosthodontic management techniques in advanced jaw reconstruction and extra-oral anatomical defects. The concept of functional assessment and rehabilitation in head and neck cancer patient management will also be briefly explained.

British Dental Journal 2019; 226: 725-737.

Factors that influence direction deviation in free-hand implant placement

Tang, T., Huang, Z., Liao, L., Gu, X., Zhang, J., Zhang, X.

Purpose: This retrospective study investigates the accuracy of free-hand implant placement and whether the factors of presence of an adjacent tooth, implant quadrant, number of missing teeth, and location of the implant site influence direction and angulation deviations.

Materials and methods: According to specific inclusion and exclusion criteria, a total of 112 implants from 75 partially edentulous patients were recruited for this retrospective study. The implants were inserted using a free-hand approach by one experienced clinician (right-handed). The full thickness flap was elevated to expose the alveolar bone in the implant surgery, and the implant crown consisted of an all-ceramic restoration retained by cement. The planned implant position was preoperatively determined using implant planning software. The postoperative implant position was determined by analysing the alignment after optically scanning the dentition using a specifically designed registration model in Geomagic Studio software. The deviations between the planned and postoperative implant positions were then calculated. The outcomes included direction and angulation deviations between the planned and postoperative implant positions. All data were analysed by ANOVA, Bonferroni correction, regression analysis, and one-sample t-tests conducted using SPSS.

Results: The 3D deviations between planned and postoperative implant positions were $1.22 \pm 0.63\text{mm}$ at the entrance point, $1.91 \pm 1.17\text{mm}$ at the apical point, and $7.93 \pm 5.56^\circ$ in angulation. The presence of adjacent teeth influenced deviations in the mesio-distal ($F = 4.338$; $p = 0.006$) and bucco-lingual directions ($F = 3.017$; $p = 0.033$) at the entrance point and mesio-distal angulation ($F = 7.979$; $p < 0.001$). The quadrant influenced deviation in the bucco-lingual direction at the apical point ($F = 6.093$; $p = 0.001$) and bucco-lingual angulation ($F = 6.457$; $p < 0.001$). The number of missing teeth had no effect on deviations of direction and angulation of implants. The location of the implant site affected the deviation in the

bucco-lingual direction at the entrance point ($F = 3.096$; $p = 0.049$) and the mesio-distal direction at the apical point ($F = 3.724$; $p = 0.027$).

Conclusion: The 3D accuracy of free-hand placed implants could be acceptable in clinical situations. The results showed that the presence of an adjacent tooth and the quadrant and the location of the implant site influenced the direction and angulation deviations of the implant position; however, the factor of number of missing teeth did not.

Journal of Prosthodontics 2019; 28: 511-518.

Fluoride mode of action: once there was an observant dentist...

Ten Cate, J.M., Buzalaf, M.A.R.

Abstract

The discovery and implementation of fluoride in the prevention of dental caries is often praised as one of the most important achievements in healthcare. In the early 20th century, it took 30 years to identify fluoride as the cause of enamel mottling but also of reduced caries prevalence in a population drinking

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water containing fluoride. Similarly, from 1960 to 1990, it took major efforts to unravel the working mode of fluoride in such detail that a rational scheme of caries prevention could be formulated. This article describes the scientific struggle leading to a consensus on the topic. For a historic purpose, the field, the actors, and their main research achievements are described. Ultimately it was generally agreed that the effect of fluoride is primarily topical by fluorides in the oral fluids rather than systemic by incorporation of fluoride in the enamel mineral crystals. Fluoride concentrations, even <1mg/L, enhance the deposition of calcium phosphates during remineralisation of enamel (and dentin). Similarly, such low levels of fluoride are effective in reducing the dissolution of the calcified tissues. This understanding has led to the development of fluoride-containing caries-preventive products that had an undisputed beneficial effect on the levels of dental caries.

Journal of Dental Research 2019; 98: 725-730.

An *in vitro* investigation of accuracy and fit of conventional and CAD/CAM removable partial denture frameworks

Soltanzadeh, P., Suprono, M.S., Kattadiyil, M.T., Goodacre, C., Gregorius, W.

Purpose: To evaluate the overall accuracy and fit of conventional versus computer-aided design/computer-aided manufactured (CAD/CAM) removable partial denture (RPD) frameworks based on standard tessellation language (STL) data analysis, and to evaluate the accuracy and fit of each component of the RPD framework.

Materials and methods: A maxillary metal framework was designed for a Kennedy class III Modification I arch. The master model was scanned and used to compare the fit and accuracy of RPD frameworks. Forty impressions (conventional and digital) of the master cast were made and divided into four groups based on fabrication method: group I, lost-wax technique (conventional technique); group II, CAD-printing; group III, CAD-printing from stone cast; and, group IV, lost-wax technique from resin-printed model. RPD frameworks were fabricated in cobalt-chromium alloy. All frameworks were scanned, and the gap distance between the framework and scanned master model was measured at eight locations. Colour mapping was conducted using comprehensive metrology software. Data were statistically analysed using the Kruskal-Wallis test, followed by the Bonferroni method for pairwise comparisons ($\alpha=0.05$).

Results: Colour mapping revealed distinct discrepancies in major connectors among the groups. When compared to 3D-printed frameworks, conventional cast frameworks fabricated using dental stone or printed resin models revealed significantly better fit ($p < 0.05$) particularly in the major connectors and guide plates. The biggest gap ($0.33 \pm 0.20\text{mm}$) was observed with the anterior strap of the major connector with the printed frameworks (groups II and III). The method of fabrication did not affect the adaptation of the rests or reciprocation plates.

Conclusions: Although both conventional and 3D-printing methods of framework fabrication revealed clinically acceptable adaptation, the conventional cast RPD groups revealed better overall fit and accuracy.

Journal of Prosthodontics 2019; 28: 547-555.

Quiz answers

Questions on page 177.

1. Fluid/lubricant; ion reservoir, remineralisation and buffer; cleansing; antibacterial actions; pellicle formation; digestion; taste; excretion; water balance; and, agglutination.

2. Unstimulated	Stimulated	Percentages from various saliva glands
0.3-0.4ml/min	0.5-2.0ml/min	Parotid = 25%
		Submandibular = 60%
		Sublingual = 7-8%
		Minor = 7-8%

3. Medications	Anticholinergics; tricyclic antidepressants; sedatives; tranquilisers; and, antihistamines, etc.
Oral diseases and conditions	Salivary gland infection, disease or blockage; and, mouth breathing
Systemic diseases and conditions	Sjogren's syndrome; diabetes; dehydration; stress, etc.
Head and neck radiation	

4. No residual salivary gland function (SGF)	Some residual SGF	Prevention of damage during radiation therapy
Salivary replacements	Masticatory and gustatory stimulation	Salivary gland sparing during radiation therapy (IMRT)
	Pharmacological stimulation	Cytoprotectants (amifostine)
	Drug prescription alteration	Salivary gland surgical transfer
	Acupuncture	

5. Dry mouth; dry lips; halitosis; traumatic oral lesions; dental caries; gingivitis; oropharyngeal candidiasis; sleeping difficulty; speech difficulty; dysphagia (swallow); dysgeusia (taste); difficulty wearing prostheses; and, masticatory difficulty.
6. Does your mouth feel dry at night or on awakening?
Does your mouth feel dry at other times of the day?
Do you keep a glass of water by your bed?
Do you sip liquids to aid in swallowing dry foods?*

Does your mouth feel dry when eating a meal?*

Do you have difficulties swallowing any foods?*

Do you chew gum daily to relieve oral dryness?

Do you use hard sweets or mints daily to relieve oral dryness?

Does the amount of saliva in your mouth seem to be too little, too much, or don't you notice it?*

Fox P.C., et al. Subjective reports of xerostomia and objective measures of salivary gland performance. *J Am Dent Assoc* 1987; 115: 581-584.

* Questions most indicative of salivary gland hypofunction.

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Remarkable opportunity for ambitious high-grossing associate dentist with enhanced skills. Full-time available. Ideal candidate will have orthodontic experience. Applications to dentalpracticecork@gmail.com.

Part-time dental associate required for a busy, friendly practice in Tralee, Co. Kerry to replace a departing colleague three days a week. Excellent experienced staff. Applicant must have experience and a genuine interest. Applications to laurie8@eircom.net.

Full-time associate position, Dublin 24 area beside M50. Must have at least four years' experience. Mixed public/private. Excellent remuneration. Email wmunroe@eircom.net.

Experienced part-time dental associate required (two days per week) in busy Co. Louth practice. Fully computerised and with digital x-ray. Excellent support staff. Apply with CV to louthassociatedentist@gmail.com.

Associate required for busy private practice in Killiney, Co. Dublin. Full- or part-time. Modern facilities, fully digitised with experienced support staff, orthodontist and implants on site. Must be IDC registered. Immediate start. Please apply to info@killineydental.com.

Associate dentist required for busy mixed practice in Dublin 24 area. Please send your CV to managerdentalpractice@hotmail.com.

Experienced associate required four to five days per week for busy private practice in north Dublin. Six-month maternity cover initially from August 2019, with possibility of staying long term. Modern computerised practice with excellent support staff.

Full- or part-time associate position available in Co. Galway. New graduates considered. Digital, experienced nurses. Apply with CV to seaportdental@hotmail.com.

Busy, family-oriented practice in Celbridge, operating for nearly 40 years, requires warm, friendly, dental associate to join their multidisciplinary team. Opportunities for all types of restorative work: crowns; bridges; implants; and, general dentistry. CV to info@oreillysdentalpractice.ie.

Dental associate for full-time position in Calgary, Canada. Established general practice in the heart of one of Canada's major urban centres. Candidate must be a good communicator and friendly. Workload more suited to an associate with one or two years' experience. Apply with CV to gillesdental@yahoo.ca.

Dundalk – associate dentist required for Saturday sessions with possibility of further sessions. Our website – www.frielandmcgahon.ie – gives an insight into our practice and team. Apply with CV to frielandmcgahon@gmail.com.

Experienced, enthusiastic associate wanted in fully computerised, modern, busy practice in Gorey, Co. Wexford. Two/three days per week including a late evening and Saturdays. Fully private, hygienist, OPG, IV and RA sedation, visiting implantologist. Invisalign provider. Friendly motivated team. Email eleanor@ocdental.ie.

Galway Dentists, in Galway city centre, requires associate dentist. Must be warm, friendly, outgoing with great people skills. Interest in advanced restorative dentistry an advantage. Central location in professional catchment area. Email in confidence to admin@galwaydentists.ie today.

Enthusiastic associates required for a busy, well-established south Dublin practice. Experienced staff, treatment co-ordinators, photography suite, intraoral scanners and cameras, OPG and CBCT. Fully digital onsite lab available for use and ongoing training is provided. Two years' experience required. Shauna@3dental.ie.

Enthusiastic associate required for maternity cover in a busy practice in the west of Ireland. Great support staff and full book. Apply with CV to locumdentistwest@gmail.com.

Established Limerick City dental surgery. Full-time associate dentist required. Computerised and digital radiographs. Good book with mix of private, PRSI and medical card patients. Experience preferred. Email: eamonnoonan@hotmail.com.

Associate dentist position three days per week replacing departing colleague from October 2019 in a well-maintained and equipped family practice in Drogheda. Ideal candidate would have experience and be capable of delivering quality care. Email CV for consideration to angela@angelakearney.ie.

Enthusiastic associate required for a busy, modern private practice for initially two days a week, one of which is Saturday. Further days might become available. Email job@crowndental.ie.

South east – experienced associate required for three days a week in a busy practice to replace departing colleague. Please apply with CV to southeastdentpractice@gmail.com.

Co. Offaly (large town close of N4). Associate required three days a week for a busy, bright, modern and well-maintained dental practice. This is a great opportunity for an enthusiastic dentist with lots of scope to develop an established book. Email info@medaccount.ie.

Dentists

Experienced dentist required for our Limerick City and Charleville, Co. Cork, dental practices. Computerised, digital intraoral and OPG radiographs. Private, PRSI, medical card. Seven sessions per week initially. Email eamonnoonan@hotmail.com.

Co. Galway dentist required one day per week (Monday) to start. Mixed practice (medical card, PRSI, private). Contact Mbdental2009@gmail.com.

Ambitious dentist two or four days per week: Frazer Dental & Orthodontics. Centrally located. Free parking. 1 hour from Dublin, 45 minutes from Newry and Cavan, 30 minutes Navan/Dundalk. Mentorship can be provided. Excellent package, flexible working hours. Join our lovely team! Apply to frazerdental@gmail.com.

Full-time general dentist required for busy, friendly 12-surgery north Dublin practice. High earning potential in a fully computerised, modern practice with an orthodontist, endodontist, implantologist, dental technician, hygienists and an OPG there to assist you. Please contact northdublindentalclinic@gmail.com.

Dentist required for busy south Dublin practice in Mount Merrion village. Full-/part-time. Experience with extractions and endo ideal. Apply to alex@whitesmiledental.ie.

Dentist required part-time/full-time for busy Roscommon dental practice. Mixed practice (medical card, PRSI, private). Please email Eileen on keaveneydental@gmail.com.

Full-time dentist required for busy schedule, working in our nursing home dental clinics. If you are looking for a rewarding, busy schedule, working with a great team, send your CV and cover letter to clinics@dentaltech.ie.

Dentists required for busy south Dublin practices in Terenure and Stillorgan. Large and modern. Full-time/part-time. Flexible to suit. Applications to southdublindentalclinic@gmail.com.

Experienced dentist, minimum three years, for full-time position Newbridge, Co. Kildare. Computerised, mixed practice, three dentists. Three days initially – build to full-time. Must be IDC registered. Immediate start. Email with CV cegan@centrichealth.ie.

Friendly, enthusiastic dentist required for single dentist practice, Kilkenny City, three days a week. Practice has hygienist, excellent recall system, great patient flow. Computerised, excellent remuneration. Email: kilkennydentist2019@gmail.com.

Experienced dentist required for sessional holiday cover, east Cork suburb. Please reply with CV and cover letter to dentaladvertcork@gmail.com.

Dentist required with minimum two years' experience to work in busy mixed practice in south Dublin. Please send your CV to dentistrequired@outlook.ie.

Dentist required for busy practice in the north east two days per week to replace departing colleague. Email CV to construction22hq@gmail.com.

Full-time dentist required for a busy modern surgery, one hour from Dublin. OPG, hygienists, orthodontists and periodontists also. All general dentistry carried out at the surgery with supporting staff. Dentist will receive 50% remuneration. Please send CV to info@virgiadentalsurgery.com.

Experienced enthusiastic dentist required for a busy, well-established private practice in D15 area. Fully digital with Dentsply Sirona Cerec system. Three to five days available, commencing August/September 2019. Please forward your CV to ambros32019@gmail.com.

Athy – Experienced dentist with special interest in endodontics/oral surgery required one to two days per week in computerised mixed practice. Email loretodentalsurgery@gmail.com.

Shannon Co. Clare: Dentist required for busy clinic in Shannon town centre, 15 minutes from Limerick city. Days required are Wednesday, Thursday, Friday, Saturday. Well-equipped surgery, excellent support staff, huge opportunity for private dentistry. Immediate start. Email jobs@alexandrardental.ie.

Experienced dentist required to work one to two days in busy private practice in Malahide, Co. Dublin. Please email CVs to dentistjobmalahide@gmail.com.
 Donegal Town – experienced dentist required for full-time position in busy practice. Practice is progressive with a special interest in orthodontics and implant dentistry. We have a good local reputation and can offer a warm and friendly working environment. Email siomurr@hotmail.com.

We are looking for experienced personable dentists who are keen to provide excellent dentistry for patients along with the chance to learn and earn. Excellent earnings available to those with a strong work ethic. Applications are invited by CV to james.turner@centrichealth.ie.

Limerick – Smiles Dental (part of Bupa Dental Care) is looking for a passionate dentist to join its private, state-of-the-art, well-established practice in Limerick. Practice offers three to five days per week. Email joanne.bonfield@smiles.co.uk.

Friendly, enthusiastic dentist sought for two-centre, five-day position, in well-equipped and staffed family practices in Co. Wexford. Great patient numbers, suitable for new graduate wishing to be mentored or experienced dentist seeking new opportunities. Email quirkedental@gmail.com or call 086-858 6676 (evenings).

Full-time, experienced, friendly dentist required to replace departing colleague in August. East Wicklow. Excellent equipment and support. Full book. 40 minutes from Dublin City centre. Two+ years' commitment expected. CV to info@rathdrumdental.ie.

Dentist required with implant experience at the Seapoint Clinic, Blackrock. The working environment is modern, fully equipped, onsite lab, supported by a well-trained professional team. We offer a competitive associate package with shared lab fees and bonuses. Email victoria@seapointclinic.ie.

Maternity leave cover required for multi-chair practice in Co. Roscommon. Part-time considered. Generous remuneration. Full book. Great support. Easy commute from Sligo. Email CV to dentalreception100@gmail.com.

Experienced implant dentist required for busy, well-established clinic in Limerick. Experienced staff, treatment co-ordinators, digital dental lab, intraoral scanner and camera, CBCT and ongoing training provided. Minimum two years' experience. Email shauna@3dental.ie.

Locums

Locum dentist with view to part-time position required for busy, modern dental practice, Balbriggan. Medical card, PRSI, private. Contact info@castlemilldental.ie.

Summer locum Friday and Saturday (and beyond). North east area. Must be able to work under pressure. Trustworthy, self-employed dentist for Fee Dental. CV to mbcar06@gmail.com.

Dublin 13. Full-time locum required for well-established single-dentist practice. Friendly, enthusiastic general dentist with two years' minimum experience required. Position starting July 22, 2019. For more information or to apply please send CV to jobs@meridianclinic.ie.

Locum dentist urgently required for July for private south Dublin practice, with a view to permanent associate position. Replies to email sandyforddentist@gmail.com. Tel. 01-294 5122.

Busy, modern dental practice in Balbriggan, Co. Dublin, requires locum/part-time dentist. Medical card/private patients. Excellent remuneration. Contact info@castlemilldentalclinic.ie.

Specialist/limited practice

Endodontist required to take over from departing colleague. Two days per month initially in our busy private practice in Dundrum, Dublin 14. Please email sarahjane@dundrumdentalsurgery.ie.

Periodontist – Smiles Dental (part of Bupa Dental) is looking for a periodontist to join its well-established, state-of-the-art practice in O'Connell St, Dublin. Position offers established book and great referral base. Email CV to Joanne.bonfield@smiles.co.uk.

Specialist orthodontist required for busy orthodontic practice in Terenure, south Dublin. Full-time/part-time. Flexible to suit. Applications to southdublindentalclinic@gmail.com.

Orthodontist – Smiles Dental is looking for specialist orthodontists to join our well-established practices in Dundalk and Wexford. Practice offers modern, state-of-the-art working environments and full support teams. One to five days per week. Email joanne.bonfield@smiles.co.uk.

Orthodontist. Charlestown Dental Centre is looking for a specialist orthodontist to join our clinic part-time. Applications to charlestownmedicaldentalcentre@gmail.com.

Unique opportunity for a prosthodontist to take over an established referral base in a leading Dublin multidisciplinary practice. In-house laboratory and fully trained technicians on site offering the highest digital standards. Email hiringcontactemail@gmail.com.

Dental nurses/managers/receptionists

Dental nurse/receptionist required for busy, computerised dental practice in Ballincollig town centre. Three and a half days per week. Thirty hours per week. Experience preferable but not essential. Applications to info@kenneallydental.ie.

Full-time dental nurse position available Galway city. Please reply with CV to dentalreception22@gmail.com.

Part-time dental nurse required for a busy, modern, computerised, award-winning dental practice in Navan, Co. Meath. We are looking for a highly motivated individual to join our professional team. Contact meathdentists@gmail.com.

Experienced dental nurse required for full-time position in modern, long-established and friendly practice in north Co. Dublin. Great opportunity for someone looking to further their career. www.swords-dental.ie.

Southgate Dental located in Drogheda is looking to recruit a full-time qualified dental nurse. Candidates should be computer literate, highly motivated and flexible. Experience with orthodontics and Exact software would be an advantage. Apply to info@southgatedental.ie.

Dublin – Looking for a part-time dental nurse to join our team. Days can be flexible, but Saturday is a must. Applications by email to dr.erika.barta@crowndental.ie

Experienced dental nurse required for busy south Dublin practice. Full-time/part-time. Flexible to suit. Applications to southdublindentalclinic@gmail.com.

Full-time dental nursing position for busy general practice. Experience essential. Must be available to work from Monday to Saturday and evenings. Please forward resumé to info@rathcooledental.ie.

Qualified full-time dental nurse position. Dublin 4 (Ballsbridge). Modern, friendly, long-established dental practice. Experience preferable. Applications to info@dublindentist.ie.

Dental nurse required. Mainly at our Sligo practice with some days at our Ballina clinic. Positive, friendly individual with excellent work ethic to join high-performing team. Part-/full-time considered. Excellent work conditions. CV to info@westcoastorthodontics.ie.

Exciting opportunity available for a dental nurse in a specialist referral practice in Oranmore, Co. Galway. Permanent part-time position two days per week. Experience preferred. Motivated, friendly team player essential. Please forward CV to sbdental96@gmail.com.

Part-time nurse required Friday evenings plus holiday cover, which may lead to more. Experience preferred but not essential. Dublin 24 area. Email wmunroe@eircom.net.

Modern general dental practice in north Wicklow seeks qualified nurse to cover maternity leave initially. Days flexible. Ideal candidate to be friendly and hard working. Join our team today by sending your CV to dentistnorthwicklow@hotmail.com.

Dental nurse required for part-time position, to include Saturdays, for busy, computerised practice in New Ross. Experience preferable but not essential. Apply with CV to info@rogersdental.ie.

Dental nurse required for busy practice in Dublin 11. Tuesday, Wednesday, Thursday – 8.30am–2.00pm. Experience not essential. Apply via email plus CV to drjjconnelly@gmail.com.

Warm, friendly dental nurse required for family-oriented dental practice in Celbridge. You will be working as part of a multidisciplinary team consisting of dentists, a hygienist and an orthodontist. Please forward your CV to info@oreillysdentalpractice.ie.

Experienced full-time dental nurse required – Dublin 18. Positive attitude, friendly, team player with fluent spoken and written English essential. Surgical experience an advantage. Email admin@cdpractice.com.

Full-time dental nurse position available from August 2019, Cavan Town. Please reply with CV to info@ndentalclinic.com.

Full-time position nursing position available in Carlow Town. If you want to enjoy your job and work somewhere where you are a part of a family then this is your place. Email caroline@kiwidental.ie.

We are currently seeking an enthusiastic receptionist/administrator to join our busy orthodontic practice in Tullamore. Ideally, the candidate will be from a medical or legal background though this is not essential. The position is full-time and permanent. Email regina@acebraces.ie.

Orthodontic therapists

Orthodontic therapist required for a full-time position in a beautiful, state-of-the-art, modern orthodontic and multidisciplinary practice in north Dublin. We have therapists who have been part of our team since finishing their training 10 years ago. Applications to manager@ncdental.ie.

Hygienists

Donegal county – Hygienist wanted for busy, friendly, popular and progressive practice. Applications to siomurr@hotmail.com.

Hygienist wanted to replace departing colleague in Killorglin, Co Kerry. Full book for two days (9.00am–5.00pm) and every second Saturday. Immediate start. Email CV to killorglindentist@gmail.com.

Hygienist required two days per week (immediate start) in modern family-oriented practice 15 minutes from Galway City. New graduates welcome. Please forward CV to afdp@eircom.net.

Dental hygienist required to cover well-established hygienist position for maternity leave, full-time from June 2019 in Naas, Co Kildare. Busy periodontal practice with full book from start, Monday to Friday, 9.00am–5.00pm. Apply to info@periodontalsuite.ie.

Hygienist wanted full-time in Co. Wexford to cover nine-month maternity leave starting September. Permanent part-time available from now and after this cover. Full book, Cavitron, Airflow, computerised. New graduate welcome. Contact quirkedental@gmail.com or 086-858 6673 (evenings only).

Hygienist required one to two days per week for busy Roscommon dental practice. Please email Eileen at keaveneydental@gmail.com.

Hygienist required for busy family practice in Westport. For a Thursday and possibly a second day. Please send CV to reception@drrosemarysmith.com.

We are seeking a hygienist to join our existing team of two hygienists here in Sligo. We are a fully private, hygiene-focused practice providing comprehensive care including Cerec, implants, CBCT, adult orthodontics. Contact Maurice FitzGerald at 071-914 3927 or info@clearyfitzgeraldsdentalpractice.ie.

Hygienist required two/three days per week for busy Donegal dental practice. Minimum five years' experience necessary. Please contact info@readysteadysmiles.com.

Experienced hygienist required for immediate start in busy award-winning dental practice. One/two days per week. Please contact Ruth on 086-198 4592 or email info@gracefielddental.ie.

Experienced hygienist required for immediate start in a busy award-winning dental practice. Two days – Saturday/Sunday. Email info@beechwooddental.ie.

Experienced hygienist required for busy prosthodontic dental surgery in Naas, Co. Kildare. Implant experience required. Days/hours negotiable. Email info@naasdental.ie or call 045-888 218.

Dental hygienist required for two days a week in busy, modern Waterford practice, with the potential for additional days. Candidate must be warm, friendly with good people skills. Modern facilities, superb dental team, fully computerised and excellently equipped. Email cusackdental@gmail.com.

Full-time, 12-month maternity cover available. Join three hygienists in a busy practice with a great support team – we always manage to have some fun during the day. Position begins late October, willing to consider part-time. Email paula@eyresquaredental.ie.

Exciting opportunity for five sessions at Riverside Dental Practice for an enthusiastic hygienist. Immediate start available. Details at <https://1drv.ms/p/s!Au2G9pTl1owEqhvJXeO7gf79-rbV>. Tel: 01-610 2222.

PRACTICES FOR SALE/TO LET

Two surgeries, leasehold/freehold, flexible. Excellently equipped, computerised. Very busy, long established, good footfall. High new patient numbers. Very low medical card. Well-established hygienist. Good profits. Excellent potential for growth. Email niall@innovatedental.com.

House for sale with full planning permission to convert to single-surgery dental practice, with living accommodation. 6 Devon Park, Salthill, Galway. Contact: eoinmac@gmail.com.

South-east freehold practice. Private, PRSI, GMS. Current principal of 30 years retiring. Three surgeries, computerised, OPG, great staff. HSE certified. Great location, parking, near general hospital. Excellent opportunity to expand and introduce specialities. Email seiredent@gmail.com.

Two surgeries, leasehold. Excellently equipped, computerised. Exceptionally busy, long established, high footfall. Very strong new patient numbers. Low overheads. Good profits. Loyal experienced staff/practice manager. Excellent potential for growth. Email: niall@innovativedental.com.

Modern, long-established, located in busy town 30 minutes from Galway. Fully digital, OPG, three-surgery practice with full books for hygienist and dentists, private and PRSI fees. High gross turnover. Contact westernpractice4sale@hotmail.com.

Kilkenny: well established, busy, full-time, two/three books, active general practice in excellent location. Digitised, modern equipment. Excellent loyal staff. Low medical card. Hygienist service. Good new patient numbers. Ample room for growth. Immediate sale. Email: niall@innovativedental.com.

South-west Dublin: two surgeries, freehold, fully equipped. Very busy, long established, good footfall. Strong new patient numbers. Low medical card. Excellent figures. Ample space to expand hours/service. Principal retiring, available for transition. Email: niall@innovativedental.com.

South-east major town – Long-established busy, general practice with up to six surgeries. Fully equipped, inclusive of OPG. Large catchment area and room to expand further if required. Keenly priced. Email roger@horganbarrett.ie.

Kerry – Very busy, well-established modern surgery. Well located, excellently equipped. Ample room to expand. Medical card numbers low. Strong new patient numbers. Experienced staff, walkable, ready to sell. Custom-built property, flexible options. Contact practicesouthwestforsale@yahoo.com.

Practice for sale. Galway city. Long-established practice for sale – private, PRSI, DTSS. Three surgeries. OPG, etc. Owner retiring. Email des.kelly3@gmail.com or tel. 086- 225 4708 (after 5.00pm).



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A listening ear

Dr Sarah McMorrow of Loughrea Dental won the 2011 Sensitive Dentist of the Year for identifying oral cancer in a patient and spoke to the *JIDA* about the importance of listening to oral cancer patients.

What has your participation in the Irish Dental Association meant to you and what is its biggest benefit?

When I moved from the UK back to Ireland, I didn't know any other dentists in Ireland and the IDA meetings were a great way to meet different dentists and discuss work challenges that only dentists understand. It is also a great source of advice on best practice, employment law and running a practice. Dental practice can be a lonely place and it's good to know you're only a phone call away from getting support.

Could you explain what winning Sensitive Dentist of the Year meant to you?

It was a great honour to win Sensitive Dentist of the Year in 2011. I was so grateful to my patient for nominating me. It encouraged me to continue to be thorough when performing an examination and highlighted the possible life-changing consequences of having a dental exam.

What do you think is important in the management of patients with cancer?

It's important to view the patient holistically and to listen to their challenges and struggles in experiencing cancer. Patients may feel that they don't want to burden their family and friends with the difficulties encountered after treatment. We as dentists are there to let the patient voice these difficulties. We may not be able to fix their problems but it can help just to allow the patient to talk about them.

What can GDPs do to improve people's knowledge of oral cancer?

GDPs can improve people's knowledge of cancer by asking about the patient's exposure to the main risk factors like alcohol consumption and smoking. We also have a poster in the bathroom of our practice listing the risk factors. This might be the only quiet time a busy parent might get to read about these things.

What developments would you like to see in the IDA?

We're entering a new era with the new oral health policy. This will require a lot of difficult decisions and change. It's important that as a group we stay strong and unified and do what is best for the oral health of the Irish public.

I'd like the IDA to continue to be a strong voice, ensuring that we can maintain our high standards of care while at the same time running a practice. I really admire all the hard work and time put in by people on the committees and in the IDA and the sacrifices they make to do that.

Sarah is originally from Co. Mayo. She trained in Newcastle upon Tyne in England and graduated in 1996. She has two children, Killian and Róisín (pictured below) and she says: "This is the special time of year that I love and cherish them the most when they are away in France with their grandmother!"

In her spare time, she enjoys jogging and for the last couple of years, has lengthened her lunch break two days a week so she can incorporate this into her work life: "This has really improved the quality of my life. I feel much more energised and refreshed and ready to enter the fray again in the afternoon".



Photograph courtesy of Julia Dunin (www.juliadunin.com).



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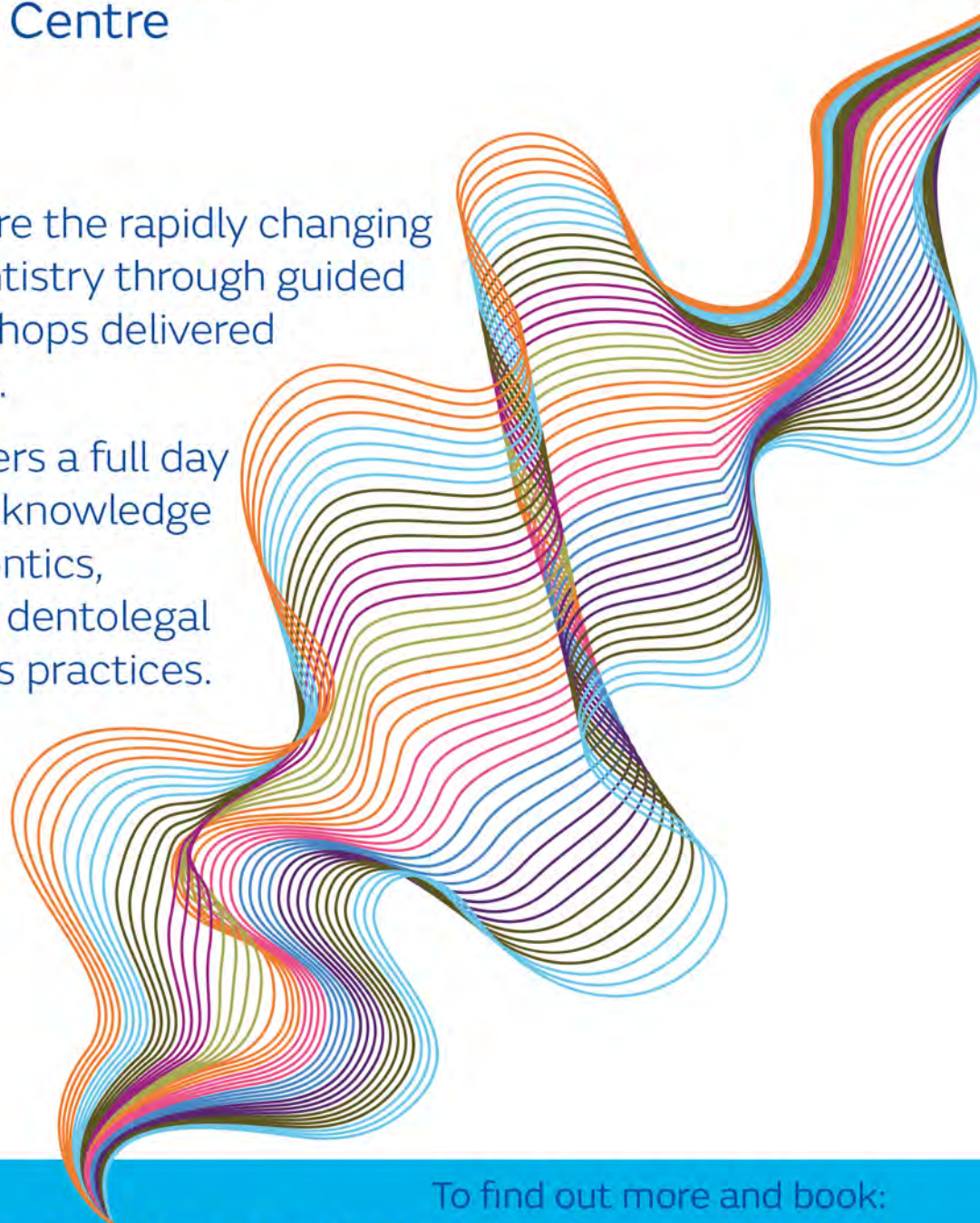
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