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perceived by HSE primary care dentists in Ireland



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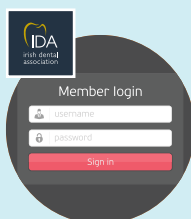
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Dr Niall Murphy of the HSE

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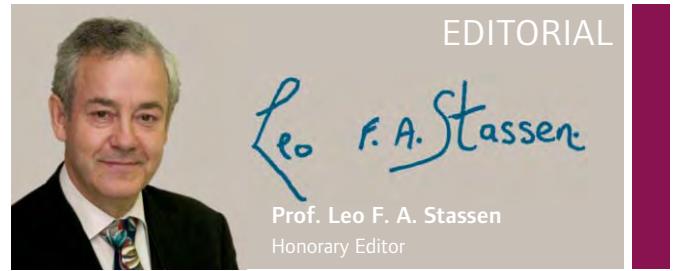


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1. Amornchat C, Kraivaphan P, Triratana T. *Mahidol Dent J.* 2004;24:103-111. | 2. Kravaphan P, Armonchat C, Triratana T. *J Clin Dent.* 2013;24:20-24. | 3. Xu T, Deshmukh M, Barnes VM, et al. *Compend Contin Educ Dent.* 2004;25(Suppl.1):46-53. | 4. Fine DH, Sreenivasan PK, McKiernan M, et al. *J Clin Periodontol.* 2012;39:1056-1064. | 5. Du-Thumm et al. *J Dent Res.* 2013;92 (Spec Iss A):3402. | 6. Data on file, Colgate-Palmolive Technology Center, 2017. Data analysis from reference 4: analysis of antimicrobial effect of 3 toothpastes on teeth, tongue, cheeks and gums. Bacterial reductions of ≥ 50% shown on 100% of mouth surfaces.



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Neglect, the DTSS and underfunding

A peer-reviewed paper on neglect of children's dentition and the IDA's position on the DTSS form the core of this edition of the *Journal*.



Issues that are at the very heart of the practice of dentistry and the oral health of the nation feature prominently in this edition. Dr Evelyn Crowley of the HSE along with her co-authors Dr Gerald Byrne and Dr Brett Duane, have done us a service in their study on the prevalence of neglected dentitions in children as observed by primary care dentists in the HSE. In their peer-reviewed paper, just over 60% of dentists reported seeing neglected dentitions at least once a week in their clinics. Some 38% reported seeing children a great deal or a moderate amount of time presenting late with a serious dentition problem. They state: "HSE dentists and their managers requested more resources for oral health, a more targeted approach, greater guidance and more multidisciplinary involvement in order to assist in managing children with neglected dentitions". Given that dentists need to be aware that a small proportion of children may suffer dental neglect as a result of parental neglect, these findings suggest that all dentists need to be cognisant of their legal and ethical obligations. As Dr Martin Foster of DPL explains in our practice management article, dentists are "mandated persons" under the Children First Act 2015.

These children are often the most vulnerable in society, and their situation is not helped by the fact that their parents' own oral health will likely have been seriously affected by the cuts to the Dental Treatment Services Scheme since 2010. In Members' News, the Association sets out the very poor current state of the Scheme, reporting that 97% of dentists lack confidence in it and 96% state that the Scheme prevents them from providing the same standard of care as they do for their private patients. This is a shameful position for a State scheme and the Association is campaigning for four things to happen to help right the situation. These are: (i) to reverse the FEMPI cuts and resume contract talks; (ii) to extend the bargaining agreement to the Association; (iii) to conduct an expert review of the Scheme and agree Codes of Practice; and, (iv) to budget for prevention. The centre pages of Members' News set out in detail the current assessment of the Scheme by dentists, best summarised by one quote: "It is broken and underfunded".

These are points and opinions of which the new President of the Association, Dr Kieran O'Connor, is acutely aware. In his interview with us, he points out that the Dental Treatment Services Scheme is approaching crisis, and that relations between dentists and the HSE on certain issues are tense. And that may be an understatement.

Both of these issues (neglect of children and the failings of the DTSS) need to be addressed with some urgency. The new national Oral Health Policy is an obvious opportunity to address them, but as IDA dentists have not been consulted, nobody knows whether it might help us solve those critical issues or not. Ultimately, more resources are required. Our economy is growing and the Government needs to direct some of the increased tax revenue available to it towards oral healthcare. If it does not do that, and urgently, it is the State that will be found guilty of neglect in court in years to come.

Conference reporting

Our second peer-reviewed paper is a superb account of the use of autotransplantation of premolars in children with congenitally absent teeth in three cases. We are grateful to Dr Don Ryan of Wexford Orthodontics who points out that the treatment is commonly overlooked in similar cases.

The Association's Annual Conference took place in Galway in April and was a mix of excellent presentations, trade show, professional networking and a big social occasion. We present a report but as always can only provide a taste of the information that was available to delegates.

The Colgate Caring Dental Awards for 2018 were also launched at the Conference. The *Journal* has long been a supporter of the notion of patients being the best champions for dentists. By sponsoring these Awards, Colgate together with the Association are giving dentists' patients a channel of communication about the great work being done day in and day out by Irish dentists. Saturday December 1 is the date for the Awards ceremony. I hope to see as many of you as possible there.

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Dealing with and bringing change

There are a lot of new measures that dentists need to get to grips with but we also want to effect some positive change of our own.

Minamata

The Minamata Convention on Mercury is a global treaty aimed at minimising, and where possible eliminating, the adverse effects of man-made emissions and releases of mercury and mercury compounds into the environment.

The European Union approved the Convention in adopting Regulation (EU) 2107/852, which came into law at the start of the year across the EU. The Regulation is aimed at protecting the environment from mercury and is very clear that dental practitioners shall not release directly or indirectly amalgam waste into the environment under any circumstances.

In Ireland, the Department of Communications, Climate Action and Environment is the lead Department for this new Regulation.

Dental amalgam will soon become the main product containing mercury in the EU. There are various timelines within the Regulation but of immediate importance is that, by July 1, 2018: "dental amalgam shall not be used for dental treatment of deciduous teeth, of children under 15 years and of pregnant or breastfeeding women, except when deemed strictly necessary by the dental practitioner based on the specific medical needs of the patient".

Presumably, the EU has chosen this cohort of patients as a start for the phasing down of the use of dental amalgam as a restorative material, which is a primary aim of the Minamata Convention. The Association will publish guidance shortly, to both dentists and patients, on the implications of the Regulation.

Oral Health Policy

We have been told that the long-awaited Oral Health Policy will be published by the Department of Health in July. We have long expressed dissatisfaction with the lack of meaningful engagement from the Department with the Association during the consultation process. I was pleased to welcome Dr Dymphna Kavanagh, Chief Dental Officer, to the IDA Conference dinner in Galway in April and we have spoken about the situation and I have made very clear that we are ready and willing to engage. We hope that any new policy will focus on preventive strategies. Any oral health policy should also help to integrate oral health with general health as part of the Government's Healthy Ireland framework. If we work with all the other professions in providing healthcare, that gives better outcomes for everybody. Jointly composed oversight groups should be established to oversee all health reform programmes, including the oral health strategy. A new dentists' act has been promised for the past decade and we still have no clear timeline for publication of the bill. This again seems to be a missed opportunity, as this important legislation would underpin any new policy. Our scheduled meeting last month with Minister for Health Simon Harris was cancelled at very short notice so we have not had the opportunity to discuss matters with him. We hope to meet him in the coming weeks.

DTSS

As a member of the GP Committee I have been aware for many years of the anger and frustration of members operating the Dental Treatment Services

Scheme (DTSS) and of the huge amount of time we spend dealing with issues relating to the Scheme when we should be helping members to promote independent practice. The FEMPI legislation needs to be unwound as a matter of urgency and we have called on Pascal Donohoe, Minister for Finance, to proceed with this.

The results of last month's survey of IDA members participating in the Scheme clearly show that a majority have lost confidence in the DTSS, and that it is no longer fit for purpose. Recent communications concerning surgical extractions between the HSE and dentists operating the DTSS have served to highlight the serious problems with the Scheme. We have engaged robustly with the HSE on this matter and highlighted that the 1994 contract definition of a surgical extraction can be interpreted taking into account contemporary science and techniques. We have still not reached a satisfactory conclusion to the discussion.

A new DTSS contract is urgently required. We need a new contract to bring dentistry into 2018 and beyond, one that is fit for purpose, and provides preventive care, and evidence-based dentistry to modern standards.

Funding and oversight are necessary and unless the Scheme is funded appropriately to provide high-standard dentistry, dentists will not sign up. We have a professional obligation to provide quality care. We are highly skilled healthcare professionals and we do our ongoing training to carry out dentistry to high contemporary standards and any new contract cannot become frozen in time like the current 1994 contract (which was groundbreaking in its day). There also has to be agreed oversight from both parties, and a clear, agreed dispute resolution mechanism.

GDPR

The General Data Protection Regulation (GDPR) is in force as of May 25, 2018, replacing the existing data protection framework under the EU Data Protection Directive.

The GDPR emphasises transparency, security and accountability by data controllers and processors, while at the same time standardising and strengthening the right of European citizens to data privacy.

To quote the Data Protection Commission: "Raising awareness among organisations and the public of the new law will be a combined effort of the Data Protection Commission (DPC), the Government, practitioners, and industry and professional representative bodies. The DPC has been proactively undertaking a wide range of initiatives to build awareness of the GDPR, in particular providing guidance to help organisations prepare for the new law which is in force as of 25th May 2018".

The Association has been proactive in encouraging members to prepare for the GDPR in the lead-in period, and provided a wide range of CPD opportunities, and now that the GDPR is in force we continue to support members, in particular through publishing materials in the Resource Centre in the members' section of our website.

Dear Editor

I would like to discuss several points of Dr Dunne's review of the alternatives to the IANB in the *JIDA* Vol. 64, Number 1, 2018. A possible complication with IANB, soft tissue anaesthesia, has been overlooked, despite its 13% prevalence.¹ As "drawbacks associated with intraligamentary anaesthesia" (ILA), the author mentions "damage to unerupted teeth": Brannstrom *et al.* could not unquestionably attribute the effects to the ILA or the anaesthetic molecules.² Table 7 highlights some delivery systems (Intraflow has not been marketed for years) and ignores the SleeperOne and the versatile QuickSleeper (the only device allowing all anaesthetic techniques: IANB, with aspiration, ILA, intraosseous (IOA), suprapariosteal).

About IOA:

- Nogué in 1907 and 1912^{3,4} duly documented the first mention of IOA by Otté in 1896: Masselink⁵ did not invent IOA.
- Kleber's study⁶ is at best a limited review of the literature, not a meta-analysis.
- On the "potential [...] damage during bone penetration": Graetz *et al.* showed considerable differences with the devices, with best results for Anesto and QuickSleeper.⁷
- The immediate onset with IOA and ILA could be a cost factor by providing substantial time saving: time is money!
- Several studies have regrettably been neglected:

- in adults, Pereira *et al.*,⁸ Farhad *et al.* (X-Tip),⁹ Villette *et al.*,^{10,11} Couderc *et al.*,¹² Terrer *et al.*,¹³ Pröbster,¹⁴ and Peñarocha's team in Valencia University¹⁵⁻¹⁷ (QuickSleeper); and,
- in children, Sixou's team in Rennes University,^{18,19} Trentesaux *et al.*,²⁰ Amédée,²¹ and Noirrit-Esclassan²² (QuickSleeper).

■ Gréaud *et al.*²³ developed a variant of IOA, the "osteocentral technique".

■ Studies confirm that IOA is a painless, highly efficient and acceptable technique, even in patients particularly difficult to anaesthetise (with MIH).^{20,24}

I do agree with Dr Dunne's conclusion: IOA and ILA are very effective alternatives to the IANB for mandibular teeth.

Dr Thierry Collier DDS

Bordeaux

References

1. College, C., Feigal, R., Wandera, A., Strange, M. Bilateral versus unilateral mandibular block anesthesia in a pediatric population. *Pediatr Dent* 2000; 22 (6): 453-445.
2. Brannstrom, M., Lindskog, S., Nordenvall, K.J. Enamel hypoplasia in permanent teeth induced by periodontal ligament anesthesia of primary teeth. *J Am Dent Assoc* 1984; 109 (5): 735-736.

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3. **Nogué, R.** L'anesthésie diploïque. Exposé de la méthode. Technique. Résultats. *Revue Stomatol* 1907; 14 (4): 191-197.
4. **Nogué, R.** *Traité de Stomatologie. Fascicule VI: Anesthésie.* J.-B. Baillière et Fils, Paris, 1912.
5. **Masselink, B.H.** The advent of painless dentistry. *Dent Cosm* 1910; 52 (8): 868-872.
6. **Kleber, C.H.** Intraosseous anesthesia: implications, instrumentation and techniques. *J Am Dent Assoc* 2003; 134 (4): 487-491.
7. **Graetz, C., Fawzy-El-Sayed, K.-M., Graetz, N., Dörfer, C.-E.** Root damage induced by intraosseous anesthesia. An in vitro investigation. *Med Oral Patol Oral Cir Bucal.* 2013; 18 (1): e130-134.
8. **Pereira, L.A.P., Groppo, F.C., Bergamaschi, C., et al.** Articaine (4%) with epinephrine (1:100,000 or 1:200,000) in intraosseous injections in symptomatic irreversible pulpitis of mandibular molars: anesthetic efficacy and cardiovascular effects. *Oral Surg Oral Med Oral Pathol Oral Radiol* 2013; 116 (2): e85-91.
9. **Farhad, A., Razavian, H., Shafiee, M.** Effect of intraosseous injection versus inferior alveolar nerve block as primary pulpal anaesthesia of mandibular posterior teeth with symptomatic irreversible pulpitis: a prospective randomized clinical trial. *Acta Odontologica Scandinavica.* Accessed April 16, 2018. Available from: <https://www.tandfonline.com/doi/full/10.1080/00016357.2018.1428826>. Published January 27, 2018.
10. **Villette, A.** Untersuchungs-bilanz aus 500 in erster Intention durchgeführten Trans-Kortikalis- Anästhesien. *Schweiz Monatsschr Zahnmed* 2003; 113 (11): 1207-1214.
11. **Villette, A., Collier, T., Delannoy, T.** Les techniques diploïques, en première intention, peuvent-elles anesthésier les dents présentant une pulpite ? – Etude rétrospective de 110 cas. *Chir Dent Fr* 2008; (1307): 67-72.
12. **Couderc, G., Weisrock, G., Tassery, H.** L'anesthésie transcorticale dans la prise en charge des urgences d'un centre de soins hospitalo-universitaire. *Fil Dent* 2009; (43): 24-26.
13. **Terrer, É., Talbi, F., Couderc, G., Vialatte, L., Tramini, P., Tassery, H.** Anesthésie ostéo-centrale versus locorégionale du bloc du nerf dentaire inférieur. *Inform Dent* 2014; 35: 12-19.
14. **Pröbster, L.** Intraossäre Anästhesie als Alternative zur herkömmlichen Infiltrations- und Leitungsanästhesie. Klinischer Erfahrungsbericht. *Quintessenz* 2012; 63 (1): 71-76.
15. **Beneito-Brotons, R., Peñarrocha-Oltra, D., Ata-Ali, J., et al.** Intraosseous anesthesia with solution injection controlled by a computerized system versus conventional oral anesthesia: A preliminary study. *Med Oral Patol Oral Cir Bucal* 2012; 17 (3): e426-e429.
16. **Peñarrocha-Oltra, D., Ata-Ali, J., Oltra-Moscardó, M.J., Peñarrocha-Diogo, M.M., Peñarrocha, M.** Comparative study between manual injection intraosseous anesthesia and conventional oral anesthesia. *Med Oral Patol Oral Cir Bucal* 2012; 17 (2): 233-235.
17. **Peñarrocha-Oltra, D., Ata-Ali, J., Peñarrocha-Diogo, M.M., et al.** Side effects and complications of intraosseous anesthesia and conventional oral anesthesia. *Med Oral Patol Oral Cir Bucal* 2012; 17 (3): e430-e434.
18. **Sixou, J.-L., Marie-Cousin, A.** Intraosseous anaesthesia in children with 4% articaine and epinephrine 1:400,000 using computer-assisted systems. *Eur Arch Paediatr Dent* 2015; 16 (6): 477-481.
19. **Sixou, J.-L., Barbosa-Rogier, M.E.** Efficacy of intraosseous injections of anesthetic in children and adolescents. *Oral Surgery, Oral Med Oral Pathol Oral Radiol Endodontology* 2008; 106 (2): 173-178.
20. **Trentesaux, T., Laumailié, M., Borowski, M., Dehaynin, E., Delfosse, C.** Apport de l'anesthésie intraosseuse pour les patients atteints de MIH. *Le Fil Dent* 2014; (94): 34-38.
21. **Amédée, J.** Anesthésie ostéocentrale et acceptation de l'anesthésie locale, chez l'enfant. Thèse, Université de Bordeaux, 2015.
22. **Noirit-Esclassan, E., Domine, S., Vergnes, J.-N., Vaysse, F.** Anesthésie intra-diploïque chez l'enfant : quelles conséquences sur la fréquence cardiaque? *Clinic* 2013; (11): 1-6.
23. **Gréaud, P.-Y., Pasquier, E., Villette, A.** L'anesthésie ostéocentrale, une nouvelle technique

en anesthésie dentaire. *Inform Dent* 2008; 90 (14): 701-704.

24. **Cabasse, C., Marie-Cousin, A., Huet, A., Sixou, J.-L.** Computer-assisted intraosseous anaesthesia for molar and incisor hypomineralisation teeth. A preliminary study. *Odontostomatol Trop* 2015; 38 (149): 5-9.

Dear Editor

Thank you for bringing this letter to my attention regarding my article on the alternatives to the IANB published in the February/March 2018 edition of the *Journal of the Irish Dental Association*.

The review intended to give a general overview of the different techniques available to achieve mandibular anaesthesia, and to critique a sufficient volume of the literature for each technique to make conclusions for evidence-based practice. Of course, this is quite a substantial topic to cover in one single review and one could argue that each technique warrants a review of its own! The articles mentioned in this letter are a welcomed addition to those IO articles referenced in the article, and they add to the body of evidence in favour of alternative techniques. In light of this, I do believe it is likely that we will be seeing more of these alternative techniques and delivery systems going forward in practice.

Kind regards

Dr Brian Dunne

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Imminent significant changes to radiation legislation

Dr Jane Renehan of Dental Compliance reports from the recent IDA seminar in Athlone.



Pictured at the IDA's recent seminar, 'An Inspector Calls!' were (from left): John Tuffy, HIQA; Dr Jane Renehan, Dental Compliance Ltd; Dr Andrew Bolas, National Radiation Safety Committee; and, Hugh Synnott of the Environmental Protection Agency.

At the recent IDA seminar, 'An Inspector Calls', members got valuable guidance on changes to regulations around radiation protection and medical ionising radiation.

The Environmental Protection Agency (EPA; formerly RPII) will remain a competent authority responsible for authorising dental x-ray equipment, covering protection of employees and the general public. Dentists will no longer be required to have an x-ray licence, but premises must have an "authorisation" to operate dental x-ray equipment.

The Health Information and Quality Authority (HIQA) will replace the Department of Health and the HSE as the competent authority for medical ionising radiation, covering all matters in relation to the dental patient.

Thus, under the new legislation dental practices may find themselves inspected by both the EPA and HIQA. At the Athlone workshop, both agencies stated that they intend communicating mostly by means of self-assessment questionnaires where the practice owner will be obliged to declare compliance with regulations. Following this some random, and usually unannounced, inspections may occur based on the questionnaires' outcomes or complaints from the general public.

The presence of two regulatory agencies in the Irish jurisdiction has the potential to lead to a greater administrative burden for dental practices. Both agencies confirm that they will work together to reduce this burden.

The take home messages for delegates were: (1) establish structures of good governance in your dental practice; (2) identify your practice radiation protection officer (RPO) as the accountable dentist; and, (3) have all relevant documentation/compliance files available for your self-assessment submission and possible inspection.

HSE Dental Surgeons Seminar

The Annual HSE Dental Surgeons Seminar will take place at the Midlands Park Hotel, Portlaoise, on Thursday and Friday, October 11 and 12 next.

Taking care of dentists



From left: Hugh Kane, Chairperson, PHMP; Dr Íde Delargy, Medical Director, PHMP; David Thomas; and, Fintan Hourihan, Honorary Secretary PHMP, and CEO of the Irish Dental Association.

The Practitioner Health Matters Programme (PHMP), which provides confidential treatment services for doctors, dentists and pharmacists who have mental health or addiction issues, recently launched its second annual report, and confirmed that it helped 48 practitioners in its second year of operation, a 53% increase over its first 18 months of operation. An independent charitable organisation, the PHMP has the support of the representative and training bodies for the medical, dental and pharmacy professions, as well as the three professional regulatory bodies.

Dr Íde Delargy, Clinical Lead for the PHMP, said the fact that over 80% of patients are back working safely again showed the effectiveness of the Programme. She also said the substantial increase in overall numbers showed that awareness of the Programme is growing: "Our experience and international experience shows that health professionals are very slow to come forward with health or addiction issues due to shame, stigma or fears of reputational damage. Practitioners often resort to self-managing and self-medicating their problems, which in turn results in them presenting late and often in crisis. That is why it is heartening to see an increase in the numbers". For full details of the Programme go to www.practitionerhealth.ie.

Colgate Caring Dentist of the Year Awards launched

Put Saturday, December 1 in your diary for the social event of the year – the Colgate Caring Dentist and Dental Team of the Year Awards. This year's event will take place at the Clayton Hotel, Burlington Road. All team members are welcome. Dress code: black tie. An event not to be missed – see you there! [See page 129 for more details].

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References

1. Araujo MW, et al. *J Am Dent Assoc* 2015;146:610-622.
2. Johnson & Johnson. Data on file.

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NEWS

DIARY OF EVENTS

JUNE

7-8 ISDH Conference

Adare, Co. Limerick

The conference will cover a broad range of general topics including: the Assisted Capacity Act, Ireland; future landscape of disability; anaesthetic considerations; treatment planning for older adults; and, periodontal disease management in SCD.

20-23 EuroPerio9

Amsterdam. For more information, log on to www.efp.org/europerio

SEPTEMBER

14 Hands-on endodontic course

Hands-on restorative course - Dr Eimear O'Connell
BLS Medical Emergencies

15 An Inspector Calls. Are you ready? Compliance Workshop 2

Radisson Hotel, Athlone, Co. Westmeath

OCTOBER

11-12 IDA HSE Dental Surgeons Seminar

Midlands Park Hotel, Portlaoise, Co. Laois

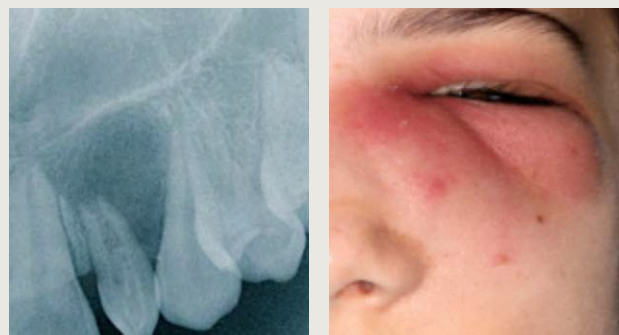
12 IDA Munster Branch – Annual Scientific Meeting

Save the date – further details to follow

QUIZ

Submitted by Dr Sinéad O'Dwyer.

Questions (answers on page 152)



1. Describe this radiograph.
2. What are the most common development anomalies associated with the maxillary lateral incisor?
3. What is your immediate concern?
4. How do you manage this patient?

Surgical focus at OSI Meeting



OSI President Stephen Murray with keynote speaker Dr Simonas Grybauskas.

The Orthodontic Society of Ireland (OSI) held its annual Spring Meeting in Dublin in April. This was a specially themed meeting centring on contemporary orthognathic surgery, and as well as orthodontists, the meeting was open to maxillofacial surgeons.

The meeting began with a one-day course on orthognathic planning, facilitated by Emma

Woolley and Joy Hickman from north Wales, and assisted by David Richardson and Tim Morris from Liverpool. At the main meeting, principal speaker, Lithuanian surgeon Simonas Grybauskas spoke on his approach to planning and executing orthognathic surgery and how he interacts with his patients' orthodontists, even though they are based in many other countries. As the lectures progressed, he demonstrated the treatment of progressively more complex cases, ending with a phenomenal presentation of virtually planned treatment of severe facial asymmetry. The meeting also featured an engaging presentation by economist Jim Power assessing the current and potential future economic environments that attendees would be operating in. There was also a short talk by Declan Keegan of CK Financial Solutions on insurance and succession challenges for small business operators. Kieran Daly, Treasurer of the Dental Benevolent Society, gave a talk on that organisation's work. The meeting finished with a talk on GDPR by Proliance, fresh from their presentation at the recent IDA event on this topic.

The Society will hold its Autumn Meeting on November 23-24 in Galway.

Are you compliant?

Part II of our Compliance Seminar will take place on Saturday, September 15 at the Radisson Hotel, Athlone. This seminar will be open to all dental team members, and will cover a range of subject areas:

- infection control (to include surgery design);
- health and safety;
- water quality, including amalgam separation; and,
- hand hygiene.

This day-long event is an absolute must for all dental practices to attend and to ensure they are compliant with new and updated regulations. To book, log on to www.dentist.ie. Cost: €250 IDA members only.

Watch this space

A day-long seminar for recently graduated/young dentists will take place this autumn. Topics to be covered will include social media, employment law as an associate, how to obtain government contracts (DTSS and DTBS), financial issues and much much more. Venue and date to be announced.

Award for Ballinrobe dentist



Dr Patrick O'Beirne of Ballinrobe Dental was recently announced as overall winner of Gnó na Bliana in the Business with Irish Awards 2018, organised by Gnó Mhaigh Eo. Sitting on the doorstep of the Gaeltacht regions of Tuar Mhic Éadaigh and An Fhairche, Patrick was determined to introduce Irish to his dental practice from the outset. He took the first step by erecting the beautiful old Irish script 'Fiaclóir' over his door in 2014. They recently added bilingual signage to their 'Kids Colouring Corner', together with interior door and counter-top signs, and have also added Gaelge to their website. The team at Ballinrobe Dental also makes an effort to use their spoken Irish on a daily basis.

Patrick is pictured left with his wife Ciara McHugh and some of his awards!



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ABOVE: Mrs Jackie Costello is pictured with 2018 Costello Medal Award winners Rawan Kahatab and Jelena Djokic.



LEFT: This year's winner of the President's Golf competition, Dr John Nolan, receives the cup from IDA President Dr Kieran O'Connor.



Pictured at this year's Past Presidents' lunch in Galway were: Back row (from left): Drs Gerry McCarthy, Michael Galvin, Charles O'Malley, Martin Holohan, Robin Foyle, Joe O'Byrne, Cathal Carr, Vincent O'Connor, Tom Feeney, and Peter Gannon. Front row (from left): Drs Brian O'Loughlin, Ena Brennan, Dr Joseph Crowley, President, American Dental Association, Kieran O'Connor, Garry Heavey, PJ Byrne, and Barry Harrington.

Balancing the old and new in Galway

The sun shone in Galway for this year's Annual Conference, where delegates learned from the very best from both home and abroad.

Thursday was, as ever, pre-conference course day, and delegates had a range of excellent lectures and hands-on courses to choose from. Prof. Trevor Burke covered successful posterior composites, Drs Eoin Fleetwood and Alastair Woods looked at implant overdentures, Drs Johanna Glennon and Paul McCabe helped attendees to keep endodontics simple and predictable, and Dr Phil Ower lectured on the essentials of periodontics management for the dental team.

The next two days saw a superb programme of lectures, with a wide range of topics covered. Below are some of the highlights.

Phasing out amalgam

Prof. Trevor Burke of the University of Birmingham made his presentation on 'Life after Minamata'. He outlined the main aim of The Minamata Convention on Mercury, which is to protect human health and the environment from the adverse effects of mercury. From July 1, 2018, dental amalgam "shall not be used for dental treatment of deciduous teeth, of children under the age of 15 years and for pregnant or nursing women, except when deemed strictly necessary by the dental practitioner, based on the specific medical needs of the patient".

Prof. Burke showed a slide he created in 1996 that simply said that there are environmental concerns about amalgam, but not toxicity concerns. He stated that the scientific evidence does not support the myth that mercury from dental amalgam causes kidney damage, or that dental amalgam is associated with MS, Alzheimer's disease, mental illness or "amalgam illness". Essentially, there is no evidence of mercury toxicity for patients. In relation to mercury toxicity for dental healthcare workers, a paper Prof. Burke and his colleague published concluded that: dentists' short-term memory is worse than controls; kidney disorders were not correlated with mercury vapour levels in surgeries; safer handling of amalgam is needed; and, periodic health surveillance of dental healthcare workers is indicated.

Addressing the issue of appropriate substitutes for amalgam, he quoted his own 2013 paper in *Dental Update*: "In clinical situations where there are no adverse situations at work (such as high occlusal loading or an acidogenic



Ann-Marie Hardiman
Managing Editor

Additional reporting from
Dr Dina Dabic and Paul O'Grady





LEFT: Dr Robin Foyle passed on the chain of office to incoming IDA President Dr Kieran O'Connor.



BELOW: Yvonne Powell, Fiona Wilcockson and Paul Duncan of Dentsply Sirona with Dr Kieran O'Connor.

plaque), certain restorations in reinforced glass ionomer (GI) materials ... may provide reasonable longevity. However, the conditions for longevity are not readily identified. Two of the studies (Scholtanus and Huysmans, 2007; Basso, 2013) demonstrate higher than desirable failure rates for GI restorations in posterior teeth, especially in the longer term".

Prof. Burke quoted the conclusion of a 22-year retrospective evaluation of posterior composites: "Composite restorations have been found to perform favourably in posterior teeth, with annual failure rates of 1-3%". Ultimately, he expressed the view that bulk fill restorative materials will be our amalgam alternative in the short to medium term. Finishing his presentation, he set out his reasons why dentists should adopt minimal intervention:

- patients like it (if you advise them of your philosophy);
- teeth like it (fewer die!);
- it's easier for dentists (fewer die: better for their blood pressure!);
- lawyers hate it (fewer dentists get sued!); and;
- we now have the materials to make it work.

GP meeting

The IDA's GP meeting returned to the Annual Conference this year, and followed a new, 'town hall meeting' format. Representatives from IDA House and from the GP Committee updated those present on current issues such as Garda vetting and the vexed question of the DTSS contract, but the main purpose of the meeting was to give members the opportunity to voice their concerns and ask questions of their representatives. There was a lively discussion, with passionate contributions from several members on the frustrations of operating within the current schemes. IDA CEO Fintan Hourihan reiterated the Association's commitment to representing members in these matters. Both he and Committee representatives Drs John Nolan and Martin Holohan emphasised the importance of GPs coming together, getting involved in the Association, and joining the GP Committee to make sure these issues are kept to the forefront.



Expressions of interest are invited for the position of

Honorary Editor of the Journal of the Irish Dental Association

Dentists with an interest in publishing and experience of editorial boards are invited to express interest in the above position.

The position is voluntary and requires some or all of the following:

- familiarity with peer-reviewed publishing of scientific content;
- knowledge of Irish dentistry;
- commitment to the objectives of the Irish Dental Association;
- ability to chair and use the resources available on the Editorial Board for strategic planning; and,
- familiarity with governance procedures in general and best practice.

The Association provides support for the Honorary Editor through the work of the Journal Co-ordinator; the members of the Editorial Board take responsibility for some specific aspects of the work; and the publishers provide the professional services necessary to ensure a high-quality publication for Irish dentists.

Confidential enquiries are welcome to Fintan Hourihan at the Association (as below).

Expressions of interest should take the form of a letter and CV, which can be posted or emailed to the Chief Executive of the Association, Fintan Hourihan – fintan@irishdentalassoc.ie

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

Deadline is June 29, 2018



Gerry Lavery demonstrating on the Septodont stand.



Dr Marcella Torres Leavy with Mark Allen of Coltene.



Dr Marty Jablow.

Looking after new dentists

At the GP meeting, DR DINA DABIC reported on the work of the IDA's new working group for newly qualified and foreign-qualified dentists in Ireland. The group's purpose is to help the IDA to provide organised support and career guidance to these dentists, as well as to increase and encourage their involvement with the IDA.

Dina presented Dental Council data from 2015 showing that 70% of registered dentists qualified from Irish dental schools and 30% qualified outside Ireland. She pointed out that the number of foreign-qualified dentists practising in Ireland could be higher now, due to the increased trend of foreign nationals moving to Ireland.

The working group's project was a survey among IDA members who were Irish graduates who qualified between 2015 and 2017 and foreign-qualified dentists who registered with the Dental Council between 2015 and 2017. The purpose of this survey was to identify the main challenges these groups face, and to serve as a baseline for planning further strategies and activities.

Results

Nearly 60% of respondents were Irish graduates, while around 40% were non-Irish graduates (80% being EU graduates), and the majority of respondents (around 75%) joined the IDA within six months of registering with the Dental Council. Over 50% of respondents claimed to be satisfied with the support the IDA offers to young dentists/foreign-qualified dentists starting in Ireland.

The main challenges Irish graduates faced within the first few years of practice were related to taxes and the financial aspects of being a self-employed associate (67%), attending CPD events (39%), and employment relations (33%). Foreign graduates seem to have difficulties in areas of employment relations (87%), registering with the Dental Council (50%), and taxation issues and indemnity insurance (37% each).

Surprisingly, 50% of Irish graduates and 30% of non-Irish graduates reported that they do not feel comfortable attending CPD events. Reasons given included that CPD events are not necessarily relevant for dentists in the early stages of their career in general dental practice. Around 90% of respondents

stated that they would be interested in attending CPD events directed exclusively at younger dentists. While 80% of respondents stated that they would be interested in having an older colleague as a mentor, the IDA's Mentoring Programme has not been widely used among this group – indeed, 50% were not aware of the scheme. All respondents stated that they would be interested in having a designated contact person within the IDA to help with queries.

One of the biggest challenges for non-EU citizens, including those who graduated from Irish dental schools, was finding a suitable, salaried position that would allow them to apply for a working permit to stay and practise in Ireland.

While this research had its limitations, it provided valuable information and guidance on areas where younger colleagues, and those starting their career in Ireland, need more help. It showed a need to attract young dentists to attend CPD events from early on by covering topics relevant for dentists in the first years of practice, including additional education on taxes, finances, and employment relations. Efforts should be made to strengthen local dental networks and allow dentists new to the area to meet colleagues from the same region and develop mentoring relationships with them, as well as being connected to other new dentists in the area. Consideration could be given to forming a young dentists' representative body on a national level, which would act as a bridge between the IDA Council and other professional bodies and dentists starting their career in Ireland. On the other side, it is very important for young dentists to share their challenges and ideas with the IDA and local IDA branches, and give their feedback on how the IDA could offer them more support.

Dr Dabic thanked Dr Rebecca Gavin, the team in IDA House and the IDA Council for their help and support.



IDA Honorary Membership recipients Dr Joseph Crowley, President of the American Dental Association, and Mrs Jackie Costello, with IDA President Dr Kieran O'Connor.



Dr Alastair Woods and Brid Keane with Pat O'Brien, Catriona Corcoran and Shane O'Neill of DMI.

Self-care and seizing the day

Later on Friday afternoon, delegates came together to hear two inspirational speakers. GP, mental health advocate and bestselling author Dr Harry Barry tackled the difficult subject of toxic stress and learning to self-care. He talked

about the importance of identifying the symptoms of stress in ourselves and others, including sleep difficulties, fatigue, headaches, anxiety/low mood, anger, and poor concentration/decision-making. We all have different levels of resilience to stress, but Harry's message was that this is not fixed – we can

The Dental Health Foundation & Special Olympics Ireland are collaborating as part of the Special Olympics Special Smiles, Ireland Games, June 2018.

The Special Smiles will be in contact with 1600 athletes. Special Smiles offers free visual examinations, oral health education and tooth brushing demonstrations for athletes.

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**Cáit Donnelly Health & Wellbeing Coordinator,
Special Olympics Ireland, Tel: (01)869 1618**

Play Your Part!



Dental Health Foundation
Ireland





Jim Way of Henry Schein with Dr Kieran O'Connor.



Dr Kieran O'Connor with Steven Lynch of MedAccount.



Prof. Trevor Burke.



Jim Foley and Peter Morris (right) of Morris Dental with Dr Kieran O'Connor.



Aidan Mahon of Doyle Mahon with Dr Kieran O'Connor.



Dr Kieran O'Connor with Jonathan Singh of NSK.

change it. Some of the strategies he recommended included writing down the causes of our stress (whether personal or work related) and dealing with them one at a time in order of importance. He also recommended seeking assistance, whether professional or from family and friends, and sharing worries with colleagues. He argued strongly that we need to think about self-care; if we don't care for ourselves and our close personal relationships, we will not be able to care for our children, our work, or the other important things in our lives. He finished by talking about the importance of accepting ourselves unconditionally, and not allowing the judgement of others to undermine our mental health. Our only task, he said, is to love ourselves.

The title of Dr Hannah Shields' talk was 'Limits exist only in our minds', and she truly is an example of that mantra. Dentist and adventurer Hannah enthralled the audience with an account of two attempts on Mount Everest (on the second of which she reached the summit), and racing to the North Pole. She spoke of injuries and death on the mountain, climbing across glaciers and through storms and avalanches, and terrifying encounters with polar bears at the Pole. More recently, Hannah appeared as a finalist on the BBC television programme *Astronauts: Do you have what it takes?* She finished her talk by saying that she sets her dreams as goals and works very hard to achieve them, but she still doesn't know what her limits are!

Dental technology

America's Dental Technology Coach Dr Marty Jablow lived up to his name on Saturday with two presentations. The first, 'Digital dentistry: the basics on what you need to get started' presented a practical view of making digital dentistry work for you. Dr Jablow discussed the benefits of scanning over taking a physical impression, saying scanning offers improved clinical results and better patient acceptance, so much so that he no longer takes impressions. When

purchasing scanners, his advice was to look closely at the package on offer for ongoing costs such as annual licence fees, and to look at the equipment in terms of three- and five-year cost. Always ask yourself what you will use this equipment for.

Some of the devices Dr Jablow discussed seemed almost in the realm of science fiction, such as wireless, motion/gesture-controlled glasses that allow the dentist to look at the patient while they scan, but these are coming to the market now, and time will tell how effective and cost-efficient they prove to be.

The true game changer in digital dentistry is undoubtedly 3D printing. Dr Jablow said that in the next five years, everything will revolve around the printer and the materials. He advised dentists to think about what they need, and whether they will want in-office printing capability, or simply create 3D files to send to a lab. Already, bite splints, models, impression trays, surgical guides, and crowns and bridges can be printed, and while the quality of, for example, composite crowns, is not good enough yet, in five years' time the story may be very different. Digital dentistry is changing the way we do things, he said, and whether we know it or not, we are in the digital world.

Dr Jablow's second presentation looked at what's new in high-tech dentistry. "You don't have to understand technology – you have to understand what it does for you", he said. This presentation looked at a range of equipment for the surgery, from conebeam CTs and the latest intra- and extra-oral cameras, to cordless loupes that can zoom in and out for a variable field of view with different magnifications.

At the other end of the scale is fibre-optic trans-illumination to diagnose caries, and newer imaging devices to help dentists watch a tooth over time to track disease progression, some using artificial intelligence – where the machine learns what caries looks like on radiograph.

BUYING PROPERTY AS PART OF YOUR PENSION

ADVERTORIAL

It appears that appetite for investment in the property market is back. Various different economic commentators have predicted residential house price growth of between 6% and 8% for the year.

In addition it seems that we have had a severe under supply of homes in Ireland over the last 10 years and nothing increases prices like scarcity and demand.

Having seen what can go wrong with property many people are reticent to get involved in a market that has proven to be much more volatile than anyone had previously dreamt it could be. So with that in mind why would anyone in their right mind even consider purchasing an investment property using their hard earned and hard saved pension funds.

There are a few issues about both property investments and pension funds that we must consider separately before we assess whether they go together or not.

PURCHASING PROPERTY AS AN INVESTMENT

- The primary goal is to purchase an asset that will provide an income to repay any mortgage over the term of the loan and thereafter give you an income. The property should increase in value at least in line with inflation so protecting the owner's investment
- Rental Income is subject to an income tax computation
- Property tax has to be paid on the property
- On the sale of the property Capital Gains Tax is applicable to any profit made

SAVING MONEY INTO YOUR PENSION FUND

- The primary goal is to save enough money during your working life to one day be able to retire and have enough income so that you no longer have to work
- The maximum amount you are allowed have in the fund at retirement is €2m (not reached by many)
- Once you draw down your cash lump sum from the pension fund you must withdraw at least 4% from the fund each year
- All individuals are subject to a maximum contribution allowance by revenue that they cannot exceed each year

So with the above considerations in mind let's analyse how purchasing a property within a pension fund would work and assess if it is a beneficial concept or not.

The downfall of many who invested in property in the past was the proportion of the purchase price they had borrowed.

Because banks were allowing people borrow 90% upwards, aspirational landlords were making very small investments and leaving themselves very heavily exposed to any sort of a glitch in property prices and also with insufficient rent to pay the mortgage. Therefore we must consider it prudent not to borrow more than 50% of the purchase price of a property (whether in a pension or not). Once this is adhered to, a yield of 5% of the purchase price



should be enough to repay a 50% mortgage over 15 years.

One significant advantage of a pension property purchase that would benefit the investor is that the rent is not taxable within their pension fund. To give a live example, an investor who receives rental income of €20,000 per annum could be liable to up to 52% of that in tax (€10,400) leaving them with only €9,600. A pension fund that receives rental income of €20,000pa has no income tax liability on it. This leaves it with far greater capacity to repay a mortgage on the property.

Because the property should increase in value in line with inflation it may assist you in getting closer to the maximum you are allowed have in your fund at your retirement. If you buy a property valued at €400,000 with a 50% mortgage of €200,000 on it and a rental yield of 5% you will own the property in its entirety after 15 years. If the property value increases at a rate of 2% per annum over 15 years it would be worth €538,347.

RENTAL INCOME PRE-RETIREMENT

One of the great advantages of the rent being paid into the fund is that it is not included as part of your maximum contribution allowance – it is separate income from the table below. The rent is not classed as an actual pension contribution and the full limits remain available.

CREATING INCOME IN RETIREMENT

As I noted above you must take a minimum of 4% from your approved retirement funds once you have taken your cash lump sum. With bond yields and interest rates currently so low it can be difficult for traditional pension funds to provide that for you without eroding the original sum invested. But with capital values and rents moving in line with inflation this should be achieved using the rental income coming into the fund. This will mean that as the 4% is paid out the capital value of the fund is protected.

While all of the rent on a property held outside of a pension is taxable, only income taken from a pension fund is taxable meaning that you may have less tax to pay depending on how much you take from the fund.

ARM'S LENGTH RULE

One very important consideration that must be remembered is that the revenue has an 'arm's length' rule which means that neither you nor family member or friend can use the property either as a home, place of work or as any other facility. This rules out your holiday home, student accommodation for your children or your own surgery building. The answer goes "if you need to ask then it breaks the rules"!

If you would like to find out more about about this option, contact John O'Connor on 01 293 8554 or at john@omegafinancial.ie



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Declaration of independence

New IDA President Dr Kieran O'Connor spoke to the *Journal* about his hopes for the National Oral Health Policy, the need for a new DTSS contract, and raising awareness of the importance of oral health.

On the day of the *Journal's* interview with Kieran O'Connor, he was scheduled to be part of an IDA delegation to meet Minister for Health Simon Harris, but the meeting was cancelled at short notice. While acknowledging the very serious nature of the Cervical Check scandal, which was the reason for the cancellation, it was difficult not to be frustrated as dentistry and oral health seem once again to be sidelined by Government.

A big year

The coming year could well be a pivotal one for Irish dentistry. While welcome changes to the Dental Treatment Benefit Scheme (DTBS; the PRSI Scheme) have expanded access to care for thousands of citizens, its partner scheme for the more socially disadvantaged, the Dental Treatment Services Scheme (DTSS; medical card scheme) is approaching crisis point, and relations between

dentists and the HSE on certain issues are tense to say the least. As if that were not enough, the long-awaited National Oral Health Policy is, apparently, imminent, but astonishingly has been developed with little discussion with the IDA.

Amid these tensions and uncertainties, Kieran has nonetheless set his goals for his presidency: "I plan to continue the good work of my predecessors and work with the Board, the Council, Fintan and the team in IDA House, and the branches, to promote the profession and to deal with the issues that arise from day to day, and with the broader vision, which is going to involve the Oral Health Policy".

Kieran feels that the profession has often been reactive in the past, and while that hasn't always been by choice (for example when the FEMPI legislation unilaterally changed the DTSS contract), there are ways in which dentists can be proactive, and set their own agenda: "We have sent the clear message out that we are willing to work with the State agencies – the changes to the PRSI Scheme show that this can be done successfully while maintaining independent practice in the form of the co-payment model".

Protecting and promoting independent practice is very important to Kieran, and to the IDA: "The fact that independent practice keeps standards up has been lost along the way. While the third-party schemes are in the mix, and they are stakeholders, the core practice of dentistry in Ireland has been private practice, and that has delivered care for generations. We need to be careful that we don't give custody of our practices to schemes because the dentists lose control and, to quote the HSE, we become 'contractors'".

Health of the nation

Setting out goals is complicated by the lack of detail around the long-awaited Oral Health Policy. Naturally, Kieran has a list of priorities he would like to see included, the first of which is that any policy would be underpinned by legislation in the form of a new dental bill. The current Act dates back to 1985 and has long been in need of an update, but as dentists know all too well, promised legislation has shown no sign of arriving.

Any policy would of course have to place heavy emphasis on preventive care: "In other countries, preventive models have worked, and what's been done with the PRSI Scheme is a preventive approach that's working for patients, giving them access to care that will prevent problems down the line. That, one would hope, will be the clear focus".

The proposed funding model will be important too, and Kieran favours a multi-annual model: "We accept that priorities have to be set, but it has to be appropriately funded on a multi-annual basis so there is a clear vision for the future".

Any oral health policy should also help to integrate oral health with general health as part of the Government's 'Healthy Ireland' framework: "We don't just fix teeth, we prevent disease and help patients to take custody of their own oral health. If we work with all the other professions in providing healthcare, that gives better outcomes for everybody".

Of course, all of this is speculation, particularly as IDA dentists have not been involved in the consultation process, which is a source of major frustration: "We have no idea what to expect when there has been a complete lack of meaningful involvement, so all we can do is wait and see".

In practice

Based in Youghal in Co. Cork, where he shares a family practice with his brother Patrick, Kieran is very aware of the issues that affect day-to-day general dental practice. While they have a core group of patients who have come to the practice for generations, the need to convey the message that oral health is

PUBLIC PERCEPTION

The public's relationship with dentistry is at best a complex one. Kieran feels that public perceptions of dentistry are improving: "There's a much greater awareness in general of both health and of aesthetics/cosmetics. We've become much broader in terms of what we can provide – adult orthodontics, minimally invasive aesthetic dentistry, mouthguards. Patients will come in and say what they want, but fundamentally it's about producing healthy smiles".

The improvements in the DTBS are helping to get people in the door, but there's still a long way to go to bring about the cultural shift of everybody in the population seeing their dentist regularly, and not just when they have a crisis. To this end he hopes the Oral Health Policy, when it comes, will also have a strong health promotional element.

important is constant. He acknowledges that there are financial difficulties for some patients, and that there is a need to balance private care with care offered under the State schemes. Dentists work hard to get the message across that oral health has to be lifelong, from the first visit at age one, to elderly edentulous patients who are now coming to get checked for oral cancer: "Dentistry is a lifelong journey, and the sooner you start the better. Essentially, creating habits is good". From a professional point of view, both Kieran and Patrick are also of the belief that dentists need to move with the times and educate themselves to offer the best dentistry to their patients: "I'm a big believer in minimally invasive dentistry. The postgraduate work I have done has shown me that there are lots of techniques we can offer patients".

He cites the theme of the IDA's recent Annual Conference in Galway, 'New way. Old Way. Galway.': "In many ways, that could be a theme for the profession. There can be a balance between the old ways and the new ways. Lots of the old ways are still solidly based and relevant. But in recent years dentistry has moved on a lot – the IT revolution, and digital workflow, will change how we do things".



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Contractual difficulties

Unfortunately, the DTSS does not allow dentists to offer the best level of care, and that is a central issue. A new DTSS contract is badly needed, and Kieran has strong views, which would no doubt be shared by most dentists, on what this should contain: "We need a new contract to bring dentistry to 2018 and beyond, one that is fit for purpose, and that provides preventive care, and evidence-based dentistry to modern standards".

Funding and oversight are also crucial: "Unless it is funded appropriately to

Surviving recession

Like so many dentists around the country, Kieran and Patrick had to reassess their practice when the recession hit. Their approach had two elements: get a strong message out to patients about the importance of oral health, and improve their own skillsets to offer the best possible care: "We were fortunate to have bought a practice that was established in the mid 1950s and we have patients who have been coming to our practice all their lives. So we were very careful about continuing to look after people while explaining that the State schemes had collapsed and there was a lot less being provided, but that looking after your oral health was still important".

Kieran completed the FGDP restorative diploma in the Royal College of Surgeons in London, and went on to complete a master's in restorative dentistry in Leeds: "Learning new techniques and technologies is good for everyone. It means you're able to give people the best contemporary dentistry and it's reassuring for patients that their dentist and dental team are not stuck in a time warp either.

"We didn't do anything radical. We kept providing good quality dental care, with the new techniques and technologies".

A family affair

Originally from Watergrasshill in East Cork, Kieran graduated from UCC in 1993 and worked in the UK for six years after graduation: "I did vocational training for the first year, which gave me a broader perspective on general practice, and also gave me an interest in CPD early on".

He returned to Ireland in 1999 and set up a practice in Youghal with his brother Patrick. He says they work well together: "We worked together in the UK too – so we did the trial run before we did it for real! We are likeminded, and we've both upskilled in different ways. We can share the problems and issues we face, issues that are common across the profession".

In his spare time Kieran enjoys GAA, cooking and gardening. He's also an active member of Youghal Rotary Club: "It's a service organisation – it has helped me to work with fellow professionals in other fields, and achieve things at local and international level, and it's community based and local – everything is local in the end".

provide high-standard dentistry, dentists will not sign up. We have a professional obligation to provide quality care. We are trained and we do our ongoing training to carry out dentistry to high standards and any contract cannot become frozen in time with what happens to be a philosophy in 2018. There also has to be agreed oversight from both parties, and a clear, agreed dispute resolution mechanism".

Of course, in order for this to happen, the infamous FEMPI legislation must be unwound, and the IDA/IDU has called on Minister Donohue to proceed with this.

Recent communications concerning surgical extractions between the HSE and dentists operating the DTSS in their practices have served to highlight the serious problems with the Scheme. Kieran has been involved in discussions with the HSE on this issue: "Extractions are evidence of the ultimate failure of an oral health policy – they're the last resort treatment when everything else has failed. In a country with fluoridated water, the fact that we're fighting about extractions in 2018 instead of talking about preventive dentistry is an appalling vista really. Thus far, we have not achieved a satisfactory outcome in our discussions on this".

The lack of positive interaction with the HSE is all the more frustrating because of the contrast between it and the very positive outcomes from the discussions with the Department of Social Protection. Kieran was involved in these discussions, and they gave him a good insight into what it takes to make a process like this work: "You have to agree procedures, processes and ground rules in advance, and have a clear idea of what you want the outcome to be. There has to be mutual respect across the table, and both parties signing up to the process. You will be speaking to non-dentists, so you need to be able to explain the science and rationale behind what treatments are to be provided, and their importance".

Having a good team is also important: "It needs to be broad based, reflecting different talents, and you need to go in unified and with a clear knowledge of the brief".

While the talks with the Department of Social Protection were frank, there was mutual respect at all times, and a genuine desire to reach a positive conclusion "They wanted to do something and we gave them a solution. As a result, the self-employed are now getting a benefit they never got before. Patients are getting something, and dentists are able to provide care in a model that is high standard and economically viable".



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2017 income protection claims

Dentist illness claims for psychological and pregnancy-related conditions increased in 2017. Every year, Omega Financial Management analyses the types of day one income protection claims paid over the course of the previous year to better understand the illnesses and injuries that have faced its membership. Dentists form the largest group of the company's members and therefore represent the highest number of claimants.

Overall, one in seven dentists needed to make a claim from their income protection policy in 2017. As a mostly self-employed profession, the newly introduced State sick leave cover of €198.50 per week is very limited and represents a fraction of the average living/professional costs faced by dentists. It was noted that the proportion of psychological and pregnancy-related conditions rose sharply compared to 2016. Psychological conditions including stress, anxiety and depression accounted for 15% of overall dentist claims in

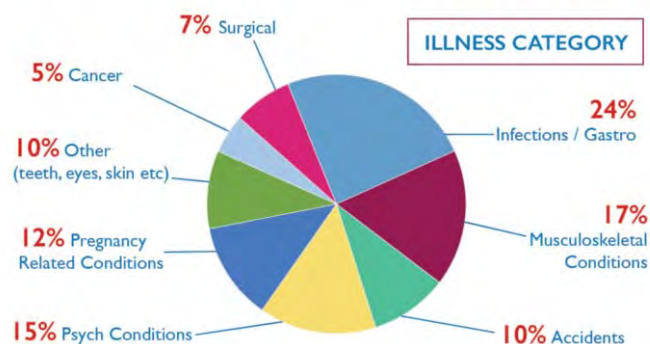


FIGURE 1: The type of income protection claims by category.

2017, compared to just 2% in 2016.

Pregnancy-related conditions accounted for 12% of overall claims, covering a variety of issues from early pregnancy to birth.

These two illness categories are not universally covered by income protection providers; however, DG (Omega's day one underwriter) covers them in entirety unless they are pre-existing. **Figure 1** shows a breakdown of claims by category.

Unfortunately there have been a number of longer-term claims resulting in dentists needing to take significant amounts of time off for conditions including anxiety, cancer and accidents.

Omega states that 100% of these day one income protection claims were paid and that this has been the case every year since the policy was introduced in Ireland. Claimants were paid on a weekly basis until such time as they could return to work.

The average age of a claimant dropped to 39, compared to 41 in 2016. **Table 1** shows a sample of dental claims received in 2016, their duration and benefits paid.

TABLE 1: Some of the sample claims and benefits paid to dental surgeons for income protection in 2017.

Illness/injury	Time claimed	Paid
Cancer	Ongoing	€130,426
Accident – broken limbs	Five weeks, two days	€8,000
Anxiety	Five weeks, two days	€5,833
Pregnancy complications	Three weeks	€2,400
Vertigo	Two weeks, one day	€1,430
Stress	Six days	€1,000
Back and hip pain	Five days	€416
Respiratory tract infection	Three days	€750

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Colgate Caring Awards



The *Journal of the Irish Dental Association* has a long track record of facilitating patients' expressions of appreciation of their dentists. This year, it takes the form of the newly inaugurated Colgate Caring Dentist and Dental Team of the Year Awards. General dental practitioners will be receiving the competition packs with stands and entry forms with this edition of the *Journal*. Patients can nominate their dentist or their dental team using these entry forms (left) or online at www.colgatecaringawards.ie where all details of the Awards can be found. Dentists and dental teams who receive a nomination from a patient will be invited to attend the Awards ceremony in the Clayton Hotel, Burlington Road, Dublin 2 on Saturday December 1.



The Awards were launched at the IDA Annual Conference in Galway in April. At the launch with the President of the Association, Dr Kieran O'Connor, were Colgate executives (from left): Debbie Maudsley, Oral Care Consultant; Christina Havaladar, Professional Marketing and Sales Manager, Northern Europe; Paul Darby and Aoife Moran, Oral Health Liaison Manager, Ireland, Scotland and Wales.

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Quintess Denta launches Grand Morse



Ian Creighton (left), Implant Sales Manager, Quintess Denta, with Neodent customer Dr Peter Doherty of 3 Dental in Dublin.

Quintess Denta states that Neodent's Grand Morse (GM) system offers innovation, flexibility and simplicity at an attractive price. It also states it comes in a range of sizes with a comprehensive prosthetic portfolio.

According to the company, it is designed for enhanced flexibility and simplicity, especially with regard to prosthetics, features a fully tapered implant design for all bone types and immediate tooth replacement protocols. Because the implant-abutment interface is crucial for long-term outcomes, GM uses a deep tapering connection inside the

implant to maximise contact with the abutment.

Implantology specialist Dr Joe Bhat has been using it for a number of months and states: "In my 20-year experience in implant dentistry, this is the best overall design on an implant I have ever seen".

The company states that Neodent is trusted by over 45,000 clinicians and has a 99.7% survival rate.

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According to the company, it offers all the properties required for an accurate, stable impression such as a low contact angle of $<10^\circ$, high hydrophilicity, and high precision to ensure excellent spreadability and coverage, allowing the material to easily flow and spread across the entire surface. VOCO believes V-Posil has exceptional toughness and elastic recovery (99.6%), and ensures high dimensional accuracy and safe tray removal.

The company states that V-Posil maximises practice efficiency and patient comfort with only two minutes' working time and two minutes' intra-oral setting time.

According to VOCO, V-Posil A-silicone-based VPS impression system offers a comprehensive range of viscosities and applications, giving you the versatility and convenience you require and the comfort your patients crave.



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Perladent has launched a new chair system onto the Irish market. The company states that the XO FLEX is the result of 65 years of experience, product development and refinement of detail.

Dr Patrick O'Brien of Monread Dental uses the chair system in his practice and said: "When I started Monread Dental, I had a vision of where I wanted to



Dr Patrick O'Brien of Monread Dental with the XO FLEX chair.

go. I attended the International Dental Show in Cologne on three occasions and each time ended up at the XO stand. I loved the chair, especially the one with the coral red colour upholstery. The days of packing silver fillings are coming to an end and people are more demanding in what they want. The new buzz term is "super dentist". This means more demanding procedures like CEREC will become the norm and the dental chair needs to be comfortable for both operator and patient for longer procedures. I believe XO meets that criteria and am enjoying using it. I believe I am the first in Ireland to use it and I'd say I will be the first of many".



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Child protection

Being aware of child protection measures, and a dentist's legal and ethical obligations in that regard, will help dentists in managing young patients who may be at risk of harm.

The importance of child protection has been brought into focus with the implementation of the Children First Act 2015.¹ This is a significant piece of legislation, which has introduced a range of legal obligations around child protection, but it should be remembered that, with respect to child patients, dentists are already subject to important obligations.

Dental Council and legal obligations

The Dental Council's Code of Practice relating to Professional Behaviour and Ethical Conduct sets out a responsibility to ensure the safety and welfare of patients.² It also stipulates that registrants must be familiar with the national guidelines for the protection of children, and that concerns must be reported to the appropriate authority if there are reasonable grounds to suspect the risk of child abuse.³

The Dental Council also has clear guidelines on children in dentistry, which take account of child protection concerns.⁴ The Council makes reference to a dentist's duty to act if there is any suspicion of abuse.⁵ It is clear that it is an ethical requirement for dentists to act upon child protection responsibilities. However, there are also legal obligations.

Like any member of the public, dentists are subject to Section 2(1) of the Criminal Justice (Withholding of Information on Offences Against Children and Vulnerable Persons) Act 2012.⁶ This provides that a person who has information relating to certain offences committed against a child, and fails to disclose this to the Garda Síochána, will be guilty of an offence.

Children First

The Children First Act 2015 places a legal obligation on 'mandated persons' to report child protection concerns of a defined threshold to Tusla (The Child and Family Agency). Dentists are 'mandated persons' under the Act and have an obligation to assist Tusla in connection with assessing concerns for children who are the subject of a mandated report.

Section 14(1) of the Act sets out that if a mandated person who, in the course of their work, becomes aware or reasonably suspects abuse or a risk of harm, then this should be reported to Tusla as soon as possible. 'Harm' covers several issues that may trigger a report. These include neglect, emotional abuse/ill-treatment, physical and sexual abuse.

Tusla has published 'Children First National Guidance for the Protection and Welfare of Children'.⁷ Advice on reporting a concern can be obtained from Tusla but the decision to report rests with the 'mandated person'. Although a legal obligation to report under the Act applies only to information acquired in the workplace setting, the guidance by Tusla does encourage the reporting of all reasonable concerns that may arise from other sources.

Summary

Dealing with child protection issues is never easy. Dentists have both ethical and legal obligations to act appropriately if they have concerns. If there are any doubts, please contact your dental defence organisation for further advice.

References

1. Children First Act 2015. Available from: <http://www.irishstatutebook.ie/eli/2015/act/36/enacted/en/html>.
2. Dental Council's Code of Practice relating to Professional Behaviour and Ethical Conduct (section 3.1). Available from: <http://www.dentalcouncil.ie/files/Professional%20Behaviour%20and%20Ethical%20Conduct%20-%20final%20-%202020120116.pdf>.
3. *Ibid*, section 11.2.
4. Dental Council's Guidelines on Children in Dentistry. Available from: http://www.dentalcouncil.ie/g_children.php.
5. Dental Council's Code of Practice relating to Professional Behaviour and Ethical Conduct (section 3.1-3.3). Available from: <http://www.dentalcouncil.ie/files/Professional%20Behaviour%20and%20Ethical%20Conduct%20-%20final%20-%202020120116.pdf>.
6. Criminal Justice (Withholding of Information on Offences against Children and Vulnerable Persons) Act 2012. Available from: <http://www.irishstatutebook.ie/eli/2012/act/24/enacted/en/html>.
7. Children First: National Guidance for the Protection and Welfare of Children. Available from: <https://www.dcy.gov.ie/documents/Publications/ChildrenFirst.pdf>.

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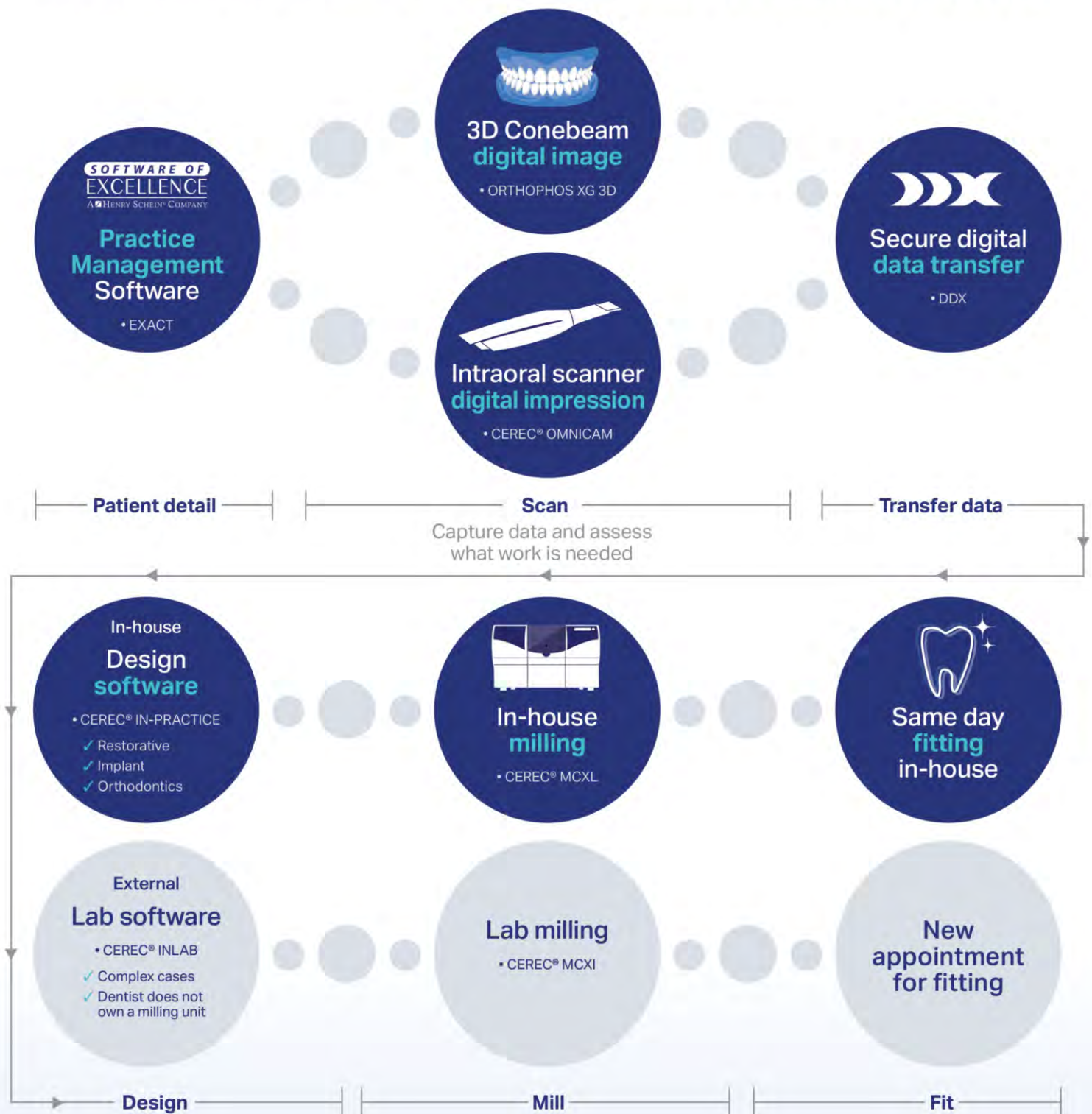
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The prevalence of neglected dentitions in children as perceived by HSE primary care dentists in Ireland

PRÉCIS

HSE primary care dentists reported seeing neglected dentitions in children very often. More resources for oral health services, greater guidance and more multidisciplinary involvement are required.

ABSTRACT

Statement of the problem: Children presenting with neglected dentitions still remains a common occurrence in paediatric dentistry. Dental neglect has comparatively recently been recognised as a child protection issue. Lack of access to services and oral health improvement programmes, along with cultural and educational barriers, contribute to the majority of neglected dentitions observed in children. Dentists need to be aware that a small proportion of children may suffer dental neglect because of parental neglect and will require appropriate follow-up. Awareness of dental neglect is important to help improve the oral health of the most vulnerable children in our society.

Purpose of the study: To report the prevalence of neglected dentitions in children, as perceived by HSE primary care dentists in Ireland.

Materials and methods: Two cross-sectional surveys using web-based anonymous questionnaires were sent to all HSE primary care dental managers (n=17) and all HSE senior and general dentists (n=239) in Ireland.

Results: Some 64.7% (n=11) of managers and 28% (n=67) of HSE dentists returned questionnaires. A total of 61.5% (n=40) of the HSE dentists who responded (n=65) reported seeing neglected dentitions at least once a week in their clinics. In all, 38.7% (n=24) of dentists who responded (n=62) reported seeing children a great deal or a moderate amount of the time, with neglected dentitions, who presented late with a serious dental problem. HSE dentists and their managers requested more resources for oral health, a more targeted approach, greater guidance and more multidisciplinary involvement in order to assist in managing children with neglected dentitions.

Conclusions: Neglected dentitions in children are observed often by HSE primary care dentists in Ireland.

Key words: dentist; public dental service; HSE; reporting; child protection; abuse; dental neglect; neglected dentitions.

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Introduction

Dental neglect is defined in the UK as “the persistent failure to meet a child’s basic oral health needs, likely to result in the serious impairment of a child’s oral or general health or development”.¹ Failure or delay in seeking care, complying with and completing treatment, and providing basic oral care, resulting in suffering of the child, e.g., pain, swelling, dental disability, malocclusion or social isolation, are common definitions of dental neglect in the literature.²⁻⁴ Many of the consequences of dental neglect as a child are carried into adulthood.⁴

Before a case of dental neglect can be determined, parents of children with neglected dentitions must have the ‘ability’ to access oral health services (which is often dependant on finances) and to access and benefit from oral health information (often dependant on educational levels).^{5,6} There are also differences in the legal and cultural definitions of abuse and neglect between countries, which may affect the awareness of abuse and neglect by health and other professionals.⁵

Dental neglect has only recently been recognised as a child protection issue.⁷ Dental neglect “may occur in isolation or may be an indicator of a wider picture of neglect or abuse”.^{1,8} Reporting of dental neglect seems to be a rarer event than reporting of general child abuse and neglect.⁷ Part of the reason for this is that dental decay is a very common condition among children.⁶ In addition, there appears to be no threshold of dental caries/decay or other oral health disease above which dental neglect can clearly be established.⁹ Several factors, including parental interest in oral health, attendance for appointments, access to services and compliance with preventive advice at home have to be taken into consideration before making a report of dental neglect.^{2,3}

Observing neglected dentitions is a very common experience in paediatric dental practice.⁶ In 2005, in a UK study, nearly 60% of respondents reported seeing neglected dentitions once daily or more often.¹⁰ Although seeing children with neglected dentitions may be a daily occurrence, when it is suspected to be caused by neglect, it is often not acted upon. The presence of a neglected dentition might be perceived to be a normal event.¹⁰

The prevalence of dental caries in five-year-old children in Ireland is high, with the average five year old in fluoridated areas in 2002 having 1.3 decayed, missing or filled primary teeth (dmft) due to dental decay.¹¹ Research found that the mean dmft of five year olds in the top 33% of decay experience was 3.7, 185% higher than the average child.¹¹ Although the above data is from 2002, it is the last oral health survey of children in Ireland. However, the indication is that the oral health of Irish children has not improved substantially over the past 15 years, especially for those from low socioeconomic backgrounds.¹² In addition, free access to oral health services in Ireland for children is still very limited, with no nationally directed oral health promotion programmes.¹³

The only reference that was found in connection to dental neglect in children in the Irish setting was from the Irish Oral Health Assessment Guideline.¹⁴ In this guideline, it was advised that as part of any dental examination: “The dentist must always be alert to the possibility of non-accidental injury, dental neglect or other indicators of possible child abuse, and should be familiar with national guidance for the protection and welfare of children”.¹⁴

The Health Service Executive (HSE) primary care salaried dentist is the only source of access to free dental care for children in Ireland. Access to comprehensive care is limited due to staffing levels.¹³ HSE primary care dentists have contact with at least 35% of children in Ireland every year.¹⁵ Their

Table 1: Total population, number who responded and response rate of HSE primary care dentists (senior and general grades) within each geographical region.

Region	HSE PRIMARY CARE DENTISTS		
	Total population (n)	Responses (n)	Response rate by region (%)
Dublin/North-East	56	15	26.8%
Dublin/Mid-Leinster	54	17	31.5%
South	70	25	35.7%
West	59	10	16.9%
All regions (national)	239	67	28.0%

observations on seeing neglected dentitions would provide a starting point to understand characteristics of children suffering dental neglect in Ireland. The aim of this study was to report the prevalence of neglected dentitions in children as perceived by HSE primary care dentists.

Materials and methods

Permission to conduct this study was obtained from the Health Services Management/Centre for Global Health Research Ethics Committee, Trinity College Dublin, in January 2017. In addition, approval was obtained from the HSE National Primary Care Research Committee and the Principal Dental Surgeon (PDS) Group (HSE primary care dental managers). Two web-based anonymous questionnaires were designed using the online survey creator SurveyMonkey. The questionnaires were designed using questions from similar international studies and piloted for the Irish setting.^{10,16} The first questionnaire (dental managers) was sent by email via the secretary of the PDS Group to all 17 integrated service area (ISA) clinical primary care dental managers in Ireland. The second questionnaire (HSE dentists) was sent via the secretary of the PDS

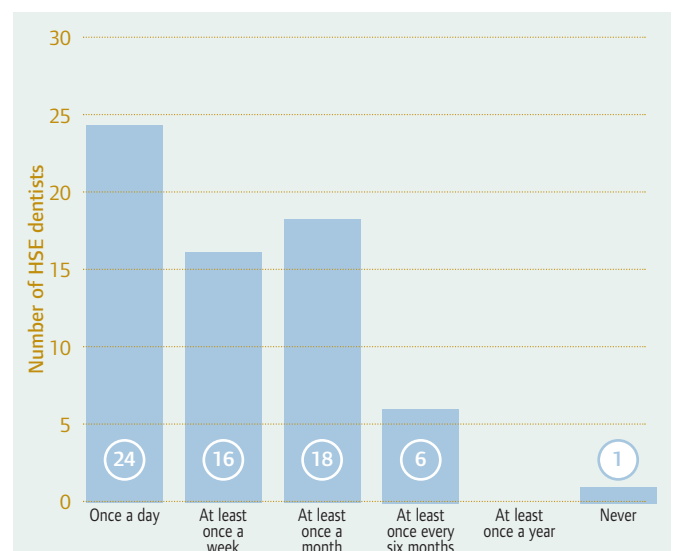


FIGURE 1: HSE dentists (n=65): “Approximately how often do you see children with neglected dentitions?” (Likert scale).

Group to each of the 17 ISA dental managers for distribution to all frontline primary care HSE salaried dentists (senior and general dentist grades) in Ireland (n=239). Each questionnaire was divided into two sections. Section 1 collected information regarding the reporting of child abuse and neglect prior to the introduction of mandatory reporting in Ireland in December 2017 (this data is not presented in this paper). Section 2 collected information on the observation of neglected dentitions in children. It was not made compulsory to answer every question, so some questions could be skipped. Apart from the online link to the questionnaire, a PDF copy was attached to the invitation email, providing the option to participate using the ordinary postal service. A reminder email was sent two weeks following the initial invitation emails. Questionnaires were distributed in March 2017 and the survey was closed on April 24, 2017. Any questionnaires received by the postal route were entered by the researcher (Evelyn Crowley) into the SurveyMonkey database. The survey data collected were exported into SPSS computer software Version 24 for analysis.

Results

Dental managers' questionnaire

Eleven questionnaires were returned, one from the Dublin/North East region, three from the Dublin/Mid-Leinster region, three from the South region and four from the West. The response rate to this questionnaire was 64.7%.

HSE dentists' questionnaire

The exact number of HSE primary care dentists who were emailed the web link to the HSE dentists' questionnaire was not available to the researchers. The Office of Workforce Planning reported in April 2017 that there were 239 primary care senior and general dental surgeons employed by the HSE in the community services in 2016 (parliamentary question 8269/17). This figure was used in calculating the response rate to the HSE dentists' questionnaire. Some 67 valid questionnaires were returned. The response rate within each geographical region (Table 1) was 26.8% (n=15) in Dublin/North East, 31.5% (n=17) in Dublin/Mid-Leinster, 35.7% (n=25) in the South region and 16.9%

(n=10) in the West. The national response rate to the HSE dentist questionnaire was 28% (n=67).

What is the prevalence of neglected dentitions in children as perceived by HSE primary care dentists in Ireland

A total of 36.9% (n=24) of the HSE dentists who responded (n=65) reported seeing children with neglected dentitions at least once a day. A further 24.6% (n=16) reported seeing children with neglected dentitions at least once a week. In total, 61.5% of dentists reported seeing neglected dentitions at least once a week in their clinics (Figure 1). In all, 23.3% (n=14) of the HSE dentists who responded (n=60) reported that they perceived children with neglected dentitions to fail to keep scheduled appointments, a great deal of the time. A further 41.7% (n=25) said those children fail to attend for a follow-up appointment a moderate amount of the time (Figure 2). In addition, 38.7% (n=24) of the HSE dentists who responded (n=62) perceived seeing children either a great deal of the time or a moderate amount of the time with neglected dentitions, who presented late with a serious dental problem that any reasonable person would have recognised as needing professional dental attention earlier (Figure 3).

Open comments

Some of the open comments collected in the questionnaires reflect the attitude that a neglected dentition may be a silent form of neglect and does not get enough attention as such. In addition, it may not be recognised as neglect due to lack of awareness and the apparent low priority of oral health in our society:

"The neglected mouth arguably is the neglected child. Just because there is no wanton physical abuse, the consequences of passive dental neglect can arguably be more damaging, with pain and poor nutrition and missing developmental milestones. As it is hidden in a vulnerable population it doesn't get the attention it requires."

HSE dentist respondent

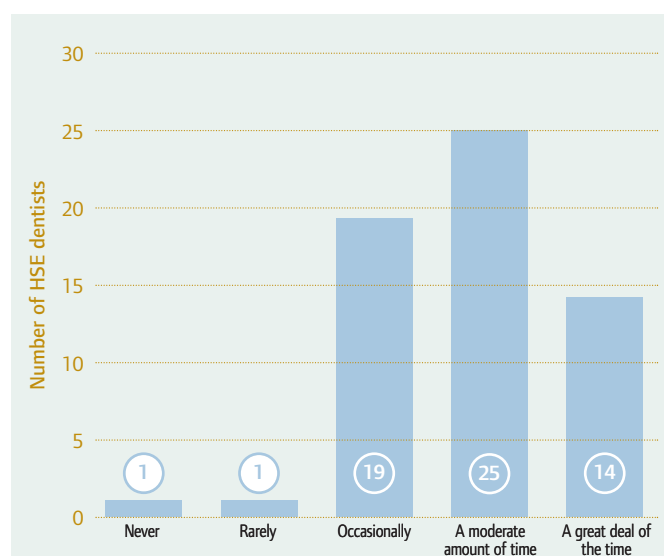


FIGURE 2: HSE dentists (n=60): "Approximately how often do you see children with neglected dentitions, who then fail to attend for follow-up treatment if offered? (Likert scale).

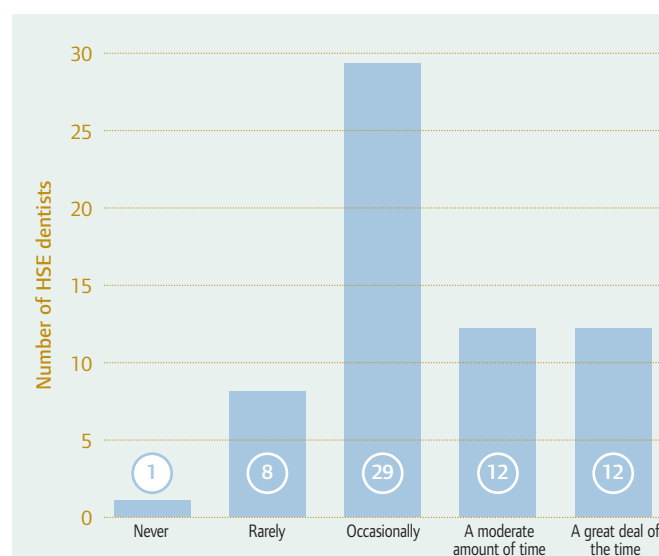


FIGURE 3: HSE dentists (n=62): "Approximately how often do you see children with neglected dentitions who present late with a serious dental problem that any reasonable person would have recognised as needing professional dental attention earlier?" (Likert scale).

Table 2: Responses given by dental managers and HSE dentists to the question: “When dealing with children with neglected dentitions, what would assist your role to improve their oral health?”

Response to questionnaire	1: dental managers (Q.14)		2: HSE dentists (Q.30)	
	n	%	n	%
More resources for dental services	10	90.9	52	77.6
A missed appointment policy with associated resources (whereby children who miss appointments are followed up)	9	81.8	37	55.2
Increased eligibility based on need rather than on target class	8	72.7	45	67.2
Improved communication with other health professionals	8	72.7	32	47.8
Raising awareness among dental staff of the possible child protection implications of dental neglect	8	72.7	32	47.8
Increased awareness of dental neglect by the Child and Family Agency (Tusla)	7	63.6	33	49.3
Feedback systems from the Child and Family Agency (Tusla) that involve dentists	7	63.6	21	31.3
Development of interactive skills (for example, motivational interviewing) with children and families	6	54.5	21	31.3
Child protection courses with a larger dental component	5	45.5	34	50.7
Improved communication with the Child and Family Agency (Tusla)	5	45.5	19	28.4
Undergraduate and postgraduate training	4	36.4	34	50.7
Improved communication with school staff	3	27.3	26	38.8
Wider promotion of courses and circulation of guidelines	2	18.2	23	34.3

“I don’t believe neglecting a child’s dentition is seen as child neglect or abuse in our society. There doesn’t seem to be awareness by parents, teachers or other healthcare workers that dental caries is preventable.”

HSE dentist respondent

Several of the open-ended comments suggest a growing awareness among the dental managers and HSE dentists of the need to improve the management of children with neglected dentitions:

“There is an urgent need to address the issue of dental caries/non-attendance as indicators of neglect. Also an urgent need to develop systems for information sharing between dental services and other health professionals.”

Dental manager respondent

“Clearer guidelines [are needed] on what to do with families who constantly fail to attend dental appointments and where there is urgent need.”

HSE dentist respondent

Only two out of the 11 oral health service areas reported having in-house guidelines in place in the area of dental neglect. Both the dental managers and dentists were asked, in regard to dealing with children with neglected dentitions, what would assist them in their role to improve their oral health? More resources for oral health services (including a more targeted approach and resources to implement a missed appointment policy) was the most

common response given both by the dental managers and the HSE dentists. Improved communication with other professionals, raising awareness of dental neglect among dental and social care staff, feedback systems involving dentists and training were other common responses (**Table 2**). The need for more resources for oral health services was reflected in the open comments section:

“Our staff is at half of our full complement, which has had a hugely detrimental effect on our service and results in many children never being examined.”

HSE dentist respondent

“While parents have a significant role to play in dental neglect, the restricted service available within the public system is also a form of supervised neglect on the part of the State. I regularly send patients away after treatment of pain with caries and subclinical infections in other teeth knowing that the families have no intentions or often no means to obtain additional care for their children.”

HSE dentist respondent

In the case of a dental neglect issue, 37.3% (n=25) of the HSE dentists responded that they would prefer to support the family to attend appointments rather than to report the case to authorities. This reluctance to report and the dilemmas involved are reflected in some of the open-ended comments by respondents:

“Where possible, parents/guardians should be supported to assist them in

accessing dental treatment for their children without involving Tusla/child protection services. Routine referrals to social workers may discourage parents [or] guardians from attending HSE dental [services] – a balance needs to be found [between] supporting parents who engage with the services and those who can't/won't and there is no alternative but to involve social workers."

Dental manager respondent

"Dentists are very cautious about involving child protection agencies. There needs to be a cultural shift from feeling that the results will be punitive to supporting families by alerting the authorities."

Dental manager respondent

Some open comments given by respondents during the survey reflect some of the barriers to reporting when dental neglect is suspected. One dentist spoke of the lack of awareness of dental neglect by social services: "Social workers don't see failed dental appointments as an issue even after IV [intravenous] antibiotics/admission and discharge against paediatric consultant advice".

Some respondents spoke of the need for multidisciplinary involvement and sharing of information:

"I feel that it would be helpful to have a definite confidential forum at which information could be shared with other professionals as a precursor to a full report. One might have some concern about dental care but the threshold at which a report should be made is not clear. However, if other professionals also had concerns and the concern was not isolated to just one area this would be helpful in making a decision."

Dental manager respondent

Discussion

In a study from the UK conducted in 2005, nearly 60% of paediatric dentists reported seeing neglected dentitions once daily or more often.¹⁰ In this study, only 36.9% of the HSE dentists reported seeing neglected dentitions at least once a day. However, paediatric dentists as surveyed in the UK study would normally be referred patients for specialist treatment by the equivalent HSE primary care dentist in the UK. Therefore, the UK participants in the 2005 study are more likely to see more severe cases and therefore report a higher prevalence of dental neglect. The differences in reported observation between the UK study and this study may also reflect improvements in oral health since 2005. However, there is no recent published Irish data to confirm this. In addition, differences in reported frequency of encountering neglected dentitions may also reflect cultural differences in caries/decay threshold levels above which a dentist would say a mouth was neglected or not. Nevertheless, despite a lower level of reporting by HSE dentists of seeing neglected dentitions than in the 2005 UK study, it is still concerning that in 2017, 36.9% of HSE dentists perceived seeing neglected dentitions at least once a day, with 61.5% reporting seeing neglected dentitions in children at least once a week. HSE dentists also reported seeing children with neglected dentitions who then fail to attend for follow-up treatment, either a great deal of the time (23.3%) or a moderate amount of the time (41.7%). An important component of preventing neglected dentitions in children and ensuring that children with high dental decay levels complete their treatment is the management of missed

appointments.^{17,18} A missed appointment policy to follow up on these children may improve attendance and thereby improve their oral health. This can involve reminding parents of their child's appointment, contacting the parents when an appointment is missed and rescheduling a new appointment, arranging a recall appointment and, when multiple appointments are missed, contacting social services.¹⁹

More of a concern is that 38.7% of HSE dentists (n=24) reported seeing children who present late with serious dental problems either a great deal of the time or a moderate amount of the time. Some children may be suffering with pain and infection, and for many reasons may not be able to access treatment.

The British Society of Paediatric Dentistry produced a policy document on dental neglect in children in 2009.¹ It included a number of recommendations on treatment provision, training and research to reduce the prevalence of dental neglect and put systems in place to safeguard children against dental neglect. These recommendations include:

- ensuring that children with neglected dentitions are prioritised for treatment and that a local system is in place to ensure rigorous follow-up of all children who have dental disease but who fail to attend for treatment appointments;
- more effective interdisciplinary work;
- improved communication with general medical practitioners and other healthcare professionals involved with the child; and,
- better planned service organisation, which considers the impact of changes on dentists' management of and intervention in dental neglect.¹

The results of this study indicate that Irish children may benefit from the implementation of similar recommendations here.

Recently, Jameson²⁰ emphasised the importance of sharing appropriate information on dental neglect with other health professionals. Ramazani *et al.*⁴ suggested that improving parents' knowledge on how to prevent dental decay and maintain a healthy mouth is essential to reduce dental neglect in children. They found that "educational programs to enhance public awareness, addressing the concern with parents and providing social worker counselling and working with families affected by dental child neglect seem promising".⁴ In addition, they found that public health nurses should have clear guidelines on child dental neglect and policies should be in place to ensure that children are not 'lost' to follow-up.⁴

The recommended age of a child's first visit to the dentist is before 12 months of age.²¹ However, in Ireland, the average age of a child's first visit to the dentist is between five and eight years of age.¹¹ Parents have limited free access in Ireland to a dentist both for treatment services and advice on how to maintain a healthy mouth.¹³ When children do present at a HSE dental clinic, it is difficult for the dentist to be able to distinguish between parental neglect and circumstantial neglect, whereby parents who want to access services and information cannot do so because of financial or other constraints. It was not possible in the scope of this study to explore the impact of limited access to dental services and oral health advice, and the contribution this has on the level of neglected dentitions HSE dentists are presented with. However, the most common things reported by HSE dental managers and dentists that would assist them in their role to improve children's teeth in Ireland were additional resources for oral health services, by way of increased access to services for all children and for those with high needs. In addition, resources to follow up with

children who miss appointments and improve communication with other health and social care professionals and school staff were advocated.

The low response rate from the HSE dentists (28%) could potentially introduce response bias, with those encountering neglected dentitions more regularly more likely to respond. It has to be acknowledged that HSE dentists operate in a variety of geographical locations with a wide cross-section of social and vulnerable groups. As a result, HSE dentists may have variable experiences of encountering children with neglected dentitions. However, this study, as a first of its kind, signals that a neglected dentition may be a common condition in children in Ireland and warrants further investigation and guidance.

Conclusion

HSE primary care dentists reported seeing neglected dentitions in children very often. They identified more resources for oral health, a more targeted approach, greater guidance and multidisciplinary involvement as being required to manage the needs of these children.

References

- Harris, J.C., Balmer, R.C., Sidebotham, P.D. British Society of Paediatric Dentistry: a policy document on dental neglect in children. *International Journal of Paediatric Dentistry* 2009; 207-215.
- Bhatia, S.K., Maguire, S.A., Chadwick, B.L., Hunter, M. Harris, J., et al. Characteristics of child dental neglect: a systematic review. *Journal of Dentistry* 2014; 42: 229-239.
- Lourenço, C.B., de Lima Saintrain, M.V., Vieira, A.P.G.F. Child, neglect and oral health. *BMC Pediatrics* 2013; 13: 188.
- Ramazani, N. Child dental neglect: a short review. *International Journal of High Risk Behaviors & Addiction* 2014; 3 (4): e21861.
- World Health Organisation (WHO). World report on violence and health. WHO: Geneva, 2002.
- Stevens, C. Is dental caries neglect? *British Dental Journal* 2014; 217: 499-500.
- Welbury, R. Child protection – raising the awareness of dental neglect. *Contemporary Clinical Dentistry* 2014; 5: 149.
- Bradbury-Jones, C., Innes, N., Evans, D., Ballantyne, F., Taylor, J. Dental neglect as a marker of broader neglect: a qualitative investigation of public health nurses' assessments of oral health in preschool children. *BMC Public Health* 2013; 13: 370.
- Souster, G., Innes, N. Some clarification of trigger signs for dental neglect. *Evidence-Based Dentistry* 2014; 15: 2-3.
- Harris, J.C., Elcock, C., Sidebotham, P., Welbury, R. Safeguarding children in dentistry: 2. Do paediatric dentists neglect child dental neglect? *British Dental Journal* 2009; 206: 465-470.
- Whelton, H., Crowley, E., O'Mullane, D., Harding, M., Guiney, H., et al. North South Survey of Children's Oral Health in Ireland 2002. Department of Health, 2006.
- McAuliffe, Ú., Kinirons, M., Harding, M. A retrospective investigation of the oral health records of a cohort of preschool children who received extractions under general anaesthesia including cost analysis of treatment. *Journal of the Irish Dental Association* 2017; 63: 38-44.
- Staines, A., Balanda, K.P., Barron, S., Corcoran, Y., Fahy, L., et al. Child health care in Ireland. *The Journal of Pediatrics* 2016; 177: S87-S106.
- Irish Oral Health Services Guideline Initiative. Oral Health Assessment: Best practice guidance for providing an oral health assessment programme for school-aged children in Ireland. 2012.
- Woods, N., Ahern, S., Burke, F., Eaton, K., Widström, E. The healthcare system and the provision of oral healthcare in European Union member states. Part 7: Republic of Ireland. *British Dental Journal* 2017; 222: 541-548.
- Kvist, T., Wickström, A., Miglis, I., Dahllöf, G. The dilemma of reporting suspicions of child maltreatment in pediatric dentistry. *European Journal of Oral Sciences* 2014; 122: 332-338.
- Jenny, C. Recognizing and responding to medical neglect. *Pediatrics* 2007; 120: 1,385-1,389.
- Harris, J.C., Firth, L.M., Chadwick, B.L. Clinical audit of children's missed dental appointments in a city-wide salaried community dental service in relation to guidance on when to suspect child maltreatment. *Child Abuse Review* 2017; 26: 172-183.
- Kvist, T., Malmberg, F., Boovist, A-K., Larheden, H. Dahllöf, G. Clinical routines and management of suspected child abuse or neglect in public dental service in Sweden. *Swedish Dental Journal* 2012; 36: 15-24.
- Jameson, R. Working together to share the dental neglect. *British Dental Journal* 2016; 221: 755-756.
- Duane, B., McGovern, E., Ní Chaollaí, A., FitzGerald, K. First tooth, first visit, zero cavities: a review of the evidence as it applies to Ireland. *Journal of the Irish Dental Association* 2017; 63: 105-111.

Autotransplantation of premolars in children with congenitally absent teeth: a report of three cases

PRÉCIS

Three cases are presented in which autotransplantation of teeth was used as part of an orthodontic treatment plan. This treatment option is commonly overlooked when patients present with congenitally absent teeth.

ABSTRACT

Autotransplantation of teeth is a well-established and predictable procedure, which is occasionally indicated but is often overlooked. When teeth are absent in growing patients, autotransplantation should be considered if a healthy tooth is to be extracted elsewhere in the mouth and if there is enough bone available at the edentulous site to accommodate it. A transplanted tooth will continue to erupt and will stimulate localised alveolar development. Transplanted teeth can be moved orthodontically and their long-term survival rate compares well with any other form of tooth replacement. Three cases are presented here where the author transplanted premolar teeth and subsequently moved these as part of an orthodontic treatment plan.

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Introduction

Congenital absence of teeth occurs commonly and this sometimes results in spacing of the teeth and in localised failure of the alveolar process to develop. This can often be effectively managed by closing the space orthodontically, but in some cases space closure either is not possible or else would produce a less than ideal aesthetic or occlusal result. In these cases the treatment provided is often to localise the space with orthodontic treatment in adolescence, so that osseointegrated implants can be placed in adulthood.

Replacing congenitally absent teeth with osseointegrated implants presents two major problems:

1. They will not erupt with the natural dentition during growth, so they cannot be placed until adulthood when growth is complete.
2. There is usually an alveolar defect present with insufficient bone at the site. Modern bone grafting techniques allow implants to be placed in many of these cases, but it can be difficult to achieve ideal results, especially in the aesthetic zone.

If a suitable tooth is to be extracted for orthodontic reasons elsewhere in the mouth, transplanting it before root development is complete offers an attractive alternative. A transplanted tooth will continue to erupt, so it can be

placed before growth is complete. It can also be moved orthodontically and its presence will stimulate localised alveolar development.¹ The long-term survival rate of autotransplanted teeth compares well with that of osseointegrated implants.^{2,3}

Case selection

It is unusual to have a case where teeth are congenitally absent and the space cannot be closed in one part of the mouth, together with crowding that requires the extraction of a suitable donor tooth in another. The author has encountered six such cases where teeth were transplanted over a 20-year period in specialist orthodontic practice. Three of these cases are presented in this article. The other three cases are not presented because the patients could not be contacted to obtain their consent. In all six cases the transplanted teeth were still present and healthy when the patient was last seen by the author.

An important consideration in case selection is whether there is adequate alveolar bone available in all three dimensions of space at the recipient site, so that a socket can be prepared to receive the tooth. A cone beam computed tomography scan to assess the dimensions of both the donor tooth and the bone available at the recipient site is helpful. In Case 1, an alveolar ridge was



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generated by orthodontically opening space at the recipient site before the transplant. In Cases 2 and 3, deciduous molars were retained at the recipient site and these helped to preserve the alveolar bone.

The best stage to transplant a tooth is when the root is three-quarters formed^{1,4} and is close to eruption so that it can be extracted with minimal trauma. A tooth with a fully formed root can still be transplanted, but the survival rate is reduced^{2,5} and more bone is required vertically at the recipient site to accommodate it.

Method

Surgery to transplant a tooth can be performed under local anaesthesia in suitable patients with good access. In two of the three cases shown, transplantation was performed under general anaesthesia.

The tooth to be transplanted is first extracted while taking care to avoid unnecessary trauma to the periodontal ligament. Extra-alveolar time should be kept to a minimum, so the donor tooth is stored in its original socket while a new socket is prepared at the recipient site. An incision is made on the crest of the ridge and a mucoperiosteal flap is reflected minimally to expose the crest only. A socket is prepared using a well-irrigated round burr rotating at a very slow speed. When the socket appears ready, the fit is checked using the donor tooth. Care should be taken to hold the donor tooth by the crown only in order to avoid trauma to the periodontal ligament. It is important that the tooth is not used to check the fit more often than is necessary so that extra-alveolar time is kept to a minimum. The socket should be a little oversized and not tight to avoid unnecessary trauma to the periodontal ligament. The transplanted tooth is placed out of occlusion and at approximately the same height in the new socket as it was in the donor socket. If an unerupted tooth is transplanted, it is placed at gingival level so that it can later erupt into occlusion. Sutures are used to close the wound and to hold the mucoperiosteal flap firmly around the neck of the tooth during healing. Non-resorbable sutures, which pass over the occlusal surface of the tooth, are used to hold the tooth in place, providing non-rigid fixation for a period of two weeks.

Chlorhexidine mouthwash is used twice daily for two weeks and the patient is encouraged to gently brush with a soft toothbrush after a few days. After two weeks the sutures are removed and an orthodontic bracket is bonded to the tooth before engaging it passively with a light flexible nickel titanium archwire. Light active orthodontic forces are applied four to eight weeks after surgery.

Case 1

A 10-year-old girl presented with her upper right canine and her upper right second premolar (UR3, UR5) congenitally absent and with her upper centreline shifted to that side. All teeth were present and developing normally in her upper left quadrant. Her lower right second premolar (LR5) was also missing. All teeth were present in her lower left quadrant but the development of her lower left second premolar (LL5) was delayed (**Figure 1**).

An upper fixed orthodontic appliance was used to open space where UR5 should have been by moving UR4 mesially into the canine position (**Figure 2**). The unerupted UL5 was then carefully extracted, after first removing the overlying deciduous molar, and transplanted to the UR5 position. The transplanted tooth was secured in its new socket using black silk sutures (**Figure 3**).

The surgery was carried out under general anaesthesia, and the patient's impacted LR4 was uncovered and LL5 extracted during the same anaesthetic.

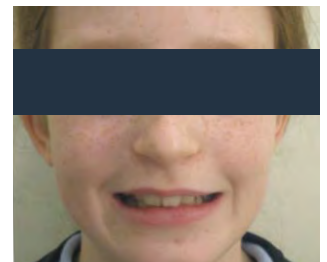
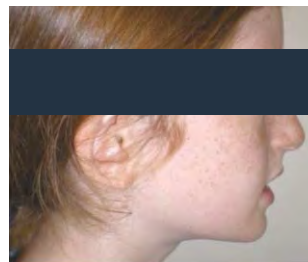
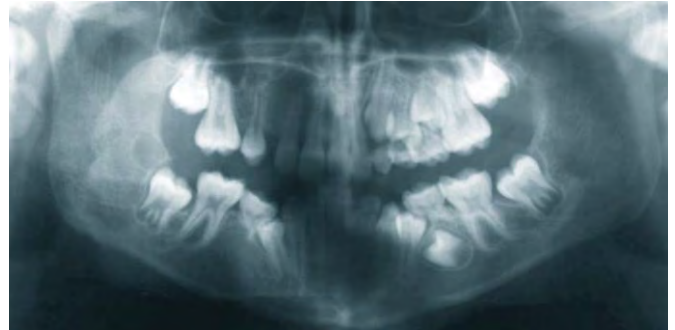


FIGURE 1: Pre-treatment – Case 1.

The sutures were removed 10 days after surgery and a bracket was bonded to the tooth at that stage (**Figure 4**).

Root canal treatment was not indicated as the tooth had been transplanted with an open apex and it was expected to maintain vitality (**Figure 5**).⁶

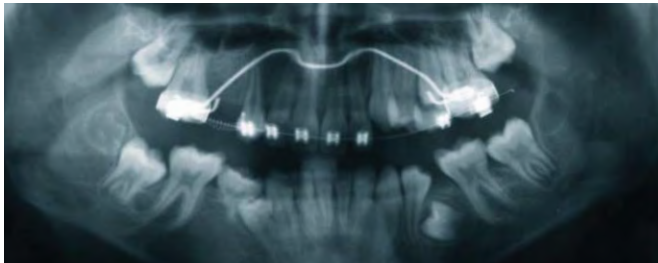


FIGURE 2: Before transplant.



FIGURE 2: Before transplant.



FIGURE 3: After transplant.



FIGURE 4: 10 days after transplant.



FIGURE 5: After transplant.



FIGURE 6: Fixed appliances after transplant.



FIGURE 7: Final result.

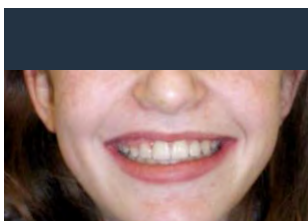


FIGURE 7: Final result.



FIGURE 7: Final result.

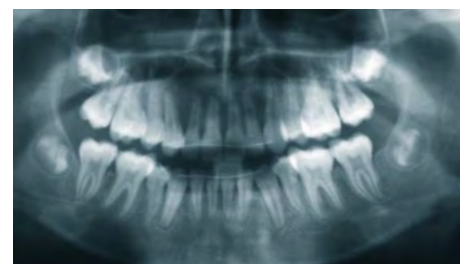


FIGURE 8: Root development following transplant – Case 1.

A lower fixed appliance was added and orthodontic treatment was completed 15 months later (Figure 6).

The patient had the same number of teeth in all four quadrants so it was possible to achieve a class I result with the centrelines coincident and matching

the middle of her face (Figure 7).

Radiographs taken 15 months after transplantation of the tooth show continued root development and sclerosis of the pulp canal, confirming that the tooth had maintained vitality after it was transplanted (Figure 8).

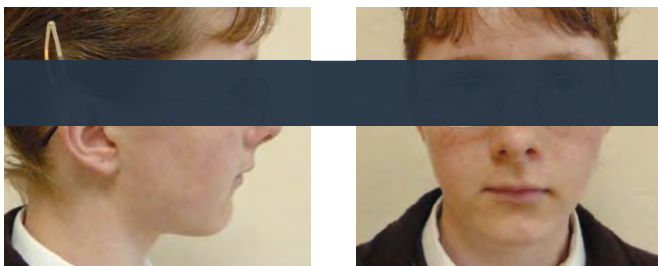
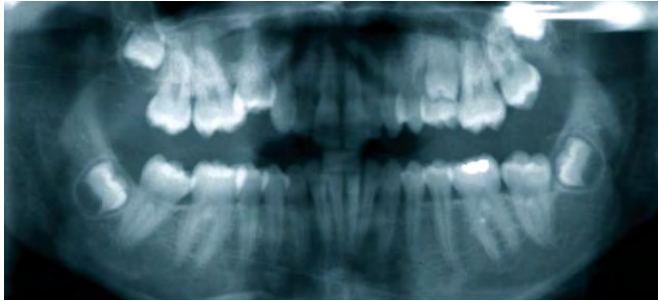


FIGURE 9: Pretreatment – Case 2.

Case 2

A 15-year-old girl presented with her upper right first and second premolars (UR4, UR5) congenitally absent and with her upper right second deciduous molar (URE) retained, ankylosed and in infraocclusion. A significant alveolar defect had developed in the URE region. All teeth were present and she was crowded in her upper left quadrant. The development of her upper left second premolar (UL5) was a little delayed (**Figure 9**).

The patient had a crowded class 2 div 2 malocclusion with a full unit class 2 molar relationship. One possible orthodontic treatment option was to extract UL5. A decision was made to extract her ankylosed URE and to transplant UL5 to that site. This would leave her with one upper premolar on each side and the space could be closed symmetrically.

UL5 was transplanted under general anaesthesia after a transpalatal arch was placed on her upper first molars to reinforce anchorage. Care was taken to place the crown at the same height in the alveolar ridge as the ankylosed URE had been, so that the bone would regenerate to repair the alveolar defect as the tooth erupted and was orthodontically extruded after healing was complete.



FIGURE 10: After transplant.



FIGURE 11: After transplant.



FIGURE 12: Final result.



FIGURE 13: Final result – Case 2.

The tooth was secured in its new socket using black silk sutures (**Figure 10**) and the sutures were removed two weeks later (**Figure 11**).

Orthodontic treatment using upper and lower fixed appliances was commenced three months after the tooth was transplanted and this was completed 18 months later (**Figure 12**). The tooth had been transplanted with an open apex and remained vital after transplantation. A radiograph taken when the appliances were removed confirmed that root development had continued after transplantation (**Figure 13**). At a 13-year review the transplanted tooth remained in situ and asymptomatic without any signs of deterioration.

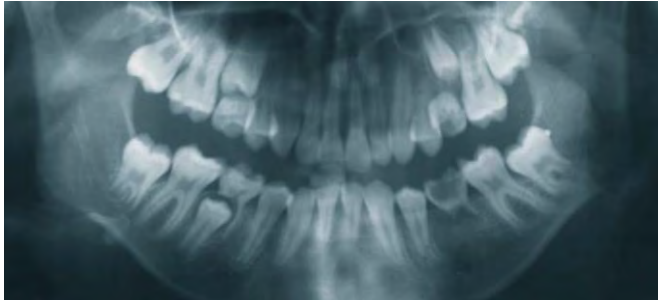


FIGURE 14: Pretreatment – Case 3.



FIGURE 14: Pretreatment.



FIGURE 15: Pretreatment.



Case 3

An 11-year-old boy presented with both lower lateral incisors (LR2, LL2) and the lower left second premolar (LL5) congenitally absent. His lower left second deciduous molar (LLE) was retained and this had a poor prognosis (Figure 14). The patient had a severe class 2 div 1 malocclusion with a 16mm overjet (Figure 15) so he was first treated with a twin block functional appliance to reduce his overjet. He still had a small residual overjet after the twin block treatment. To correct this, it was decided to extract both upper second premolars (UR5, UL5) and to transplant one of these to the LL5 position (Figures 16, 17 and 18). UR5, UL5 and LLE were extracted and UL5 was transplanted under local anaesthesia (Figures 18 and 19).

Fixed appliance treatment was commenced four weeks after transplantation of the tooth (Figure 20).

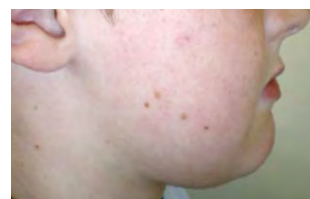


FIGURE 16: After twin blocks.



FIGURE 17: Before transplant.

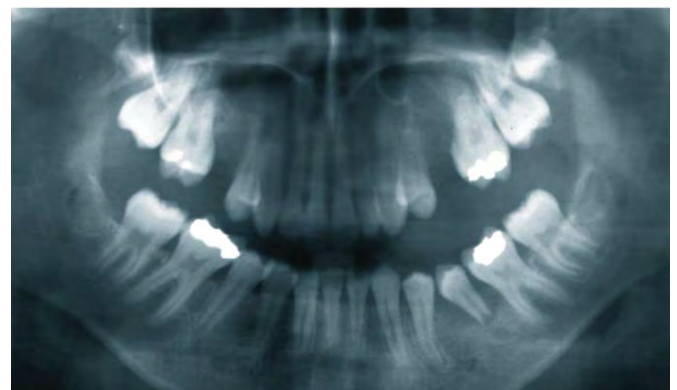


FIGURE 18: After transplant.

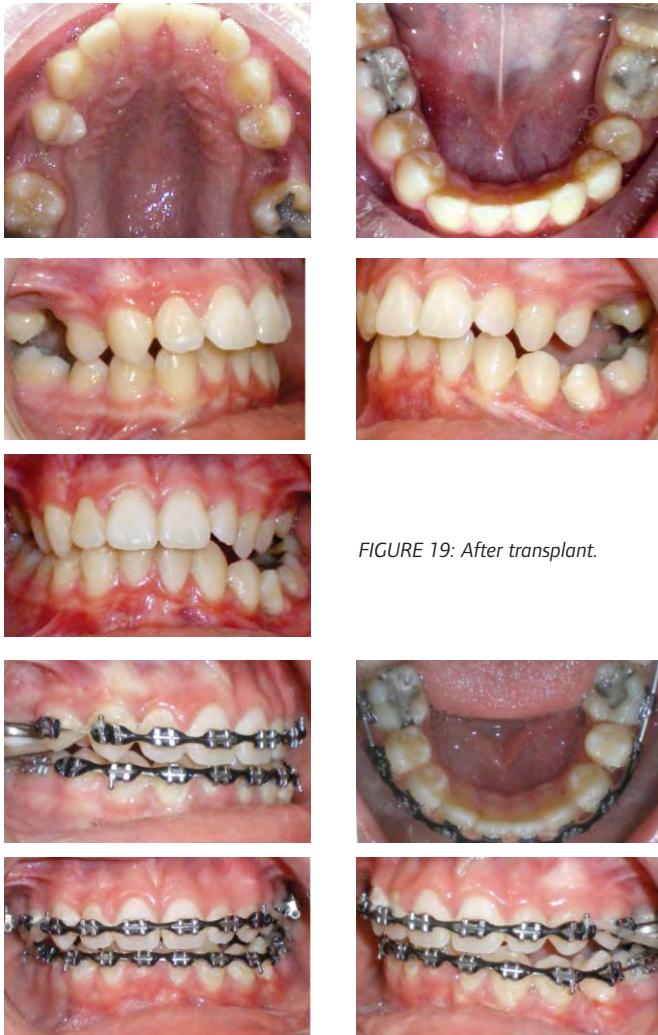


FIGURE 19: After transplant.

FIGURE 20: Fixed appliances after transplant – Case 3.

Discussion

Transplantation of teeth is not a new technique. The earliest reports of tooth transplantation involve slaves in ancient Egypt who were forced to give their teeth to their pharaohs.⁷ Autotransplantation, where teeth are transplanted from one part of the mouth to another, was first described in the dental literature by Swedish dentist Vidman over 100 years ago.⁸

Autotransplantation of teeth has several applications in modern dentistry. Transplantation of premolars to the anterior maxilla following the early loss of incisors in children has been widely described.^{1,9,10} In these instances, transplantation of a premolar to an incisor position allows treatment to be completed early (10–12 years) and allows the alveolar process to continue to develop afterwards.^{1,11} The crown of the transplanted premolar is restored with either composite or porcelain so that it matches the other incisors. Ectopic teeth are sometimes transplanted as an alternative to surgical exposure and orthodontic movement.^{12,13} Third molars have been transplanted to replace heavily damaged premolars and molars,¹⁴ while this article describes the transplantation of premolars to replace congenitally absent teeth. Cryopreservation of teeth prior to transplantation has also been described in the literature.⁴

A recent systematic review of the literature analysed the results of 21 studies and revealed an overall survival rate of approximately 98% over a mean observation period of 6.25 years for teeth transplanted with open apices.² A separate systematic review analysed the results of 26 studies that looked at the survival rates for teeth transplanted with complete root formation and closed apices. This found an overall survival rate of 90% after five years.⁵

Jonsson and Sigurdsson¹⁵ followed 32 consecutive orthodontic patients who had 40 premolars transplanted to replace missing premolars in contralateral or opposing jaw quadrants. Thirty-five of the 40 transplanted teeth were subsequently moved using fixed orthodontic appliances. The observation time varied from two years to 22 years, with a mean of 10.3 years. Some 37 teeth were retained and healthy at the last examination, representing a success rate of 92.5%. The teeth in this study were transplanted at varying stages of root development and those transplanted with closed apices received root canal treatment afterwards. Kokai *et al.*¹⁶ reported on 100 mature teeth with closed apices, which were transplanted in 89 adults and subsequently moved orthodontically. They found that 93% survived over the mean observation period of 5.8 years but only 71% of the teeth transplanted remained healthy.

Andraesen and Paulsen⁶ reviewed 370 transplanted premolars and demonstrated pulpal healing in 96% of teeth with open apices but in only 15% of teeth with closed apices. The standard protocol adopted has therefore been to perform elective root canal treatment only if root formation is complete and the apex is closed.

Root development often continues after a tooth with an open apex has been transplanted and this was seen in the cases shown. Paulsen and Andreasen¹⁷ radiographically observed root development following the transplantation of 118 premolars, which were transplanted with open apices. They found that root development was unimpeded in 26%, impaired in 55% and arrested in 19%. When root development is arrested after transplantation, root formation is often seen radiographically at the donor site, suggesting that Hertwig's epithelial root sheath was detached and left behind when the tooth was removed.¹⁸

Andreasen *et al.*¹⁹ found some radiographic evidence of surface, inflammatory or replacement root resorption in 14% of their sample of 370 transplanted premolars. Kafourou *et al.*²⁰ found that 13.5% of their sample of 89 transplanted teeth showed signs of replacement resorption. Both studies suggested that trauma to the periodontal ligament at the time of surgery was responsible for this resorption.

Different techniques have been developed, which aim to minimise trauma to the periodontal ligament and to reduce extra-alveolar time in order to maximise healing of the periodontal ligament and the pulp. One such method is to use a three-dimensional printed replica of the donor tooth. This is fabricated beforehand using data from a cone beam CT scan and used instead of the donor tooth as the template to prepare a socket of the correct size.²¹

The optimal stage of root development for transplantation is considered to be when the root is approximately three-quarters formed.¹ When a tooth is transplanted at that stage of root development, over 90% survive with pulpal healing, and in approximately 80% the root will continue to develop.

Teeth can be transplanted with mature roots and closed apices but, in addition to a slightly lower survival rate and the requirement for elective root canal treatment, more bone is required in the vertical dimension at the recipient site. Histological studies in animals suggest that a rest period of two weeks is best before an orthodontic force is applied after autotransplantation.²² Andreasen *et al.*¹⁹ looked at periodontal healing after autotransplantation radiographically and

found that in most cases this was complete eight weeks after transplantation. Kokai *et al.*¹⁶ applied orthodontic forces with nickel titanium wires four to eight weeks after transplantation and a similar protocol was used for the cases presented in this article.

Growth and development of the alveolar process is dependent on the presence of natural teeth with functioning periodontal ligaments. When teeth are absent in growing patients, alveolar defects sometimes develop, which can be difficult to deal with. When a tooth is transplanted to an edentulous space in a growing patient, it will continue to erupt and the presence of a functioning periodontal ligament means that the alveolus will continue to develop.⁷ This was seen in the cases presented.

A transplanted tooth with a functioning periodontal ligament has a bone inducing capacity¹ and this can also be used to regenerate lost bone and to repair alveolar defects in growing patients. This was demonstrated in Case 2.

Conclusion

Autotransplantation of teeth is a well-established and predictable treatment option, which is often overlooked. When teeth are absent in growing patients, autotransplantation should be considered if a healthy tooth is to be extracted elsewhere in the mouth and if there is enough bone available at the recipient site to accommodate it.

References

1. Andreason, J.O., Schwartz, O., Kofoed, T., Dugaard-Jensen, J. Transplantation of premolars as an approach for replacing avulsed teeth. *J Pediatr Dent* 2009; 31 (2): 129-132.
2. Atala-Acevedo, C., Abarca, J., Martínez-Zapata, M.J., Díaz, J., Olate, S., Zaror, C. Success rate of autotransplantation of teeth with an open apex: systematic review and meta-analysis. *J Oral Maxillofac Surg* 2017; 75 (1): 35-50.
3. Moraschini, V., Poubel, L.A., Ferreira, V.F., Barboza Edos, S. Evaluation of survival and success rates of dental implants reported in longitudinal studies with a follow-up period of at least 10 years: a systematic review. *Int J Oral Maxillofac Surg* 2015; 44 (3): 377-388.
4. Paulsen, H.U., Andreasen, J.O., Schwartz, O. Tooth loss treatment in the anterior region: autotransplantation of premolars and cryopreservation. *World J Orthod* 2006; 7 (1): 27-34.
5. Chung, W.C., Tu, Y.K., Lin, Y.H., Lu, H.K. Outcomes of autotransplanted teeth with complete root formation: a systematic review and meta-analysis. *J Clin Periodontol* 2014; 41 (4): 412-423.
6. Andreasen, J.O., Paulsen, H.U., Yu, Z., Bayer, T., Schwartz, O. A long-term study of 370 autotransplanted premolars. Part II. Tooth survival and pulp healing subsequent to transplantation. *Eur J Orthod* 1990; 12 (1): 14-24.
7. Cohen, A.S., Shen, T.C., Pogrel, M.A. Transplanting teeth successfully: autografts and allografts that work. *JADA* 1995; 126 (4): 481-485.
8. Tsukiboshi, M. Autogenous tooth transplantation: a reevaluation. *Int J Periodontics Restorative Dent* 1993; 13: 120-149.
9. Stange, K.M., Lindsten, R., Bjerklin, K. Autotransplantation of premolars to the maxillary incisor region: a long-term follow-up of 12-22 years. *Eur J Orthod* 2016; 38 (5): 508-515.
10. Akhlef, Y., Schwartz, O., Andreasen, J.O., Jensen, S.S. Autotransplantation of teeth to the anterior maxilla: a systematic review of survival and success, aesthetic presentation and patient-reported outcome. *Dent Traumatol* 2018; 34 (1): 20-27.
11. Czochrowska, E.M., Stenvik, A., Album, B., Zachrisson, B.U. Autotransplantation of premolars to replace maxillary incisors: a comparison with natural incisors. *Am J Orthod Dentofacial Orthop* 2000; 118 (6): 592-600.
12. Tunc, S.K., Kayasan, M.S., Ozeroglu, E., Eroglu, C.N. Malpositioned canine treatment with autotransplantation and laser. *Eur J Dent* 2017; 11 (3): 395-397.
13. Kaur, J., Pillai, S.A., Kumar, H.K.S., Shetty, K.S. Management of an ectopic lower canine by autotransplantation and orthodontic treatment. *J Clin Orthod* 2016; 50 (11): 673-682.
14. Verweij, J.P., Anssari Moin, D., Wismeijer, D., van Merkesteyn, J.P.R. Replacing heavily damaged teeth by third molar autotransplantation with the use of cone-beam computed tomography and rapid prototyping. *J Oral Maxillofac Surg* 2017; 75 (9): 1809-1816.
15. Jonsson, T., Sigurdsson, T.J. Autotransplantation of premolars to premolar sites. A long-term follow-up study of 40 consecutive patients. *Am J Orthod Dentofacial Orthop* 2004; 125 (6): 668-675.
16. Kokai, S., Kanno, Z., Koike, S., Uesugi, S., Takahashi, Y., Ono, T., Soma, K. Retrospective study of 100 autotransplanted teeth with complete root formation and subsequent orthodontic treatment. *Am J Orthod Dentofacial Orthop* 2015; 148 (6): 982-989.
17. Paulsen, H.U., Andreasen, J.O. Eruption of premolars subsequent to autotransplantation. A longitudinal radiographic study. *Eur J Orthod* 1998; 20 (1): 45-55.
18. Andreasen, J.O., Paulsen, H.U., Yu, Z., Bayer, T. A long-term study of 370 autotransplanted premolars. Part IV. Root development subsequent to transplantation. *Eur J Orthod* 1990; 12 (1): 38-50.
19. Andreasen, J.O., Paulsen, H.U., Yu, Z., Schwartz, O. A long-term study of 370 autotransplanted premolars. Part III. Periodontal healing subsequent to transplantation. *Eur J Orthod* 1990; 12 (1): 25-37.
20. Kafourou, V., Tong, H.J., Day, P., Houghton, N., Spencer, R.J., Duggal, M. Outcomes and prognostic factors that influence the success of tooth autotransplantation in children and adolescents. *Dent Traumatol* 2017; 33 (5): 393-399.
21. Verweij, J.P., Moin, D.A., Mensink, G., Nijkamp, P., Wismeijer, D., Van Merkesteyn, J.P. Autotransplantation of premolars with a 3-dimensional printed titanium replica of the donor tooth functioning as a surgical guide: proof of concept. *J Oral Maxillofac Surg* 2016; 74 (6): 1114-1119.
22. Yang, Y., Bai, Y., Li, S., Li, J., Gao, W., Ru, N. Effect of early orthodontic force on periodontal healing after autotransplantation of permanent incisors in beagle dogs. *J Periodontol* 2012; 83 (2): 235-241.

CPD QUESTIONS

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

- Q. What percentage of transplanted teeth with open apices survive for more than five years?
- Q. What percentage of transplanted teeth with mature roots survive for more than five years?
- Q. Is root canal therapy necessary after a tooth with an open apex is transplanted?

The all-on-4 modified polyetheretherketone treatment approach: a clinical report

Zoidis, P.

A modified polyetheretherketone (PEEK) implant framework material in combination with prefabricated high-impact polymethylmethacrylate (PMMA) veneers was used as an alternative material for the fabrication of a complete maxillary arch implant-supported fixed restoration. The elastic performance of the PEEK framework (elastic modulus of 4GPa) combined with PMMA veneers may reduce the occlusal forces, protecting the implant-supported restoration and the opposing dentition, especially in all-on-4 treatments, where lack of proprioception and wide inter-implant distance are present. Long-term clinical evidence is required before recommending the application as an alternative restorative material for such a prosthesis.

Journal of Prosthetic Dentistry 2018; 119: 516-521.

Marginal adaptation and CAD-CAM technology: a systematic review of restorative material and fabrication techniques

Papadiochou, S., Pissiotis, A.L.

Statement of problem: The comparative assessment of computer-aided design and computer-aided manufacturing (CAD-CAM) technology and other fabrication techniques pertaining to marginal adaptation should be documented. Limited evidence exists on the effect of restorative material on the performance of a CAD-CAM system relative to marginal adaptation.

Purpose: The purpose of this systematic review was to investigate whether the marginal adaptation of CAD-CAM single crowns, fixed dental prostheses, and implant-retained fixed dental prostheses or their infrastructures differs from that obtained by other fabrication techniques using a similar restorative material, and whether it depends on the type of restorative material.

Material and methods: An electronic search of English language literature published between January 1, 2000, and June 30, 2016, was conducted on the Medline/PubMed database.

Results: Of the 55 included comparative studies, 28 compared CAD-CAM technology with conventional fabrication techniques, 12 contrasted CAD-CAM technology and copy milling, four compared CAD-CAM milling with direct metal laser sintering (DMLS), and 22 investigated the performance of a CAD-CAM system regarding marginal adaptation in restorations/infrastructures produced with different restorative materials.

Conclusions: Most of the CAD-CAM restorations/infrastructures were within the clinically acceptable marginal discrepancy (MD) range. The performance of

a CAD-CAM system relative to marginal adaptation is influenced by the restorative material. Compared with CAD-CAM, most of the heat-pressed lithium disilicate crowns displayed equal or smaller MD values. Slip-casting crowns exhibited similar or better marginal accuracy than those fabricated with CAD-CAM. Cobalt-chromium and titanium implant infrastructures produced using a CAD-CAM system elicited smaller MD values than zirconia. The majority of cobalt-chromium restorations/infrastructures produced by DMLS displayed better marginal accuracy than those fabricated with the casting technique. Compared with copy milling, the majority of zirconia restorations/infrastructures produced by CAD-CAM milling exhibited better marginal adaptation. No clear conclusions can be drawn about the superiority of CAD-CAM milling over the casting technique and DMLS regarding marginal adaptation.

Journal of Prosthetic Dentistry 2018; 119: 545-551.

Adverse effects of silver diamine fluoride treatment among preschool children

Duangthip, D., Fung, M.H.T., Wong, M.C.M., Chu, C.H., Lo, E.C.M.

This randomised clinical trial aimed to compare the adverse effects and parental satisfaction following the different regimes of silver diamine fluoride (SDF) treatment among preschool children. A total of 888 preschool children who had active dentin caries received different SDF application regimes: group 1, 12% SDF applied annually; group 2, 12% SDF applied semi-annually; group 3, 38% SDF applied annually; and group 4, 38% SDF applied semi-annually. Information on adverse effects – including tooth or gum pain, gum swelling, gum bleaching, and systemic toxicity – was collected through a parent-reported questionnaire within one week after every SDF or placebo application. Information of parental satisfaction on children's dental appearance was collected at baseline and 30-month examination. At the 30-month examination, 799 children (90%) remained in the study. No acute systemic illness or major adverse effect was reported. No differences of all minor adverse effects among the four groups were found ($P>0.05$). Overall, prevalence of tooth and gum pain as perceived by patients and reported by parents was 6.6%, while gum swelling and gum bleaching were 2.8% and 4.7%, respectively. Blackening of carious lesions was common among all groups, with 36.7%, 49.5%, 65.6% and 76.3% in groups 1 to 4, respectively (2 test, $P<0.001$). The proportion of parents who were satisfied with their children's dental appearance in groups 1 to 4 was as follows: 67.6%, 61.5%, 70.8%, and 62.3%, respectively (2 test, $P>0.05$). Based on parental reporting, SDF does not cause acute systemic illness. Tooth or gum pain, gum swelling, and gum bleaching were uncommon and not significantly different among the study

QUIZ

Answers (questions on page 116)

1. Periapical x-ray revealing periapical radiolucency and resorption associated with the left lateral peg incisor and presence of dens invaginatus.
2. The most common developmental anomalies associated with the maxillary lateral incisor include peg-shaped crown, radicular groove, talon cusp, and dens invaginatus.
3. Orbital cellulitis. This infection can lead to abscess formation, cavernous sinus thrombosis, blindness, or death. Ensure full range of eye movements on examination.
4. Keep upright, IV antibiotics, analgesia, refer to hospital. Drainage needs to be achieved via either first-stage root canal treatment or extraction depending on the wishes of the patient. If the patient wants to save the tooth they will require an endodontic and restorative opinion.

groups. Parental satisfaction with children's dental appearance was similar among all groups. The use of SDF following the study protocol for caries arrest is safe for preschool children. Collecting information on parental satisfaction and adverse effects is beneficial for dental professionals when deciding to adopt SDF treatment for preschool children (ClinicalTrials.gov NCT02385474).

Journal of Dental Research 2018; 97: 395-401

Minimising microbial contamination risk simultaneously from multiple hospital washbasins by automated cleaning and disinfection of U-bends with electrochemically activated solutions

Deasy, E.C., Moloney, E.M., Boyle, M.A., Swan, J.S., Geoghegan, D.A., Brennan, G.I., et al.

Background: Outbreaks of infection associated with microbial biofilm in hospital hand washbasin U-bends are being reported increasingly. In a previous study, the efficacy of a prototype automated U-bend decontamination method was demonstrated for a single non-hospital pattern washbasin. It used two electrochemically activated solutions (ECA) generated from brine: catholyte

with detergent properties; and, anolyte with disinfectant properties.

Aim: To develop and test a large-scale automated ECA treatment system to decontaminate 10 hospital pattern washbasin U-bends simultaneously in a busy hospital clinic.

Methods: A programmable system was developed whereby the washbasin drain outlets, U-bends and proximal wastewater pipework automatically underwent 10-minute treatments with catholyte followed by anolyte, three times weekly, over five months. Six untreated washbasins served as controls. Quantitative bacterial counts from U-bends were determined on Columbia blood agar, Reasoner's 2A agar and *Pseudomonas aeruginosa* selective agar following treatment and 24 hours later.

Findings: The average bacterial densities in colony-forming units/swab from treated U-bends showed a >3 log reduction compared with controls, and reductions were highly significant ($P < 0.0001$) on all media. There was no significant increase in average bacterial counts from treated U-bends 24 hours later on all media ($P > 0.1$). *P. aeruginosa* was the most prevalent organism recovered throughout the study. Internal examination of untreated U-bends using electron microscopy showed dense biofilm extending to the washbasin drain outlet junction, whereas treated U-bends were free from biofilm.

Journal of Hospital Infection 2018; Feb 2. [Epub ahead of print]



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Associate dentist with 10 years' general practice experience seeking part-time work on Wednesday/Friday in greater Dublin area with immediate start possible. Email dentistireland33@gmail.com.

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Associate dentist required to join our well-established practice in north Dublin. Great working conditions, intraoral camera, digital x-rays, microscopes, treatment co-ordinator, etc. Positions are part-time with a view to full-time. Email Michelle.Teeling@smartdentalcare.co.uk.

Full-time associate position available in busy, computerised, long-established practice in west Dublin. Minimum three years' experience and molar endo skills essential. Email dentalpracticemanager22@gmail.com.

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Experienced dental associate required to replace departing colleague in Virginia, Co. Cavan. Part and/or full-time position available. One hour from Dublin. OPG, computerised, periodontist, orthodontist, hygienist. Please send CV to info@virginiadentalsurgery.com.

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Experienced associate dentist required for established practice in Tralee. Two surgeries with excellent support staff. Please send CV to lina.dent@yahoo.ie.

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General dentist with short-term ortho solutions experience required. Boyne Dental is an award-winning, multi-discipline practice, with full digital workflow from Sirona CBCT to CEREC Ortho and scanner, milling unit and furnace. Full-time position available in a wonderful environment. Email CV to david@boynedental.ie.

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Lucan dental clinics seeks dentist for maternity cover. Details available by contacting Brian, Tel: 086-168 6056.

Navan: general dentist required for full-time position from July. Fridays available immediately. Busy, modern, computerised private and medical card practice. One year's experience minimum. One evening per week and one Saturday per month – 25 minutes from the M50. Email dentalreceptionnavan@gmail.com.

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Dentists Kildare: Athy, Celbridge, Newbridge. Dublin: Tallaght, Crumlin. Full-/part-time for primary care. Email CV to unagaster@gmail.com or phone Una at 087-917 4831.

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Experienced dentist required immediately in modern north Co. Dublin practice. Please send current CV to steven@medaccount.ie.

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Locum dentist

Locum dentist wanted for busy single-handed practice, July 2-7, 2018. Modern, mixed practice 30 minutes from Limerick, Ennis, Nenagh. Minimum three years' experience essential. Email judyomearadental@gmail.com.

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Full-time dental nurse required, Blessington, Co. Wicklow. Experience with computers preferable. Motivated candidate. Immediate start. Email niall@blessingtontdental.ie.

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Hygienist required to join our well-established practice in north Dublin. Great working conditions, intraoral camera, digital x-rays, microscopes, treatment co-ordinator, etc. Positions are part-time with a view to full-time. Email Michelle.Teeling@smartdentalcare.co.uk.

We are looking for an experienced, enthusiastic and caring hygienist, part-time, to join our award-winning team (including our two hygienists) at Portobello Dental. Please email CV and cover letter to helen@portobellodental.com.

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Enthusiastic, caring hygienist required for a busy, modern, award-winning practice in Co. Meath (approximately 40 minutes north of Dublin) for one day per week. Mature book with a lovely patient base. Position currently for Wednesdays. Contact dentaljobireland1@gmail.com.

Dental hygienist required for one day, Thursday or Friday, for state-of-the-art clinic in Co. Limerick. Potential for additional days also. Candidates will need to be caring, motivated and enthusiastic. Please email Jennifer with your CV at jennifer.bowedental@gmail.com.

Hygienist required for maternity leave cover August 2018 to February 2019. Busy private practice 15 minutes from Galway City. Thursday or Friday CV to galwaydent14@gmail.com.

Dublin – exciting opportunity for an enthusiastic hygienist to join our modern, well-equipped, well-established Smiles Dental practice in Dundrum, Dublin, initially on a two to three days per week basis. Candidates must have general experience and be IDC registered. Email joanne.bonfield@smiles.co.uk.

Enthusiastic, caring, gentle hygienist required to join our busy, modern dental practice based in the midlands/northwest. Position two days/week, with possibility of expanding to full time. Please send CV to dentalhygienistwanted@gmail.com.

Dental hygienist wanted for maternity and holiday cover in modern, computerised practice. Starting July. Approximately 18-20 hours per week. Cork City. Apply with CV to corkassociatwanted@gmail.com.

PRACTICES FOR SALE/TO LET

Galway City. Long-established two-person dental practice. Steady gross/profit. Private, PRSI, DTSS. Price negotiable. Leasehold or freehold options. Email galwaydentist2017@gmail.com.

Dentist suite in Rialto Primary Care Centre, opening January 2019. Large GP practice moving in, Suites 97m² to 147m², shell and core or fully fitted out, All 'own door' units. Price is dependent on size and fit-out. Email tgunning@guardianpcc.com.

Dublin West – very busy, well-equipped, private, long-established practice. Three surgeries, one in use. High-profile location, huge footfall. Extensive free parking. Computerised, digital OPG/lateral skull. Experienced staff. Fully walkinable. High new patient numbers. Excellent profits. Email dentistrydublin@gmail.com.

Cork City Centre. Two surgeries with room to expand. X-ray room, staff and patient WCs, sterilising room, storeroom, well equipped and maintained with good patient mix. Contact steven@medaccount.ie in confidence or call 01-280 6414.

Roscommon Town. Long-established single-handed practice in freehold premises, well located property; 120sqm approx. Owner retiring. For details please email seeteedee@eircom.net.

Limerick City. Two-surgery leasehold practice for sale. High gross/high profits. Fully computerised. Would suit husband and wife team. Contact lkpractice3@gmail.com.

Office to let. First floor office space to let – 735sqft (68sqm). Previously a dental surgery. Ideally located for medical/dental-based practice with busy GP practice next door. Office is up to radiation protection standards. Tel: 087-268 4809.

Offaly, Birr. Long-established general practice for sale. Leasehold. Two well-equipped surgeries. Computerised, digital x-ray, OPG, RA sedation, IO camera, air-conditioned. Hygienist. Low overheads. Email offalypractice@gmail.com.

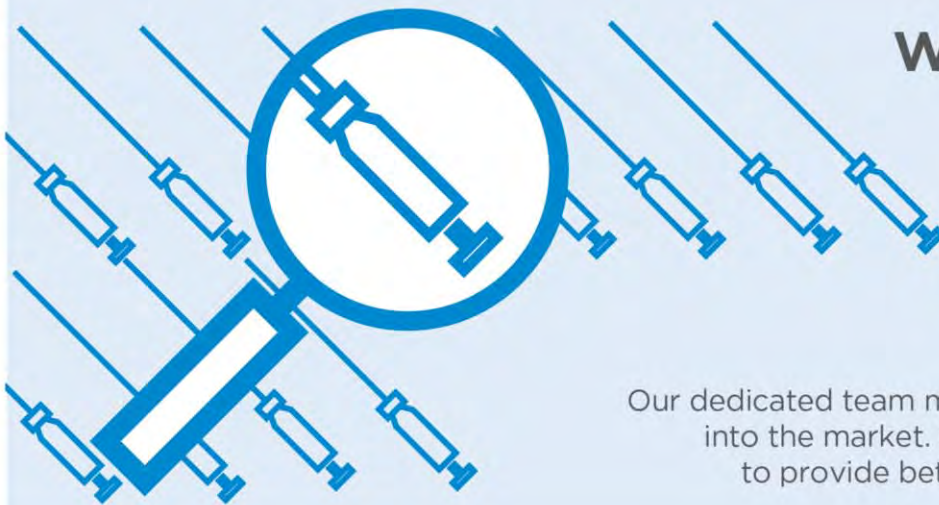
EQUIPMENT FOR SALE

Adec Radius chair soft UPH, BienAir electrical motor US scaler, i/o camera, ceiling-mounted dental light. Kodak Elytis digital x-ray, doctors+assistant chair, Durr Dental compressor, Microsmart suction with amalgam separator. In good technical state. Email dentalid1514@gmail.com.

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- ISO Certificate 9001
- ISO Certificate 14001
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- EC Certificate BSI - Full Quality Assurance system
- Japanese Accreditation

The public presence

HSE dentist Dr Niall Murphy believes the IDA's work benefits all members and is working hard to improve Ireland's public dental service.

What led you to get involved with the IDA?

I moved to Waterford in 1993/'94 and started attending the local lectures and many golf outings that were arranged by the South East Branch of the IDA. After that, I became Secretary of the local branch in 2001 and 2002.

What form did that involvement take?

I found the IDA was a good association for arranging relevant CDE [continuing dental education]. I used to help organise some of the local educational events and conferences. I would always attend the local branch meetings, the IDA National Conference and the HSE Dental Surgeons Seminar. The main thing about those meetings apart from the learning is that they are an important social forum.

How did your involvement progress?

Four years ago I was elected as the South Eastern member of the IDA HSE Committee. As a member on that Committee I had the chance to learn more about how the IDA and the public dental service work. Being on the committees, you get involved with making decisions and get the opportunity to question or lobby Government departments and HSE senior management to try to make improvements to the service for both the benefit of our patients and our own working conditions.

What has your participation in the Association meant to you?

My active participation in the Association has given me a better overall picture of dentistry in Ireland. I think we can all get caught up in our own microcosms of dental life. As a HSE dental surgeon, I'm basically just working with children and special care patients and don't really know what's going on in private practices or with the DTSS. Being involved in the IDA gives me a better understanding of the needs of all the members.

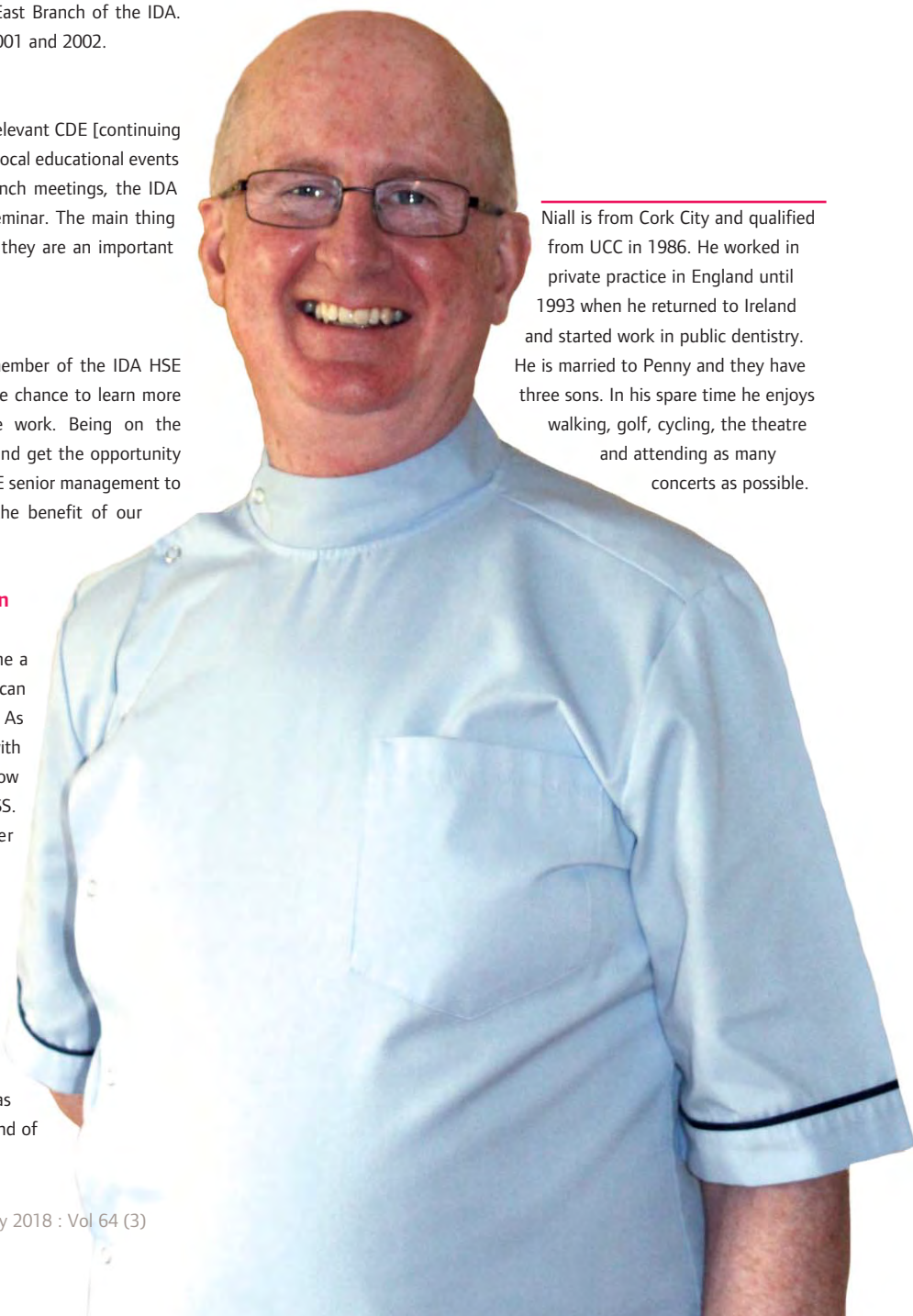
What is the single biggest benefit of membership in your opinion?

To me, it is a feeling of security. We all benefit from having the various committees working together with the assistance of the expertise that the IDA team and IDA House share with us. That's furthered the progression of dentistry in Ireland as a whole, as well as looking after the general well-being of our members and of all of our patients too.

What developments would you like to see in the Association?

If we could develop a more IT-based CDE training structure, it would help the majority of our members in continuing their education in dentistry. If you live outside a main city like Cork or Dublin, it's almost impossible to get to all these courses and lectures, and it gets quite expensive. A more IT-based system, and that is something we're working on, would help every member.

The present DTSS contract is not fit for purpose. It doesn't cater for the needs of our patients, nor does it come anywhere near to reimbursing our dentists for their expertise in treating these patients. That's probably the single most important thing now but the other thing is I think that as an Association, we need to tackle the HSE and the Government, and get them to restore all the posts we lost over the last 10 years. Some areas of the country have lost 50% of their dentists, which in any walk of life is scandalous.



Niall is from Cork City and qualified from UCC in 1986. He worked in private practice in England until 1993 when he returned to Ireland and started work in public dentistry. He is married to Penny and they have three sons. In his spare time he enjoys walking, golf, cycling, the theatre and attending as many concerts as possible.

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