

Journal of the Irish Dental Association

Iris Cumainn Déadach na hÉireann

Management of primary molar infraocclusion in general practice





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DID YOU KNOW? The Journal of the Irish Dental Association is the only dental publication produced in Ireland.

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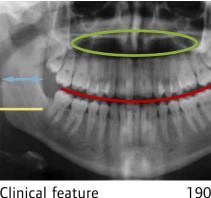
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Clinical feature

Reading a panoramic radiograph

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References 1. Cantore R et al. J Clin Dent; 2013;24 (Spec Iss A):A32-A44. 2. Wolff M et al. Clin Dent. 2013; 24 (Spec Iss A):A45-A54. 3. Santarpis P. Lavender S. Gittins E al Submitted for publication in Am J Dent. 2013. 4. Kraivephan P et al. Carter 2013;47:582-590. 5. Hu DY et al. Data on file. Colgate Palmolive Company, 22

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Ethics, dentistry and business

Honorary Editor, Professor Leo Stassen, reflects on ethics, science, business and awards in this edition.

Dr Eleanor O'Higgins of UCD School of Business is an expert in the area of ethics and she has provided an outstanding interview for this edition of the Journal. She observes that professions should lead the way in the drive to improve integrity in society. Her comments on ethics in dentistry are excellent and her warning that this is a small country where cosy relationships still hold considerable sway is frightening in the context of the financial implosion experienced here since 2008. I would go so far as to say that her interview should studied be by all dental students before they enter the profession.

Scientific content

Drs Mary McGeown and Anne O'Connell have provided the Journal with an excellent paper on management of primary molar infraocclusion in general practice, with a recommendation that all children in the mixed and primary dentition should be assessed. Likewise, Dr Andrew Bolas has produced a three stage guide to reading a panoramic radiograph, which will be of use to all practitioners and is a great addition to our series of clinical features.

Identex and the IDA Autumn Meeting

It is significant and welcome that the Association and the Irish Dental Trade Association (IDTA) have joined forces in the presentation of Identex and the IDA Autumn Meeting. CPD points will be on offer to those dentists that attend the IDA lectures, which are being staged in conjunction with Identex at Citywest Hotel in Dublin in September. The trade show itself also provides the opportunity for learning through the presentation of new products and technologies. The lectures will run throughout the two days so that those who attend can benefit from attending the trade show and availing of formal CPD.

Sensodyne Sensitive Dentists Awards Ceremony

It has been a privilege for the Journal to celebrate the outstanding work of dentists over the last six years through the Sensodyne Sensitive Dentist of the Year competition. When we started, we didn't know what level of testimony we would receive from patients. It has been fantastic and it is wholly appropriate that we move up from our luncheon ceremony to a Gala Awards Dinner in the Royal Hospital Kilmainham on December 6 next. Invitations will be extended to those who have been nominated and I look forward to seeing as many of you as possible for the big occasion.

Victory for IDU

The team in IDA House, under the Union banner this time, succeeded in getting the HSE to remove the details of payments made to dentists under the public health schemes from its website. At no point had dentists agreed to the publication of such figures and the Union's appeal to the Office of the Data Protection Commissioner was successful in getting the payments from 2009-2011 removed from the HSE website.

Foundation training

I wish to echo the call by our President, Dr Peter Gannon, on the urgent need for a new foundation training scheme for recent dental graduates. It has been wrong that we have been relying on our graduates gaining entry into the British training scheme. As the UK authorities have now restricted entry to graduates from UK universities only, the onus is firmly on our Government to provide similar opportunities here.

Mouth Cancer Awareness Day

Naturally, given my daily work, I appeal to as many of you as possible to play an active part in the forthcoming Mouth Cancer Awareness Day on Wednesday, September 17. The difference in outcome for those who benefit from early detection is enormous. Please be vigilant always and take part in the Awareness Day.



Prof. Leo F. A. Stassen Honorary Editor

Leo F. A. Stassen.

Urgent need for FT scheme

Dr Peter Gannon highlights significant initiatives and important issues for dentists, among them the urgent need for a new foundation training (FT) scheme in Ireland.

I hope you all are having a good summer. I would like to highlight some significant initiatives and some important issues for the Association at the moment.

Mouth Cancer Awareness Day

MCAD takes place this year on Wednesday, September 17. This is still a very worthwhile initiative, raising the awareness of mouth cancer among the general public, but also reminding dentists of the need for careful soft tissue examination during routine dental visits. Personally, I am more thorough and more confident about what I find as a result of the educational lectures that have preceded previous mouth cancer awareness days. Several hundred dentists and their staff will once again take part.

Oral health and diabetes - European Oral Health Day

Oral health and diabetes is the theme for this year's European Oral Health Day, which takes place on September 12. The IDA has made contact with the Diabetes Federation of Ireland and discussed the possibility of forming an allegiance to promote oral health awareness amongst members of the Federation and subsequently with the large numbers of people in Ireland affected by diabetes.

Dental graduates 2014

The British Government has decided that entry to foundation training (FT) schemes across the UK is to be confined to graduates from British dental schools. This means that graduates from Irish dental schools will effectively be denied the chance to take up positions in NHS practices, which require completion of foundation training in the UK. The IDA and the deans of the dental schools in Ireland have campaigned for the past few years to have an FT scheme introduced in Ireland, which would enjoy recognition by the British authorities and enable Irish dental graduates access to NHS dental positions in the UK as has traditionally been the practice. In spite of putting together a detailed and costed submission, the Department of Health has thus far refused to support the introduction of an FT scheme here. The immediate consequences are that 2014 graduates are likely to face unprecedented difficulty in securing positions this summer. The Association is determined to escalate its efforts to see the introduction of an FT scheme, but in the meantime, in order to assist graduates, we are putting them in touch with dentists here in Ireland who have offered opportunities for work in their practice. We are very grateful to our colleagues for their assistance with this matter.

IDU Trade Union Licence

I am pleased to advise you that on July 7, 2014 we received formal notification that the Irish Dental Union has been granted a negotiation licence by the Minister for Jobs, Enterprise and Innovation, Mr Richard Bruton.

Established in 2011, the Union's aim was to secure the rights and protections afforded to licensed trade unions involved in representing their members in negotiations with the state and other employers, whether those members are public service employees or selfemployed contractors.

Securing a trade union licence should ensure that we are afforded the same rights as other licensed trade unions, such as the IMO, and will have the right to engage in collective bargaining on behalf of members contracted to provide services under state schemes.

It will also mean that we are now entitled to organise our public service employee members in industrial action legitimately where

such action is necessary. Securing this power can only serve to strengthen our role in defending and representing members employed by public service agencies. This only adds to the traditional roles that the IDA continues to fulfil, including educational, scientific and advocacy and, most importantly, the provision of opportunities to meet fellow members.

Dr Peter Gannon IDA President



New Advanced Defence Gum Treatment cuts gingival bleeding by 50.9% in just 4 weeks¹



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In addition, Advanced Defence Gum Treatment is designed to not cause staining."



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Advanced Defence against gum disease

Mouth, Head and Neck Cancer Awareness Campaign in Ireland

Dear Sir,

A campaign to promote awareness of mouth, head and neck cancer in Ireland began in 2010. This campaign was initiated primarily by a group of cancer survivors, the Irish Dental Health Foundation, Irish Cancer Society and the university dental schools in Cork and Dublin. The first Mouth Cancer Awareness Day (MCAD) was held at the Cork and Dublin Dental University Hospitals in September 2010.

In order to make the free examinations more accessible throughout the country, the Irish Dental Association became a partner in the campaign in September 2011. The objective was to further increase awareness in the general public and the dental profession – see website for details www.mouthcancerawareness.ie. To date, 70% of dental practices countrywide have offered free mouth cancer examinations in addition to the two dental schools in 2010, '11, '12 and '13.

Mouth, Head and Neck Cancer Awareness Ireland (MHNCAI) has promoted increased public and professional awareness of the warning signs of this disease, stressing the importance of early referral for these patients. We, of course, stress that a check for changes in the oral soft tissues is provided at every dental visit but increased awareness in the public arena means that individuals seek help early. Self examination is also encouraged and supported. Early detection of mouth cancer will result in better treatment outcomes - early detection saves lives. On MCAD, mouth cancer check-ups and information are provided free of charge in dental practices around the country. The two dental hospitals, as well as providing check-ups, have provided support and immediate follow-up for any cases considered to be urgent by the examining dentists. As a result of this campaign, we have established a clear referral pathway. Since the campaign began, approximately 20,000 free examinations have been carried out and 22 cases of oro-pharyngeal cancer have been detected. More importantly perhaps, awareness of this 'Cinderella cancer' has been significantly increased in the general public and in the dental profession. The challenge now is to increase awareness in the medical and other healthcare professions.

The favourable media response, which has been the oxygen of this campaign, has been a very important part of the success of this initiative. The partnership is convinced that an awareness day, rather than a week or a month, has been a key factor in attracting media coverage. Recent statistics indicate a rise in the incidence of mouth, head and neck cancer in the UK (www.cancerresearchuk.org). In September 2013, a number of dentists in the UK participated in Mouth Cancer Awareness Day and we made our data collection and information material available. Our experience in Ireland has shown that this campaign has not only saved lives and increased awareness about this disease, but has also highlighted the important role of the dentist as oral physician.

The next MCAD (Ireland) is on Wednesday, September 17, 2014.

Yours sincerely,

Dr Denise MacCarthy Senior Lecturer Consultant in Restorative Dentistry, Dublin Dental University Hospital and present Chair of Mouth Cancer Awareness Ireland

Dr Conor McAlister Irish Dental Association Dr Eleanor O'Sullivan Lecturer in Oral Surgery, Cork University Dental School

2010 2011** 2012 2013 Total 1,660 435 Referrals from GDP Referrals from GDP 2.095 1,340 568 301 MCAD and 404 MCAD and 2,613 referrals from GDP Referrals from GDP 3,758 14,982 NA 6.764 4,460 (701 GDP registered) (602 GDP registered) 123 Urgent 83 Urgent 23 Urgent 80 Non urgent 416 Non-urgent 100 Non-urgent 25 *GDP referrals *GDP referrals *GDP referrals 32 18 7 9 76

1

22

2

Mouth Cancer Awareness Days (MCAD) in Ireland 2010 - 2013

13

6

*NOTE: Urgent referrals are recorded as patients seen in DDUH and CDUH and patients referred to DDUH and CDUH on the emergency phone line immediately following the MCAD. Further GDP referrals were received by various clinicians via multiple pathways over a protracted period of time and it was not possible to accurately track these referrals as related to the MCAD.

**Ref: The Development of Mouth, Head and Neck Cancer Awareness in reland (MHNCAI) and Results of the 2011 Mouth Cancer Awareness Day (MCAD). Denise MacCarthy, Eleanor D'Sullivan, Conor McAlister, Claire Healy, Stephen Flint, June Nunn, Finbar Allen, Tina Gorman, Michael D'Sullivan, Leo Stassen. JIDA 2012

Patients examined

in Dublin Dental University Hospital Patients examined

in Cork Dental University Hospital

Patients examined

in general dental

Urgent referrals *

Biopsy completed

Cancer diagnosed

practice



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Mouth Cancer Awareness Day

Mouth Cancer Awareness Day will take place this year on Wednesday, September 17. You can register your interest to participate online at www.mouthcancerawareness.ie.



As you know, Mouth Cancer Awareness Day 2011, 2012 and 2013 were an outstanding success, with over 700 dentists taking part in the initiative each year. Over 23,000 people have availed of the free mouth cancer exam around the country and 23 cancers were detected. We are appealing to

as many dentists as possible to sign up for the day in 2014. Without the support of the dental profession this very worthwhile initiative would not be possible.

Please register today and remember, you decide how long you dedicate to the initiative on the day. You do not have to commit to the entire day. This is up to each practitioner to decide what best works for them in their surgery. We need your help. Information packs will be sent to all participating dentists over the next few weeks.



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Identex/IDA Autumn Meeting

IDA is delighted to announce that we will be running educational workshops alongside Identex in September (see preview on pages 171-174).

The event takes place at Citywest, Dublin on Friday and Saturday, September 19 and 20 next. Workshops are open to all attendees and can be booked in advance. Team members are also welcome. Subject areas covered include: infection control; clinical audit in oral radiology; employment law; waste management; taxing and pension issues; communication skills; local anaesthesia; and, posterior composites. All workshops will be CPD accredited.

* Dental Protection will be providing an hour-long workshop, which will offer risk credits to all DPL members. These risk credits will go towards up to 15% discount on your DPL membership.

A full trade show (Identex) will run on both days with over 35 trade companies in attendance. Entry to Identex is free. Workshops are \in 20 to attend for IDA members and \in 50 for non-IDA members.

Staff retirement



Popular staff member at IDA House, Mary Graham retired recently after over 16 years of service. She was presented with a bouquet of flowers by Chief Executive Fintan Hourihan and departs with the good wishes of all the members of the Association.

Quiz

Submitted by KELLIE O'SHAUGHNESSY

Dental decay levels appear to be high with children visiting your dental practice. You want to make your dental practice more health promoting, but all your staff are needed within their current roles. However, following current media coverage on sugar, many parents are now asking about sugar. What measures can you take to address the situation and provide advice in a cost-effective way?

Answers on page 200

CPD Roadshow



September will see the start of the final year of this cycle of the ever-popular CPD Roadshow. Roadshows will take place at Dublin, Cork, Limerick, Galway, Sligo and Kilkenny on Saturday mornings from 10.00am to 1.00pm. Each event will

consist of four lectures of 40 minutes covering topics including: medical emergencies, oral radiology, endodontics, orthodontics, restorative, periodontics, etc. See www.dentist.ie for a full range of topics and dates and venues. This is a fantastic opportunity for members and their team to avail of top class educational programme in their areas. Don't miss out!

Orthodontics book for charity

Dr Dan Counihan, who practises in Tralee, has recently published a textbook *Orthodontics for the Face* and President of the Orthodontic Society, Dr Katherine Condren, was delighted to receive a copy. It can be purchased at www.orthodonticsfortheface.com, with all the proceeds going to Our Lady's Hospital, Crumlin.

IDA Seminar for HSE members

The Annual Seminar for the HSE Group of IDA will take place from Thursday and Friday, October 16 and 17 at the magnificent Mount Wolseley Hotel and Country Club, Tullow Co. Carlow. Dr Frances O'Callaghan, Senior Administrative Dental Surgeon in south Dublin will be taking over as President at the event. Lectures on such topics as fluoride, special needs dentistry, composites and caries will be presented. A full programme will be published shortly.



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Stand



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Victory for IDU over payments

The HSE has been forced to remove details of state payments to dentists from its website following a complaint from the Irish Dental Union. The Union has been vehemently against the online publication of payment details to individual dentists under the Primary Care Reimbursements Service and has been campaigning for its removal. In a letter to the HSE, Chief Executive of the Union, Fintan Hourihan outlined members' argument that there was no statutory basis for the publication of such details, and that members were "concerned that they have not given consent".

Following this complaint, the Data Protection Commission threatened enforcement action against the HSE unless they removed the details of the payments made to dentists under the medical card scheme from the website.

The HSE confirmed on July 23 that they had removed the details of payments to dentists, as well as other health professionals contracted

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to them, for the years 2009 to 2011.

Commenting on the breakthrough, Fintan Hourihan said: "The IDU welcomes the HSE's decision to cease publication of payments made to dentists participating in the dental treatment services scheme. The Union had raised its concerns with the Office of the Data Protection Commissioner as we believe that publication of payments represented a breach of privacy as recognised by law internationally and was made without the consent of the dentists concerned.

"The publication of payments also presented a misleading impression when viewed in isolation and suggested dentists were earning inflated levels of income, when in fact the payments were to cover the cost for treatments already dispensed. In addition the vast bulk of these payments relate to practice running costs, materials used and everyday overheads with the payment to dentists comprising a very small portion.

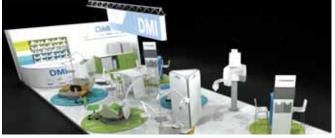
"The HSE also failed to consider whether the publication on a single, freely-consultable website updated by name relating to all of the beneficiaries concerned went beyond what is necessary for achieving the HSE's legitimate aims."

New Minister for Health

In the recent Cabinet reshuffle, Leo Varadker TD was appointed to the position of Minister for Health.

Minister Varadker was elected to the Dáil in 2007 as a TD for Dublin West, and served as Minister for Transport, Tourism and Sport from March 2011. The Association has sought and obtained a meeting with Minister Varadker and it will take place in September.

Interactive DMI



An artist's impression of the DMI stand for Identex.

DMI will have an interactive stand at Identex designed to explore all surgery possibilities and demonstrate the latest technologies in dentistry. Dentists will be able to experience the range of A-dec dental units and meet the experts on the stand. The Carestream 8100 3D which puts the advantages of 2D and 3D imaging into the reach of the general practitioner will also be on show.

DMI is also presenting the new CAD/CAM solution from Planmeca. Dentists can visit the DMI stand to create and design digital models and see them come to life with the precision of the PLANmill 40.

There will be special exhibition only offers and a chance to win \in 500 worth of consumables.



SENSODYNE SENSITIVE DENTIST OF THE YEAR AWARDS 2014

Will you be going to the Ball?

This year, the winners in the Sensodyne Sensitive Dentist of the Year Awards will be announced at a black tie Gala Ball in the Royal Hospital Kilmainham on December 6, hosted by the Irish Dental Association. If you are nominated by a patient, you will receive a letter inviting you and your guests to attend and giving all details on how to book your place.



Your patients can nominate you for an Award at www.sensodynesensitivedentist.ie, where all terms and conditions can also be found.



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Come to Identex and the IDA Autumn Meeting

The Irish Dental Trade Association and the Irish Dental Association have joined forces to present both Identex and a series of lectures in September.

In an exciting development for the dental profession, the Irish Dental Trade Association's national dental trade exhibition, Identex, will take place for the first time in conjunction with the Irish Dental Association's Autumn Meeting. The dates for your diary are Friday and Saturday, September 19 and 20 in Citywest Hotel, Saggart, Co. Dublin.

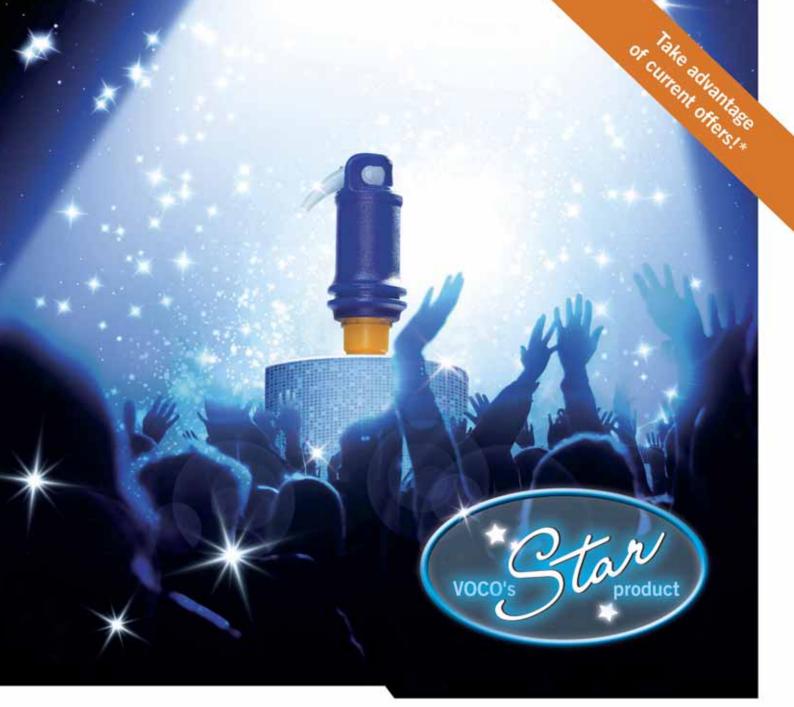
As is normal at Identex, leading manufacturing companies and dental innovators from around the world will showcase and demonstrate their latest products at the exhibition, which has been in existence for 30 years. This year, the exhibition will be augmented by the Irish Dental Association's Autumn Meeting.

At that Meeting, the IDA will host a comprehensive lecture programme with lecturers discussing current dental topics including: employment law; communication; oral radiology; and, infection control, amongst others.

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This year's trade show will take place in Citywest Hotel in Saggart, Co. Dublin.



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IDA AUTUMN MEETING – LECTURE SCHEDULE

The IDA Autumn Meeting is a programme of lectures taking place over the two days of Identex in two lecture halls inside the show. Topics covered range from practice management to clinical, and all are designed to be CPD for which attendees will obtain credit. The cost is €20 per lecture or €30 for two.

Friday, September 19

LECTURE HALL 1

11.00am	Tax and pension issues for the dental practitioner				
	David McCaffery, MedAccount and John O'Connor,				
	Omega Financial Management				
12.00noon	Working within the law				
	Breda O'Malley, Hayes Solicitors				
2.30pm	Local anaesthesia				
	Dr Dermot Canavan				
4.00pm	Dental radiology clinical audit - it's easy and it's fun!				
	Dr Brendan Fanning				
LECTURE HALL 2					
11.00am	Getting consent and record keeping				
	Dr Hugh Harvey, DPL				
12.00pm	Infection control - what's changed, what's new?				
	Dr Nick Armstrong				
2.30pm	Brushing up on motivation				
	Dr Brid Hendron				
4.00pm	Safe management of hazardous medical waste				
	Brian Rodgers				

Dentists and team members attending the show and lectures will be able to:

 meet face to face with the specialists responsible for the state-ofthe-art dental equipment, materials, products, techniques and solutions that save time, improve productivity and reduce longterm costs;



Gerard Lavery, President, Irish Dental Trade Association.



Dr Peter Gannon, President, Irish Dental Association.

Saturday, September 20

LECTURE HALL 1					
11.00am	Tax and pension issues for the dental practitioner David McCaffrey, MedAccount and John O'Connor, Omega Financial Management				
12.00noon	Working within the law Ms Breda O'Malley – Hayes Solicitors				
2.30pm	Safe management of hazardous medical waste Mr Brian Rodgers				
4.00pm	An introduction to clinical photography Dr PJ Byrne				
LECTURE H	LECTURE HALL 2				
11.00am	Infection control - what's changed, what's new? Dr Nick Armstrong				
12.00pm	Posterior composites Dr Una Lally				
2.30pm	Local anaesthesia Dr Dermot Canavan				
4.00pm	Dental radiology clinical audit – it's easy and it's fun! Dr Brendan Fanning				

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Leaders encourage attendance

Commenting on the announcement of the details, the President of the Irish Dental Trade Association, Gerard Lavery, said: "We look forward to welcoming you to Identex 2014. Bring your team along as the show offers a fantastic chance to get together and it can be a springboard for fresh ideas for your practice. It's also a great place to network with colleagues, professional associations and key opinion leaders."

The President of the Irish Dental Association, Dr Peter Gannon, said: "We are delighted to present the IDA Autumn Meeting at Identex 2014. It represents an ideal way for the trade and the profession to cooperate. We hope dentists will take away a greater knowledge of legislation and how it affects them, plus an update on new materials and equipment. I look forward to seeing as many of our members there as possible."

Voco at Identex

Voco will present several products at Identex including Futurabond M+, a universal one-component adhesive in bottles. According to Voco, Futurabond M+ offers the user flexible solutions for every bonding situation. Total-etch, selective-etch or self-etch - the dentist is free to choose and apply the etching technique depending on indication or according to personal preference. Thanks to a new type of monomer technology, overetching of the dentine is impossible. The company says that Futurabond M+ is more flexible than conventional bottled bonding agents with regard to its spectrum of application. It offers secure adhesion to various materials such as metals, zirconium or aluminium oxide, as well as silicate ceramics and it requires no additional primer. Another product being featured at the Voco stand is IonoStar Molar, a new glass ionomer restorative material in innovative application capsule. The material is applied without conditioner or adhesive and scores particularly highly thanks to its non-sticky consistency and perfect marginal adaptation. IonoStar Molar can be modelled immediately after insertion and cures within four minutes. Its lastingly high level of fluoride release counteracts postoperative sensitivity.

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Henry Schein is launching the new Sirona Intego chair at Identex. The launch includes a special finance deal, offering the chair to dentists for as little as \in 256 inclusive of VAT per month for 60 months. Intego is described by its maker, Sirona, as the best treatment centre in its class. Its ergonomic design perfectly

combines appearance and



The new Sirona Intego chair: made in Germany and available from Henry Schein.

functionality, while its outstanding German-made quality doesn't just satisfy – it impresses. The two designs, Intego and Intego pro, can be flexibly configured for surgery requirements. Dentists can select the whip arm or the hanging hoses design, while the company says that every option delivers optimal performance at a fair price – offering great value in every respect.

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¹Council Directive 2013/32/EU of May 2013 ²Septodont is the only company producing 500 million dental cartridges per year ³Source SDM data, YTD Q3 2012

Sensodyne Gala Awards Ceremony

There's a new development in this year's Sensodyne Sensitive Dentist of the Year Awards.



The Royal Hospital Kilmainham in Dublin, venue for the Gala Awards Ceremony for the Sensodyne Sensitive Dentist of the Year.

After several years of outstanding testimony from patients about their dentists, GSK together with the *Journal* and the Association, have decided to celebrate the nominated and winning dentists in a more high-profile way. Accordingly, every dentist who is nominated for the Sensodyne Sensitive Dentist of the Year Award will be invited to attend the Gala Awards Ceremony in the Royal Hospital Kilmainham in Dublin on December 6 next, at which the winners will be announced. The event, hosted by the Irish Dental Association, will be black tie and will celebrate the endorsement of oral healthcare provided by dentists, as written by their patients.

Commenting on the development, the President of the Association, Dr Peter Gannon, welcomed the chance to acknowledge the work of Irish dentists in such a public manner. "For years, our lunch to celebrate the winners of the Sensodyne Sensitive Dentist of the Year has been a great, but very modest occasion. Now, we have the opportunity to celebrate that same success in a big way. In a world where bad news tends to dominate the headlines, it is great to have such an occasion. I look forward to seeing so many of you there."

Dentists are reminded that Sensodyne Sensitive Dentist of the Year competition packs are available from GSK, and that patients can nominate their dentists online at www.sensodynesensitivedentist.ie The Awards Ceremony will be a black-tie event at which the regional winners and the overall winner will be announced. Nominated dentists are eligible for both a regional award and the overall award. The night will commence with a drinks reception in the Baroque Chapel at 7.00pm with dinner in the Great Hall at 8.00pm. The Award winners will be announced at 10.15pm and there will be music and dancing from 11.00pm until late.

Only those dentists that have been nominated may attend with their guests. Dentists who receive a nomination will receive a letter of invitation with all details.

RCSI Meeting

The Faculty of Dentistry RCSI has announced that its Annual Scientific Meeting (ASM) 2014 will be held in Dublin on October 30 and 31. The title is 'Clinical Controversies in Dental Practice', and will include lectures on caries management, orthodontics, the role of fluoride, drug therapeutics and the dental practitioner, adhesion, radiology, endodontics and oral surgery. Confirmed overseas speakers include Amr Morsi (New York), StJohn Crean (Preston), Avijit Banerjee (London), Mark Hector (Dundee), Chris Deery (Sheffield) and Ross Hobson (Newcastle). Accomplished national speakers include Hal Duncan (endodontics), Garry Fleming (adhesion) and Brian Bourke (orthodontics). On the Friday afternoon the Leo Sheridan Lecture session, 'Current controversies in the surgical management of head and neck cancer' will be delivered by Brian Schmidt (New York) and David Vaughan (Aintree, Liverpool).

Those who wish to register interest for this meeting, and would like to be kept updated on the event should email the Faculty office at: facdentistry@rcsi.ie.



Donation to Centre

Miriam Cleary presented a cheque on behalf of all the presenters of the CPD Roadshow 2013/2014 to Brother Kevin from the Capuchin Day Care Centre recently. A dental clinic has been set up by a group of volunteer dentists to provide some oral healthcare to users of the Centre.

WIDEN launches

The WIDEN (women in dentistry) committee launched their group with a very successful evening in the Dublin Dental Hospital in April. The aim of the group is to widen the network of female colleagues around the country through professional, social and educational events. The topic for the meeting was 'Networking – energising and enriching' and Claire Mulligan, an occupational psychologist, and strong advocate of the benefits of networking facilitated the evening. A reception was held at the IDA Annual Conference in Kilkenny. Please contact widensecretary@gmail.com for more details.



At the WIDEN reception in Kilkenny were from left: Drs Sarah Brody, Clodagh McAllister, Nuala Carney, Linda Elliott, Jane Renehan; and Gillian Smith.

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Swapping scrums for scrubs

Former Irish rugby player and current Southern Trust dentist Dr Paddy Johns spoke to our reporter RÓISÍN TREACY about rugby, dentistry, and his work for Plan Ireland.

He may be best known for manning the second row for Ireland throughout the 90s, winning 59 caps for his country and playing in two World Cups, but many may not realise that among his other accomplishments, Paddy Johns is also a dentist.

Two personal experiences with the dentist as a young boy pushed Paddy to consider a career in dentistry. "When I was about 12, I had four teeth out, and it didn't go too well for me. So it put me off going back [to the dentist] for four or five years, until another dentist gave me a filling, which didn't really hurt at all. That was always in the back of my head, and the idea that if I could be a dentist, I could be like the second dentist, not the first one." This, coupled with a talent for science in school, saw Paddy travel to Newcastle to study dentistry, where he spent two years, before transferring to Trinity College Dublin.

Upon graduating from Trinity in 1991, the six foot six Northern Irish man spent a year in private practice in Carrickfergus. However, working in private practice meant often having to see patients on evenings and weekends, which clashed with rugby training and matches. This is what gave Paddy the push towards public dentistry: "It was really a colleague that suggested the community dentistry because it was more nine to five and it suited better with the rugby commitments I had. I tried it for six months and I really enjoyed it, so I stuck with it, but then I took six years out to play rugby."

Following his retirement from professional rugby, Paddy returned to dentistry and began working with the Southern Trust, the authority with responsibility for healthcare in the southern region of Northern Ireland. It's a job which is not without its challenges: "We are the community dental service, so we treat priority groups – patients with special needs, patients who have learning and physical difficulties,

Background

Paddy was born and raised in Dungannon. He is married and has four children – Christopher (19), Emily (17) and twins Megan and Hannah (14). He spends much of his spare time following his children to their various sporting matches: Christopher is a professional football player and plays with Southampton under-21s, while the girls of the family all play hockey.

Outside of rugby, Paddy enjoys competing in triathlons, and enters about four events per year in a bid to keep himself fit. He's currently training for a triathlon, which takes place in Athlone in August.



those who are housebound, in nursing homes, etc. We also run the children's general anesthetic list, so we take out children's teeth in hospitals."

"The young patients are often very anxious kids who won't sit for a general dentist. Generally, our patients wouldn't be suitable for practice for various reasons and that makes them a bit more challenging to work with. They're more time-consuming. In practice, they don't need somebody coming in who's not able to lie back in the chair, or isn't able to open up their mouth too wide for very long." The now 46-year-old is based in the Health and Social Services Centre in Banbridge, Co. Down, and admits that he enjoys the challenge and variety that comes with community dentistry. When asked what his

favourite part of the job is, he replies with a laugh: "I quite like taking out teeth." Of course that's not the only enjoyable part of his job: "I do like relieving pain. If someone comes to you in a lot of pain and you can help that, it's quite satisfying. And if someone comes in and they're embarrassed about their teeth, you can help them so they're no longer embarrassed and give them a smile."

Returning to the rugby pitch

After hanging up his rugby boots in 2002, Paddy stayed away from the rugby spotlight for 10 years. However, following the 2011 Rugby World Cup, he felt it was a good time to get back on the pitch and try his hand at coaching. For this, he returned to his home club of Dungannon, where he spent the past two years as head coach.

Since re-immersing himself in the sport, Paddy has found that there's a huge difference between coaching rugby and playing it: "It can be a lot more frustrating to coach a team than to play in one. You have a lot less control of the outcome of the game. You can't always ensure they [the players] do what you want them to do, but it can be very satisfying too when a plan comes to fruition."

Dungannon had a disappointing year in 2013, and were relegated to Division 2A. However, Paddy says, despite this, he enjoyed his time coaching the team: "The players are all good lads. Just being in a team environment and on the bus and the pitch; it's the closest thing you can get to playing, without actually having to play."

Paddy admits he underestimated the mammoth effort that goes into coaching an amateur team. He reckons his work with Dungannon rugby club was taking up about 20 to 30 hours of his time a week between training, planning, matches and everything else that goes with it. "You play a match on a Saturday – you might be gone by 8.00am, and not back until 6.00pm or 7.00pm. After the game itself then you watch the video, that'll take an hour or two, then analyse it. After that you sit down and plan your training sessions for the next week. During the week you have training, making your phone calls to people who aren't going to be on the team, and so on."

This time pressure and family commitments has driven Paddy to take a step back from the helm of Dungannon rugby club: "This year there's a new coaching team coming in, so I may help out in the background without committing a lot of time, and hopefully they will bounce back [following relegation].

"My kids are at the stage where in another couple of years, they'll all be gone, so when that happens, I plan to get back into it. I underestimated the time commitment, and at the moment I need more time with my family."

Giving back

Paddy also does his bit for charity, and spent some time in Ethiopia last year with community-development organisation Plan Ireland. Although he had known about Plan prior to his trip (he and his wife have sponsored children under Plan UK for about 14 years), it was fellow rugby player and friend Malcolm O'Kelly who got Paddy directly involved in the organisation's work.

Malcolm is ambassador for Plan Ireland and when the 2013 Ethiopia trip clashed with the birth of his twins, he asked Paddy to take his place. With little hesitation, Paddy agreed to go: "It was nice to go and see what Plan actually do on the ground. I knew I was giving to sponsor a child, but I didn't know what was happening at the end of it. It was really good to see that every penny is put to good use. Plan's strategy is very good, they don't just go in and throw money at communities; they put a scheme in place, they've got an exit strategy, and what they do really makes a big difference. They enable the local community to manage the project themselves."

In Ethiopia, the delegation visited the projects that Plan had put together. One of them was a solar water project in a community in the middle of Ethiopia. Before the water pump was installed, the children

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August/September 2014 VOLUME 60 (4) : **179**

JOURNAL OF THE IRISH DENTAL ASSOCIATION

Rugby career

Paddy began playing rugby from an early age; he recalls he was around six or seven-years old when he and his two brothers first became regular faces around his local rugby club in Dungannon.

in the community would have to make a two-mile walk to the water twice a day to gather enough for the family. This task usually fell to the girls, who were as young as eight years of age. Paddy explains how Plan's simple project has helped the village to become more self-sufficient: "Plan got solar panels and put them in a pump and installed two miles of piping to pump the water up to the village. Now the villagers distribute water – they pay something like 2p for the water – and the money collected goes to the locals to fix anything that needs to be fixed – so it's all self-funding now. Once they have somebody that they can teach to fix any troubleshooting problems with the pump, Plan can step out.

"So now the kids don't have to collect water: they can go to school, they no longer need to get married at 12, they can get married at 16

Paddy had his international debut as a lock against Argentina in October 1990 at the age of 22. He played in both the 1995 and 1999 Rugby World Cups, and has won 59 caps for Ireland. Paddy retired from rugby in 2002.

and stay in school until that time, so it's starting to improve their lives. Something as simple as that has made a huge difference in that whole community."

The highlight of the trip for Paddy was seeing how happy and grateful the children they met were to Plan and its representatives. He's eager to encourage people to get involved with the charity, if only to sponsor a child themselves: "I really see the value in Plan, and if people reading this could think about sponsoring a child, I could certainly validate that it's worthwhile. Having been out there, I see they make a huge difference, and it's not a whole lot of money either."

If you are interested in sponsoring a child with Plan Ireland, visit www.plan.ie/sponsor-a-child/sponsor-a-child-today.



Diploma of Primary Care Dentistry Examination

The next sitting of the Diploma of Primary Care Dentistry Examination will be held in Dublin on October 6, 2014. The Diploma has been approved by the Dental Council and the examination has been developed in collaboration with the Irish Dental Association and the Irish Faculty of Primary Dental Care. The closing date for applications is August 29, 2014. The fee for the examination is €850. Any queries can be directed to Emma Scally at escally@rcsi.ie or phone +353 1 402 8617. Candidates are free to apply through the following weblink – https://postgradexams.rcsi.ie.

Intensive Revision Course Day

The Faculty of Dentistry will run an "Intensive Revision Course Day" on September 6, 2014 in the Albert Lecture Theatre, RCSI. The course will be examination focused and will provide helpful information and guidance for the Diploma and MFD examinations. Cost of registration for this revision course is \in 150. Programme details can be found on the Faculty website at http://dentistry.rcsi.ie. Following this revision course there will be another opportunity to register for the October diet of the Diploma examination. 7 CPD points will be awarded to course attendees.

POSTGRADUATE EDUCATION



Postgraduate Dental Education Programme Autumn 2014

Saturday morning modules of post-graduate dental education, with a strong focus on practice issues, and in preparation for membership examinations, have been organised by the Faculty of Dentistry, RCSI. These will take place in the Royal College of Surgeons in Ireland, 123 St. Stephen's Green, Dublin 2 on the dates mentioned below. The modules will start at 8.50am and will feature five 30 minute presentations until 1.00pm. A full programme is available on the Faculty website – http://dentistry.rcsi.ie

- Saturday, October 4th 2014
- Saturday, November 15th 2014
- Saturday, December 13th 2014
- 3.5 CPD points will be awarded to course attendees.

Registration

To register for the above online, please log on to the Faculty website – http://dentistry.rcsi.ie. Alternatively, you can contact the Faculty of Dentistry, RCSI by phone: 01 402 2256/2239 or by email: PDEprogramme@rcsi.ie. Cost €80 per Module or €350 for all four modules (including Revision Course).



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Ethics and dentistry

Dr ELEANOR O'HIGGINS answers questions from the Journal about ethics and dentistry.



What sets a profession apart from other groupings in society? A profession is identified by four interrelated hallmarks.

- A common body of knowledge which characterises the unique domain of expertise of the profession: this body of knowledge has to be updated continually through ongoing professional education.
- A registration system which offers a licence to practice the profession or admission into the profession: the register is maintained by a recognised body, such as the Dental Council, and is usually based on fulfilment of stipulated educational requirements accredited by the competent authority, the Council. The attainment of educational standards must be from a recognised institution. Therefore, the integrity of the registration system depends on verification that the educational institutions where members obtained their qualifications are recognised in the profession nationally and where there is agreement internationally.



Eleanor is on the faculty of the UCD School of Business, with interests in business ethics, corporate governance, corporate social responsibility and strategic management.

- Service of the public good: in contrast to commercial interests, professionals are expected to serve the public benefit, so professional values and standards are placed ahead of individual interests. In particular, the patient's or client's interests (the convention is to refer to recipients of professionals as 'clients', whilst in health related professions, such recipients are referred to as 'patients') take precedence over those of the professional. The Dental Council Code presents various elements of acting in the public interest, both through relationships with and the welfare of individual patients, as well as responsibilities to the community as a whole.
- A code of ethics/conduct: this is a shared code which stipulates a higher level set of principles or ethical tenets, and expected standards of conduct that reflect the stipulated principles. Professional codes go beyond what is legal. A code is of no use unless it is enforced, so the certifying body may monitor adherence to the code by members, and impose sanctions when expected standards are not maintained, up to expulsion from the register, even if the individual has not been found legally liable for any transgression. The classical example of a breach of ethics in dentistry and medicine is overtreatment.

How does judgment play a role in a profession?

Professionalism depends on more than possession of knowledge and clinical competence. It depends on the ability to apply that knowledge and competence appropriately, based on experience. Judgment relies on the integration of formal facts and tacit knowledge. Tacit

knowledge may be seen as 'unspoken knowledge that people draw on from within themselves: observations, ingrained habits, inspirations, hunches, and other forms of awareness that are typically not written down or codified, but that live in people's minds and bodies', defined by Ikujiro Nonaka, a Japanese guru in knowledge management. Therefore, good judgment is learned, but cannot be taught explicitly.

What ethical dilemmas are faced by business people, including health professionals who provide a service to patients, in relation to the idea of public good?

There are countless ethical dilemmas in both business and the professions, but I would like to mention one that is very important and common to both. This is the inequality in knowledge frequently found between sellers and buyers in business paralleled by inequality between professionals and clients. Thus, the client is highly dependent on the professional who could use his/her superior knowledge to mislead or take advantage of the client, e.g., a dentist recommending unnecessary treatments. In commercial transactions, this would correspond to the doctrine of *caveat emptor* – let the buyer beware. This was a doctrine that banks used when they gave out unsustainable loans to borrowers in the housing boom.

However, with professionals, it should be different. One would expect training on professional ethics to be a key part in the education and formation of dental students. Therefore, their pledge to act in the public interest and adhere to a code would prevent untrustworthy actions. It means that ethical behaviour does not have to be constantly enforced by law, which would be costly and largely impossible. Instead, we can reasonably expect that the members of the profession will instinctively do the right thing, even if they could get away with transgressions.

There is an understandable temptation for all of us to be swayed by self-interest as exemplified by more profitable treatment modalities over equally-effective, less-expensive interventions, or adopting a minimally invasive approach. The latter choices would make dental treatment more accessible to those in greatest need.

Why is a code of ethics or conduct so important for a profession?

It is not just important – it is a moral responsibility. As mentioned in response to the previous question, obedience to a professional code allows clients and the public generally to trust the members of the profession. This enhances the relationship between the professional and the client for the benefit of the client. Of course, the spirit as well as the letter of the code has to be upheld, just as law cannot in itself prescribe virtue, if people are determined to circumvent it. This is where a strong competent registration body is important in ensuring that the code is a living document to its members, not something to be got around.

What is your assessment of the Code of Professional Behaviour and Ethical Conduct published by the Dental Council of Ireland in February 2012?

It appears to be a helpful document covering the high level aspirations

of the profession, as well as the expected standards of day-to-day behaviour of dentists in relation to various stakeholders, like clients, fellow practitioners, and the community. However, it is important that practitioners use it in combination with The Code of Practice pertaining to Public Relations and Communications, The Code of Practice Related to the Display of Private Fees in Dental Practices, and The Code of Practice Relating to Non-Surgical Cosmetic Procedures, as all of these codes cover interrelated ethical issues.

What is trust and what are the important components of trust?

Trust is a core concept in professional practice. When you trust someone, you allow yourself to be vulnerable to that individual, even when you have no way of monitoring or controlling him/her, as you believe s/he will act in your interests even when s/he could get away with it if s/he took advantage of you. In that sense, you are willing to take a risk by exposing your vulnerability.

We trust those whom we consider to be trustworthy. So, that raises the question of how, or when, we consider someone to be trustworthy. Trustworthiness depends on three necessary components. One is ability or competence, i.e., that the person is competent, has the knowledge to do the job, so a dentist who is properly registered with the Dental Council would be considered competent. Another component of trustworthiness is benevolence, so we believe that a professional is putting a patient's real needs first. Then, integrity is a component of trustworthiness, the perception that the trustee adheres to a set of principles, consistent with the values and needs of the truster. This can be an issue of character. All three components of trustworthiness must be present for an individual to be trusted. So, I would not trust Mother Teresa to perform a tooth extraction on me, even if I were convinced of her benevolence and integrity.

Can you describe the relationship between risk and trust for a patient of a dentist?

Patients are able to trust dentists and put themselves into their hands when they believe the dentist is trustworthy, i.e., possesses all three components of trustworthiness. Competence would usually be ensured by the certification process. Belief of the patient in the benevolence and integrity of the dentist is usually built on a developing relationship, but before the patient visits a particular dentist, the benevolence and integrity of the dentist may be known to the prospective patient through word-of-mouth from other patient experiences and general reputation. Of course, nowadays, the internet and social media allow for speedy word-of-mouth reporting of experiences with particular professionals. Isn't there a website called, 'rate my dentist'? Of course, such websites are not always influenced by high-minded moral principles and are unfortunately open to abuse, so we have to be careful about trusting those websites themselves!

Why is integrity such an important concept for a profession?

Integrity and moral behaviour are inseparable. Integrity is a cornerstone of positive human interaction, especially where trust is necessary. Genuine relationships are based on integrity, and

professions are built on authentic personal relationships with clients. Such relationships would not be possible without integrity on the part of the professional.

Isn't integrity redundant in the modern world – and especially after the last 10 years in Ireland?

On the contrary – the last 10 years in Ireland have shown the disaster for society when there is a breakdown in integrity, so integrity is needed more than ever. This is what prompted President Higgins' pursuit of an ethics theme this year. Whilst integrity may be difficult to achieve when there is so much cynicism about, we should continue to strive for it – and professions should lead the way. If they fail to do so, they leave themselves open to stricter regulation and all that implies.

Genuine relationships are based on integrity, and professions are built on authentic personal relationships with clients.

What observations would you make about the difference between clinical errors and moral errors in relation to dentistry?

There is very little scope for clinical errors in health matters. Nevertheless, they do occur, unfortunately, and usually cannot be helped. However, when there has been carelessness, or perverse decisions have been involved, these are moral issues. Also, moral fallout from technical errors may occur when there is a cover up, or when a legal case is fought tooth and nail in court, even when the fault is obvious, so people who are already victims of error are subjected to further unnecessary stress. This may, of course, be at the behest of insurance companies. It is interesting that in a recent settlement by a school and a hospital involving a rugby injury to a schoolboy, his mother was disappointed at the fact that neither party had apologised for their avoidable mistakes, which had ruined the boy's life. Wouldn't such an apology have been simple, honest, and helped to diminish rather than compound the damage caused?

What is your view, in terms of the ethics of the profession, of the advent of a lay majority on the Dental Council?

It is a great idea, so dentists can understand the perspectives of patients and the public, and the possible negative and positive effects of their profession, grounded in actual cases. A combination of lay and professionals on the Dental Council enables an assimilation of perspectives and a more open, informed, comprehensive view of issues of concern than dentists on their own could obtain, even with the best of goodwill. In fact, lay majorities are now a common feature in professional regulatory bodies. In my experience, having served on the Press Council, which comprises a lay majority, for two terms, I have experienced this kind of decision making firsthand and it works really well, especially when everyone is interested in the fairest outcome. It is important to note that, although there was often

vigorous debate, there was no 'them and us' atmosphere on the Press Council, and never did the Council line up as press versus lay members on any issue during my time there.

Why is the use of disciplinary powers as important as their very existence?

If standards are to be taken seriously, they must be enforced, even if the vast majority of members are upstanding. Indeed, it would be ludicrous if those who failed to practice in an ethical manner were protected by the vast majority who do so.

Have you any observations on ethical issues faced by dentists (or healthcare professionals in general)?

As mentioned previously, dental and healthcare are of critical importance to patients and cannot be seen as a commodity. Since trust is so core, any actions that breach trust become ethical issues. These may range from matters to do with misinformation, medical negligence and professional misconduct, for example, when practitioners close ranks to protect fellow members who have obviously been guilty of breaches.

Based on your academic and professional observations, is Irish society becoming more or less ethical?

It is difficult to say – there is perhaps a greater awareness of ethics and wrongdoing, which would not have come to the fore in times past, when cover-ups and silence would have been the order of the day. I am thinking about issues like clerical child abuse and financial scandals. However, this is a small country where cosy relationships still hold considerable sway. Also, as a Canadian, I am surprised by the attitude often found in Ireland that refuses to acknowledge the responsibilities of citizens to contribute to social solidarity by paying for services such as water charges, taken for granted in most developed countries. Another characteristic I have encountered is the justification of antisocial acts such as tax evasion and fraudulent welfare claims as quite in order on the basis of oppression by the 'system', or 'everyone else is doing it'.

Would you have any specific message for dental students that are about to graduate and enter the world of patient care?

It would be to take seriously all four pillars of professionalism, and to always live up to the need for trustworthiness. Any compromise of principles is usually impossible to reverse, and instead, the beginning of a slippery slope, (if I may use a cliché), so don't fool yourself into believing that a small breach is just a once-off.

Is there any other comment or observation you would like to make in relation to ethics in dentistry?

If dentists put the interests of the patient first in all they do, not alone will they protect their patients' interests, and themselves from medicolegal consequences, they will be able to experience true personal satisfaction from having lived up to the noble aspirations of their profession.



Saliva – a protective oral lubricant and bio fluid

Saliva is a vital body fluid; without it continued healthy functioning of the oral cavity would not be possible. Over the last nine years, new research findings have increased the fundamental understanding of physiological secretory mechanisms in addition to a greater understanding of the role inorganic components of saliva play in protecting the oral cavity and the crucial part it plays in both oral and systemic health.

In terms of oral health, the multiple functions of saliva relate to its fluid characteristics and specific components, both of which are familiar and widely acknowledged by the dental profession.

The importance of saliva, however, extends beyond its local effects on the oral tissues. Considerable advances in salivary research have revealed the potential use of salivary assays in the diagnosis of a number of systemic and oral diseases

In addition, there has been an interest in using saliva as a means to a better understanding of cell-to-cell communications mediated by body fluids. Saliva also appears to play a part in the mechanism of extrinsic dental staining, mediated in part by certain salivary proteins termed proline-rich proteins (PRPs.) It has been proposed that PRPs may provide a protective mechanism against the detrimental health effects of dietary tannins. The role of saliva in the initiation of starch digestion via the action of salivary amylase is well known, however recent research has demonstrated that saliva may also help to transport critical nutrients for absorption from the GI system, in particular B12 as intrinsic factor complex in the ileum.

The importance of saliva therefore lies not only in its functions as a protective oral lubricant, but as a biofluid that protects both oral and systemic health. Saliva is a vital body fluid.

It has been scientifically proven that saliva stimulation by chewing sugarfree gum helps to increase the saliva flow-rate up to tenfold, which can reduce the risk of caries by up to 40%.

Please visit www.wrigleyoralhealthcare.ie

References available on request



Functions of saliva

- Mechanical cleansing of food and bacteria
- Lubricant of oral surfaces
- Protection of teeth and oro-oesphageal mucosa
- Oral acid neutralisation
- Anti-microbial activity
- Dissolution of taste compounds
- E Facilitation of speech, mastication and swallowing
- Formation of food bolus conducive for swallowing
- Initial digestion of starches and lipids
- Oesphageal clearance and gastric acid buffering





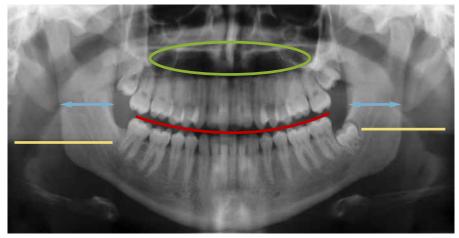


FIGURE 1: Indicators for assessing image quality.

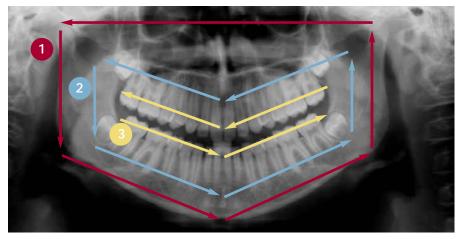


FIGURE 2: Assess the radiograph in an 'ever-decreasing' spiral.

Reading a panoramic radiograph

Poor-quality radiographs make diagnosis difficult or sometimes impossible. Rather than try and formulate a diagnosis or treatment plan from a poor radiograph, a decision should be made at an early stage to assess whether the exposure needs to be repeated or not. Panoramic radiographs have a number of inherent faults due to the mechanism by which the image is created, they are also hugely reliant on the positioning of the patient.

STAGE 1: Assess the quality of the radiograph

Figure 1 shows a number of indicators that

can help in assessing the image quality of a radiograph. The red line indicates the occlusal plane, this should follow a shallow arc, too flat and the patients' chin is too high; and too deep (or "smiley") and the patients' chin is down on their chest. The blue arrows indicate the widths of the right and left ascending rami, these should be approximately the same size; a difference may indicate the patient is rotated in the machine, causing more magnification on one side. The third indicator is the ghost shadows of the angles of the mandible, again these should be at approximately the same level. In this example the line on the left is

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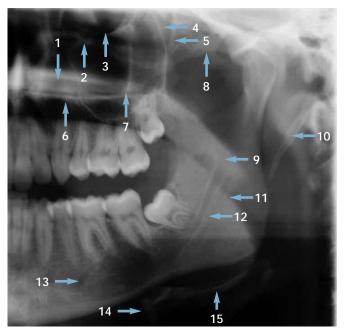


FIGURE 3: Normal anatomy seen on a panoramic radiograph (1-15).

1. Shadow of the hard palate

3. Inferior orbital margin

4. Pterygopalatine fissure

5. Lateral pterygoid plate

7. Zygomatic buttress

2. Lacrimal duct

antrum

6. Hard palate

- Zygomatic arch
 Soft palate
- 10. Styloid process
- 11. Dorsum of the tongue
- 12. Inferior dental canal
- 13. Mental foramen
- 14. Body of the hyoid
- 15. Greater wing of hyoid

higher that the line on the right, indicting that the head is tilted to the left. Finally, the green highlighted area shows an area of the image that is much darker than its surroundings; this is an air space shadow caused by air between the hard palate and the dorsum of the tongue. As can be seen, this often lies over the apical area of the maxillary teeth, making diagnosis difficult. By getting the patient to push their tongue against the roof of their mouth during exposure, this shadow can be reduced or eliminated. Exposure factors should be assessed, and be such that the contrast levels allow enamel. Dentine and bone should be distinguishable.

STAGE 2: Assess the whole radiograph in a logical fashion

One approach to assessing the radiograph is what could be described as the 'windscreen wiper' method, whereby the clinician casts their eyes from left to right and right to left, in an attempt to cover all the detail. A preferred method, as illustrated in **Figure 2**, is to assess the radiograph in an 'ever-decreasing spiral'. Starting at the right condyle, the assessment progresses along the lower border of the mandible, right round to the left condyle. From here, the assessment crosses the maxilla taking in the maxillary antra and the hard palate. The next

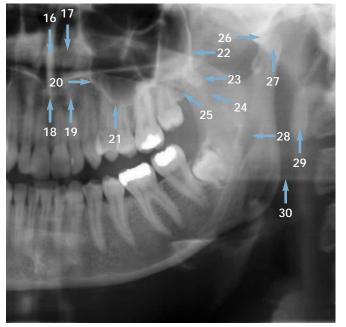


FIGURE 4: Normal anatomy seen on a panoramic radiograph (16-30).

- 16. Nasal septum
- 17. Inferior concha
- 18. Anterior nasal spine
- 19. Shadow of nasal cartilage
- 20. Medial wall of the
- 21. Floor of the antrum
- 22. Posterior antral wall
- 23. Hamulus

- 24. Coronoid process
- 25. Maxillary tuberosity
- 26. Articular eminence
- 27. Condylar head
- 28. Mandibular foramen
- 29. Earlobe
 - 30. Shadow of the angle of the mandible

sweep starts at the right sigmoid notch and carries around the mandible again, this time assessing the periapical tissues and the alveolar bone. From the left sigmoid notch, the eye is then cast across the peri-apical tissues of the maxillary teeth back to the starting point. The final sweep involves looking at each of the teeth and the alveolar bone.

STAGE 3: Remember the normal anatomy

Figures 3 and 4 (cropped panoramic images) show some of the normal anatomy seen on a panoramic radiograph. There are also a number of soft tissue shadows that appear on the image, and also a number of 'ghost shadows' that appear as a result of how the panoramic image is captured.

Conclusion

One of the main problems with panoramic radiographs is that often normal anatomy or one of these 'ghost shadows' can look like pathology. By assessing the quality of the radiograph, reading the radiograph in a logical fashion and remembering the normal anatomical images, it is possible to get the most from the radiograph.

Management of primary molar infraocclusion in general practice

PRECIS

Infraocclusion of primary molars is common. Appropriate management will be dictated by the patient's age, presence of a permanent successor, severity, and rate of progression.

ABSTRACT

Statement of the problem: Infraoccluded primary molars can be managed in general dental practice but clinicians need to understand when intervention is necessary. Purpose of the study: To review the current literature on infraocclusion in primary molars, and to demonstrate diagnosis and management strategies for general dental practitioners. Methods and materials: Current literature was sourced via PubMed search using multiple key words. Relevant articles are summarised within the article. Different management strategies will be illustrated using a section of cases of differing severities and age at diagnosis. All interventions, including conservative management, restorative, and surgical management will be reviewed. The importance of early diagnosis, continued monitoring, and interdisciplinary team work will be emphasised. Results: Infraocclusion of primary molars is a common clinical

finding, which can be diagnosed both clinically and radiographically. The severity of infraocclusion is classified according to the relationship of the occlusal surface of the tooth relative to adjacent teeth. The age of the child at diagnosis and rate of infraocclusion play a pivotal role in case management. The majority of primary molar teeth exfoliate naturally when the permanent successor is present, however active intervention may be required in some cases. Possible management techniques include extraction, restoration, and luxation of these teeth.

Conclusions: All children in the mixed and primary dentition should be assessed for infraocclusion of primary molars, particularly mandibular molars. Accurate dental records are essential to assess the severity and monitor the rate of progression of infraocclusion so that the condition can be appropriately managed.

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Table 1:	Classification	of infraocclusion. ⁷
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Severity	Definition	Clinical example
Slight	Between occlusal surface and interproximal contact, less than 2mm.	Figure 1
Moderate	Within occluso-gingival margins of interproximal contact.	Figure 2
Severe	Below interproximal contact point.	Figure 3



FIGURE 1: A clinical photograph of slight infraocclusion.

Infraocclusion of primary molars is a common clinical finding. It describes a tooth that has failed to maintain its position relative to adjacent teeth in the developing dentition and is therefore, inferior to the occlusal level.¹

The age of the child at diagnosis and the rate of progression of infraocclusion play a pivotal role in case management. Early diagnosis of infraocclusion within a general practice setting is important in ensuring appropriate management of these cases.

This article reviews the current literature on infraocclusion of primary molars and explains diagnosis and management strategies within general practice.

Introduction

The prevalence of infraocclusion of primary molars is most commonly reported to be in the region of 1.3-8.9%,² however it can be as high as 38.5%.³ The peak prevalence is in eight-to-nine year olds,² with a higher incidence between siblings.^{2,4,5} Infraocclusion has been reported to be common in Caucasians with no gender bias noted.⁶ Overall, mandibular molars are more commonly affected than maxillary molars^{3,5} with the mandibular first primary molar being the most commonly affected tooth.^{2,7} Infraocclusion often presents bilaterally with all teeth showing similar degrees of infraocclusion.^{5,8,9}



FIGURE 2: A clinical photograph of moderate infraocclusion.



FIGURE 3: A clinical photograph of severe infraocclusion.

Aetiology

Infraocclusion is widely believed to be due to ankylosis.^{10,11} It is suggested that damage to Hertwigs epithelial root sheath leads to a break in continuity of the periodontal membrane,⁶ causing direct contact of cementum or dentine with bone.¹²

Genetic factors have also been suggested given the increased incidence of infraocclusion amongst siblings.^{2,4} In addition, children with one infraoccluded primary molar can frequently develop infraocclusion of additional teeth.⁵ There is an increased frequency of other dental anomalies in children who have infraoccluded teeth such as ectopic eruption of first permanent molars, peg laterals, enamel hypoplasia and palatal displacement of maxillary canines.¹³

Another factor thought to play a role in infraocclusion of primary molars is the absence of a permanent successor tooth.¹⁴ Up to 65.7% of patients with developmentally-absent permanent premolars showed infraocclusion of primary molar teeth.¹⁵

Classification

The severity of infraocclusion was defined by Messer and Cline in 1980 as mild, moderate or severe. (Table 1)

It is important to accurately record the severity of infraocclusion at each assessment, so that the amount and rate of progression of infraocclusion can be monitored. Infraocclusion can be recorded



FIGURE 4: A clinical photograph of an altered occlusal plane due to infraocclusion.

Table 2: Consequences of infraocclusion of primary molars and their implication for the patient.^{13,17,21}

Consequences of infraocclusion of primary molars	Implication for patient
Tipping of adjacent teeth	 Orthodontic treatment to upright tooth. Risk of caries. Increases need for active intervention.
Overeruption of opposing teeth	 Orthodontic treatment.
Lateral open bite or crossbite	 Increased need of orthodontic treatment.
Caries of infraoccluded teeth or adjacent teeth	 Restorative dental treatment. Extraction if causing pain or infection.
Hypoplasia or deflection of successor tooth	 Restorative dental treatment.
Impaction of successor tooth	Extraction if severe.
Delayed exfoliation of primary tooth	 Delay in commencing orthodontic treatment.
Progression of infraocclusion	 Possible need for extraction if rapid.
Early extraction of severely infraoccluded primary molar	 Space maintenance. Orthodontic treatment to correct space loss.
Increased difficulty of extraction	 Fracture of primary molar tooth/retained roots. Surgical extraction.



FIGURE 5: An OPG radiograph of an altered occlusal plane due to infraocclusion.

clinically with direct measurement using adjacent teeth as reference or with clinical photographs. Many clinicians also use study models already available for orthodontic treatment planning.

Diagnosis

A diagnosis of infraocclusion is made by clinical examination where a disturbance in the occlusal plane is evident. The infraoccluded primary molar tooth will lie apical to the occlusal plane (**Figure 4**).¹⁶ These teeth have the classical, high-pitched, 'cracked-teacup' sound of ankylosis when percussed with a metal instrument.¹² Radiographs are required to verify the presence or absence of the permanent successor.

Radiographs also illustrate a step in the occlusal plane and there is often an angular defect of alveolar bone which is angled towards the ankylosed tooth (**Figure 5**).¹⁶ Many clinicians will take an orthopanograph radiograph rather than periapicals, due to the association of infraocclusion with bilateral presentation and other dental anomalies and to determine any orthodontic treatment need. A combination of a clinical and radiographic assessment is advised to rule out other causes, such as primary failure of eruption, impaction or other pathology.¹⁷

Consequences

The potential consequences of infraoccluded teeth have been widely reported in the literature and are summarised in **Table 2**.^{14,18,19} Several of these consequences are clearly illustrated in **Figure 6**.

Treatment planning

There are several different factors that will influence the management of infraoccluded teeth. These factors must be considered when a patient presents to general practice with infraocclusion to determine if they can be managed appropriately or require referral on for specialist management. These include the presence or absence of a permanent successor, age of onset and severity, rate of progression of infraocclusion, tipping of adjacent teeth, presence of other anomalies and other concurrent dental needs of the patient.



FIGURE 6: A clinical photograph illustrating the consequences of infraocclusion.

Presence of a permanent successor

Children presenting with an infraoccluded primary molar should have radiographs taken to assess for the presence of a permanent successor. It has been reported that 96.7% of infraoccluded primary molars, with a permanent successor present, exfoliate with normal eruption of the permanent successor with a delay of up to six months compared to a contralateral, non-infraoccluded primary molar.²⁰

Mild to moderately-infraoccluded primary molars with a permanent successor should be monitored clinically at three to six-monthly intervals and may require no intervention.²¹ Radiographic review should be undertaken if there is rapid progression or need for intervention. It may also be advisable to re-establish the mesio-distal dimension and occlusal table of an infraoccluded tooth in mild or

Table 3: How to monitor infraocclusion of primary molars in general dental practice.

- 1. Record the number and position of infraoccluded teeth.
- 2. Measure and record the severity of infraocclusion (use a periodontal probe, photo).
- 3. Take radiographs to determine the presence or absence of successor.
- 4. Determine if active intervention or monitoring of infraocclusion is required.
- 5. Inform parents of teeth involved and need to return for reevaluation.
- 6. Review patient at three-to-six monthly interval to reassess the rate of progression of infraocclusion in conjunction with other dental needs.
- 7. Subsequent radiographs may be required.
- 8. Establish an appropriate interval and re-evaluate treatment options for the infraocclusion at each recall appointment.



FIGURE 7: A clinical photograph of a composite build-up on an infraoccluded mandibular molar without a permanent successor.

moderate cases. This can be completed using composite crowns or onlays or possibly with the placement of a stainless steel crown without occlusal reduction.

Reasons for considering extraction of infraoccluded primary molars with a permanent successor include: an altered path of eruption for the successor; failure of root resorption; delayed exfoliation of the primary tooth beyond six months; or, significant tipping of adjacent teeth causing occlusal discrepancies.²¹

Other patient-related factors, such as concurrent dental treatment need, medical history, and the behaviour of the child will also influence the decision and timing of any intervention for infraocclusion. A more aggressive approach will be considered if a child is planned for a dental general anaesthetic visit. Alternatively, extractions should be avoided in immunocompromised children or those with bleeding disorders and a more conservative approach for severely infraoccluded teeth is advised.

In addition, a space maintainer can be considered to maintain arch length. It may be in the interest of the patient to consider an orthodontic consultation if there are additional orthodontic issues or significant space loss due to the infraocclusion. The general dental practitioner is well placed to monitor these children.

The absence of a permanent successor

When a patient presents with an infraoccluded primary molar tooth without a permanent successor, a decision needs to be made whether to retain or extract this tooth. The rate of progression of infraocclusion, age at diagnosis and rate of root resorption in addition to the orthodontic needs of the patient play a role in treatment planning.^{22,23} An orthodontic opinion would be advisable.

Infraocclusion of late onset with a slow progression and root resorption will generally be retained for longer periods, perhaps indefinitely.¹⁹ Mild to moderately infraoccluded teeth without a permanent successor in uncrowded arches may be retained and restored to function.¹⁷ Restoration may be completed with full-coverage composite onlays. (Figure 7). Such restorations will restore the occlusal level of the infraoccluded tooth, preventing tipping of



FIGURE 8: A clinical photograph of a severely infraoccluded mandibular right second molar in a five-year old.

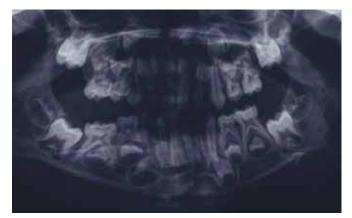


FIGURE 9: An OPG radiograph of a severely infraoccluded mandibular right second molar in a five-year old.

adjacent teeth and overeruption of the opposing dentition, however it is impossible to predict when these teeth will exfoliate, or if they will be retained indefinitely. Alternatively extraction may be warranted in crowded arches which require orthodontic treatment; this should only be completed as part of an orthodontic treatment plan.

Age of onset and severity

While the peak age of infraocclusion has been reported to be around eight to nine-years old² with most ankylosed primary molars showing slight-moderate infraocclusion,²¹ it can be seen in younger children. As infraocclusion is often progressive,²¹ its presentation in a younger child can lead to a more severe infraocclusion, leading to an absence of vertical alveolar development at that site and possibly deflection of the permanent successor.

Figure 8 shows an intraoral image of a five-year-old child who presented with a severely infraoccluded 85. Clinically, there was distal tipping of tooth 84 towards the infraoccluded tooth. Radiographic examination showed the presence of all permanent successors (Figure 9). Clinically and radiographically caries were observed.

The decision to extract this tooth was made due to the severity of infraocclusion at a young age and the evidence of caries in the tooth. On-going monitoring of the eruption of 46 and 45 will be required with the likelihood of space maintenance.

Rate of progression of infraocclusion

The rate of infraocclusion can vary from slow to fast and will dictate the likelihood for intervention. Late onset cases usually show milder infraocclusion and can often be managed more conservatively.¹⁹ If the tooth shows a rapid rate of infraocclusion, particularly at an early age,

August/September 2014 196 : VOLUME 60 (4) there is a greater potential for disruption of alveolar development, whether or not there is a permanent successor. Teeth exhibiting rapidly progressive infraocclusion are usually extracted to limit the extent of vertical defect of bone. The younger the age at diagnosis and the more severe classification, the increased likelihood of intervention.

Tipping of adjacent teeth

Severe infraocclusion of a primary molar tooth can lead to tipping of adjacent teeth and subsequent loss of arch length. Infraocclusion may also lead to food impaction at the site, which may increase caries risk in the infraoccluded tooth or adjacent teeth.¹⁴

It is important for the general practitioner to be vigilant for signs of a food trap or poor oral hygiene in the area of infraocclusion. Appropriate oral hygiene advice should be given regularly to the patient and their parents to prevent the development of carious lesions and the regular use of topical fluoride will aid in caries prevention.

When extraction is the preferred treatment choice for an infraoccluded primary molar, it is important to note that such teeth are more prone to fracture due to ankylosis. Atraumatic extraction technique, including luxation to disrupt the bony union between the alveolus and ankylosed tooth, should be considered before forceps extraction. Surgical extraction may be necessary in teeth with severe infraocclusion, or where access is impeded. Extraction of infraoccluded teeth may be warranted if it is felt that the tipping will cause significant loss of arch length, overeruption of opposing teeth and prevent the eruption of the successor tooth.²¹ Space can be created to improve access by the use of an orthodontic appliance so that management of infraocclusion can be incorporated into an



FIGURE 10: A clinical photograph of a sectional fixed-orthodontic appliance to correct a tipped mandibular molar.



FIGURE 11: An OPG radiograph of a nine-year-old boy with infraoccluded deciduous molars and the presence of permanent successors.

overall treatment plan (Figure 10). This can allow for a more straightforward extraction of the infraoccluded tooth, or even promote eruption of the infraoccluded tooth and prevent the need for further intervention.

Luxation is a treatment that has been discussed in the literature. The tooth is luxated to break the ankylosis and the tooth is retained following luxation to allow continued eruption of the tooth. This technique has had some success.^{6,14} A recent case reported an infraoccluded primary molar in a five-year old, which was luxated twice over a one-month period.²⁴ The tooth subsequently erupted, reaching the occlusal level of the primary dentition.²⁴ While such results are encouraging, further research is required to determine the success rate of this treatment modality.

Presence of other infraoccluded teeth

Children with one infraoccluded tooth frequently have other teeth that subsequently present with infraocclusion.⁵ Infraocclusion is often bilateral with the teeth showing similar degrees of infraocclusion.^{5,8,9} This is likely to be the most common clinical scenario presenting to general practice and when a child presents with an infraoccluded primary molar tooth it is important to regularly review this patient to monitor for infraocclusion at other sites. The number of infraoccluded teeth can impact on the decision to extract or monitor as having multiple infraoccluded teeth can increase space loss or play a role in patient management if multiple extractions are required.

Figure 11 shows an OPG radiograph of a nine-year-old boy who presented with infraoccluded 55, 75 and 85. Teeth 55 and 85 were moderately infraoccluded and tooth 75 classified as slight infraocclusion. All these teeth were caries-free, had permanent

successors and there was no clinical evidence of tipping or space loss. The decision was made to place this child on a three-monthly review schedule to monitor the infraocclusion. None of the teeth progressed beyond moderate infraocclusion and all teeth subsequently exfoliated naturally and the permanent successors erupted as anticipated.

Conclusion

- 1. All children in the primary and mixed dentition should be examined for infraocclusion at their routine dental visits, as early diagnosis can simplify treatment.
- 2. If an infraoccluded tooth is noted, the remaining primary molars should be monitored, as they are at a higher risk of infraocclusion.
- 3. Accurate dental records describing the severity of infraocclusion in relation to adjacent teeth are essential to monitor the rate and severity of the infraocclusion.
- 4. Clinical diagnosis of infraocclusion and radiographic determination of the presence or absence of a permanent successor are prognostic factors for management.
- 5. An assessment of the severity and rate of progression of infraocclusion, in addition to the child's other dental needs, are important to determine if the patient can be appropriately managed in a general-practice setting or if referral for specialist treatment is advisable.
- 6. Oral hygiene instruction should be stressed and preventative regimes implemented to reduce the risk of caries in either the infraoccluded or adjacent teeth.
- 7. Space maintenance and/or an orthodontic consultation is advised when permanent successors are absent, multiple teeth are involved or where there is rapid progression of infraocclusion.

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Periodontal pathogens and associated factors in aggressive periodontitis: results 5 to 17 years after active periodontal therapy

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Abstract: To assess the association between presence of periodontal pathogens and recurrence of disease in patients with aggressive periodontitis (AgP) after active periodontal therapy (APT) and further influencing factors.

Material and methods: Microbiological samples were taken from 73 patients with AgP 5 to 17 years after APT at 292 sites (deepest site per quadrant). Real-time polymerase chain reactions were used to detect the periodontal pathogens Aggregatibacter actinomycetemcomitans, Porphyromonas gingivalis, Tannerella forsythia and Treponema denticola. Uni and multivariate analyses evaluated the associations between pathogens and recurrence of disease, smoking and adjunctive antibiotic therapy.

Results: At re-examination A. actinomycetemcomitans could be detected in six patients (8.2%), P. gingivalis in 24 (32.9%), T. forsythia in 31 (42.5%) and T. denticola in 35 (48.0%). Increased levels of T. forsythia and T. denticola at re-examination were significantly associated with recurrence of disease in multivariate analyses (OR: 12.72, p < 0.001; OR 5.55, p = 0.002 respectively). Furthermore, high counts of T. denticola were found in patients with increased percentage of sites with clinical attachment levels (CAL) \geq 6 mm compared to those with low counts (13.8% versus 3.2%, p = 0.005). **Conclusion:** In patients with recurrence of disease T. forsythia and T. denticola were frequently and in higher counts. Furthermore, T. denticola was found more frequently in patients with increased CAL.

Journal of Clinical Periodontology. 2014; 41 (7): 662–672.

Complication and failure rates with implant-supported fixed dental prostheses and single crowns: a 10-year, retrospective study

Wittneben, J.G., Buser, D., Salvi, G.E., Bürgin, W., Hicklin, S., Brägger, U.

Purpose: Clinical studies related to the long-term outcomes with implant-supported reconstructions are still sparse. The aim of this 10-year retrospective study was to assess the rate of mechanical/technical complications and failures with implant supported fixed dental prostheses (FDPs) and single crowns (SCs) in a large cohort of partially edentulous patients.

Materials and methods: The comprehensive multidisciplinary examination consisted of a medical/dental history, clinical examination, and a radiographic analysis. Prosthodontic examination evaluated the implant-supported reconstructions for mechanical/technical complications and failures, occlusal analysis, presence/absence of attrition, and location, extension, and retention type.

Results: Out of 397 fixed reconstructions in 303 patients, 268 were SCs and 127 were FDPs. Of these 397 implant-supported reconstructions, 18 had failed, yielding a failure rate of 4.5% and a survival rate of 95.5% after a mean observation period of 10.75 years (range: 8.4–13.5 years). The most frequent complication was ceramic chipping (20.31%) followed by occlusal screw loosening (2.57%) and loss of retention (2.06%). No occlusal screw fracture, one abutment loosening, and two abutment fractures were noted. This resulted in a total mechanical/technical complication rate of 24.7%. The prosthetic success rate over a mean follow-up time of 10.75 years was 70.8%. Generalised attrition and FDPs were associated with statistically significantly higher rates of ceramic fractures when compared with SCs. Cantilever extensions, screw retention, anterior versus posterior, and gender did not influence the chipping rate.

Conclusions: After a mean exposure time of 10.75 years, high survival rates for reconstructions supported by sand-blasted, large-grit, acid-etched implants can be expected. Ceramic chipping was the most frequent complication and was increased in dentitions with attrition and in FDPs compared with SCs.

Clinical Implant Dentistry and Related Research. 2014; 16 (3): 356–364.

Pulpal response to sensibility tests after traumatic dental injuries in permanent teeth

Bastos, J.V., Goulart, E.M., de Souza Côrtes, M.I.

Background/aim: The assessment of pulp vitality is one of the major challenges in dental traumatology due to the temporary loss of sensibility after trauma and because of the limitations of conventional pulp tests. The aim of this study was to evaluate pulpal response to sensibility tests and to determine their accuracy after crown fractures and luxation injuries.

Materials and methods: A total of 121 permanent anterior teeth from 78 patients treated at the Dental Trauma Clinic of the Federal University of Minas Gerais were evaluated. Responses to pulpsensibility tests were monitored for a minimum period of 24 months or until the diagnosis of pulp necrosis.

Results: At the first appointment, 68 teeth responded positively to sensibility tests, one tooth was necrotic and 52 teeth did not respond to sensibility tests but showed no other signs of necrosis. The initial lack of response was not associated with age (P = 0.18), but was related to the presence of luxation (P < 0.001). At the final appointment, 87 teeth were classified as vital and 31 were classified as non-vital. While a positive response shortly after trauma was a good predictor of vitality, a lack of response was not associated with subsequent necrosis. The final pulpal condition of the teeth that

initially did not respond was associated with the type of injury, as displaced teeth tended to develop necrosis (P = 0.008). The accuracy of each sensibility test at the initial and final appointments was, respectively, 55.1% and 67.8% for the heat test, 55.9% and 77.9% for the cold test, and 57.6% and 89% for the electrical test.

Conclusions: A temporary loss of sensibility was a frequent finding during post-traumatic pulpal healing, especially after luxation injuries. All sensibility tests presented low accuracy shortly after trauma. The electrical test provided the best support for pulpal diagnosis after long-term follow up. The clinician must be aware of additional signs of crown discoloration and radiographic changes before initiating endodontic treatment.

Dental Traumatology. 2014; 30 (3): 188-192.

A comparison of cone beam computed tomography and periapical radiography for the detection of vertical root fractures in nonendodontically treated teeth

Brady, E., Mannocci, F., Brown, J., Wilson, R., Patel, S.

Aims: To compare in an *ex vivo* model, the diagnostic accuracy of periapical radiography and cone beam computed tomography (CBCT) for the detection of artificially induced incomplete and complete vertical root fractures (VRFs), and to determine whether the width of the VRFs had an impact on the diagnostic accuracy of the imaging systems.

Methodology: Incomplete VRFs were induced in 30 nonendodontically treated human mandibular premolar and molar teeth. VRF widths were measured using optical coherence

Quiz answers (Questions on page 166)

- **ASSESSMENT:** Use methods to risk assess, such as a caries riskassessment checklist. This would enable the practice to establish a need for prevention methods and determine high-risk patients.
- **CREATE PRACTICE POLICY/UPSKILL:** Using the dental teams existing skills, upskilling and training programmes and setting clear practice policies. Communication is key, it starts within the dental team.
- **PREVENTION ADVICE:** By informing parents on changes in delivery of prevention, this can accommodate an extra fee for going that extra mile. This could be added to the price of an examination or set as a fee for a separate oral health education session.
- **PREVENTION TREATMENTS:** Levels of fluoride toothpaste and mouthwash to meet caries risk. Once parents are informed on the importance of prevention and understand what it actually is, they

tomography. Complete VRFs were induced in 15 of these teeth. 3D Accuitomo and i-CAT CBCT scans and periapical radiographs were taken prior to and after fracture induction. Receiver operating characteristic (ROC) analysis was carried for each imaging technique. In addition, values for sensitivity, specificity, positive and negative predictive values, inter- and intra-examiner agreement were calculated.

Results: In the ROC analysis, both CBCT scanners were significantly more accurate than periapical radiography for the detection of incomplete VRFs (P < 0.05). The overall area under the ROC curve (AUC) values for 3D Accuitomo, i-CAT and periapical radiography were 0.687, 0.659 and 0.540, respectively. The sensitivity of 3D Accuitomo, i-CAT and periapical radiography was 27%, 28% and 3% respectively. Interexaminer agreement for the detection of incomplete fractures with periapical radiographs, 3D Accuitomo and i-CAT was 0.020, 0.229 and 0.333, respectively. Both CBCT scanners were significantly more accurate (P < 0.01) in detecting VRFs of \geq 50 m compared with VRFs of <50 m. 3D Accuitomo (0.999) and i-CAT (0.998) were significantly higher (P < 0.05) than for periapical radiography (0.724).

Conclusions: Under the conditions of this *ex vivo* study, periapical radiographs and CBCT were unreliable for the detection of simulated incomplete VRFs. The widths of the fractures appeared to have an impact on the diagnostic accuracy of CBCT as the detection of VRFs of \geq 50 m was significantly higher than those of <50 m. The detection of complete fractures was significantly higher for all systems than that of incomplete fractures.

International Endodontic Journal. 2014; 47 (8): 735-746.

are more likely to want to invest in prevention treatments such as fluoride varnish application and fissure sealants.

SOCIAL NETWORKING: Advice and advertisement via social media.

- **COMMUNITIES:** Involving local businesses, schools and communities.
- **POLICY:** As health professionals, individuals, and families, we can play a vital part in shaping our future. Highlighting issues for the political agenda and being part of our dental associations and dental councils can make us a stronger unit.
- **BELIEF AND PASSION:** If the dental team believes in the advice we give, in turn we can enable and empower our patients.

For more information on oral health promotion please feel free to contact Kellie at: oralhealth@idha.ie or thedentalden@gmail.com.







Only NSAID available in an oral solution¹

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Keral@ 25 mg granules for oral solution (dexketoprofen). Prescribing Information Please consult the Summary of Product Characteristics (SPC) for full prescribing information. Presentation: Sachets containing 25 mg Dexketoprofen, as dexketoprofen trometamol).

Use: Short term symptomatic treatment of acute mild to moderate pain

Dosage: Adults: 25mg every 8 hours or 12.5mg every 4-6 hours. Maximum daily dose 75mg. Use lowest effective dose for the shortest duration necessary to control symptoms. For acute pain administer 15 minutes before meals. For short term use only. In the elderly or those with mild-moderate bepatic dysfunction or mild renal dysfunction, initial maximum daily dose of 50mg. Close monitoring advised in the elderly or those with hepatic dysfunction. Not recommended for children or adolescents

critizen or adoescensis. Contra-indications: Hypersensitivity to dexketoprofen, the excipients or other NSAIDs, NSAID induced attacks of asthma, bronchospasm, acute thintils, or nasal polyps, utilicaria or angioneurotic oederna. Known photoallergic or phototoxic reactions during treatment with ketoprofen or fibrates. History of gastrointestinal bleeding or perforation related to previous NSAIDs therapy. History of or active peptic ulcer/haemorrhage, chronic dyspepsia or suspected peptic ulcer/ haemorithage, other active bleeding or bleeding disorders, Crohn's disease or ulcerative colitis, severe heart failure, moderate-severe renal dysfunction, severe bepatic dysfunction, haemorrhagic diathesis and other coagulation disorders,

moderate-server rena hystocolon, server expand upstocolon, namemorragic damests and other coagulation discretes, server dehydration, during the third trimester of pregnancy and lactation. Warnings and precautions: Caution in allergic conditions. Avoid use with concernitant other NSAOs including COX-2 selective inhibitors. Use lowest effective dose for the shortest duration necessary to control symptoms. Gastrointestinal bleeding, ulceration or perforation which can be fatal, have been reported with all NSAOs at anytime during treatment, with or without warning symptoms or a previous history of serious gastrointestinal events. When gastrointestinal bleeding or ulceration occurs withdraw treatment. The risk of gastrointestinal bleeding, ulceration or perforation is higher with increasing NSAID doses, in patients with a history of ulcer, particularly if complicated with haemorrhage or perforation, and in the elderly. The elderly have an increased frequency of adverse reactions to NSAIDs especially gastrointestinal and in the elderly. The elderly have an increased frequency of adverse reactions to NSAUs especially gastrointestinal bleeding and perforation which may be tatal. Commence treatment in these patients on the lowest does available. Ensure cure of oesophagits, gastrilis and/or peptic ulcer before starting treatment. Monitor patients with history of G disease. Special care with NSAUs in patients with a history of gastrointestinal disease (ulcerative collis, cronin's disease). Consider combination therapy with protective agents (e.g. misoprostol or proton pump inhibitors), and in patients requiring concomitant low does aspirin, or other drugs likely to increase gastrointestinal risk. Monitor patients with a history of gastrointestinal toxicity, particularly when elderly, for unusual abdominal symptoms (especially gastrointestinal bleeding) particularly in the initial stages. Caution in patients receiving oral corticosterorids, anticoagulants, SSRIs or arti-platelet agents. Do not use with writarin, other cournains or hepatin. Caution in patients with impaired trenal function, receiving diuretic therapy or those who develop hypovolamia. Ensure adequate fluid intake, may increase plasma urea nitrogen and creativine. Caution in patients with impaired hepatic function. May increase some liver parameters. Monitor and advise patients with hypertension and/or mild to moderate heart failure. Special caution in patients with cardiac disease, especially episodes of previous heart failure. Monitor and advise patients with a history of hypertension and/or mild to moderate congestive heart failure as fluid relation and oederma have been reported. Some NSADs (particularly at high does and long term treatment) may be associated with a small increased nick of its particularly at high does and long term treatment may be associated with a small increased nick of its particularly in high does and long term treatment may be associated with a small increased nick of the second nick of the semain as and increased nick of th Some NSAEs (particularly at high doses and long term treatment) may be associated with a small increased risk of arterial thrombotic events (e.g. myocandial infarction or stroke). Careful consideration before treating patients with uncontrolled hypertension, congestive heart failure, established ischaemic heart disease, peripheral arterial disease, and/ or cerebrovascular disease. Similar consideration before initiating longer-term treatment of patients with risk factors for cardiovascular disease (e.g. hypertension, hyperlipidaemia, diabetes mellitus, smoking). Serious skin reactions (some

of them fatal), including extolative dermatitis, Stevens-Johnson syndrome, and toxic epidermal necrolysis reported very In their hala, including involute demands, commission synthetic, and toxic operation in recording reported way rarely. Discontinue treatment at the first appearance of skin rash, mucosal lesions, or any other sign of hypersensitivity Particular caution in patients with congenital disorder of porphytin metabolism, dehydration, directly after major surgery. If long term use necessary, monitor hepatic and renal function and blood count. Stop treatment at first signs of severe hypersensitivity reactions. Avaid use with varicella. Caution in patients with haematopoietic disorders, systemic upus erythematosus or moved connective tissue disease. As other NSAIDs, deviketoprofen can mask the symptoms of infectious eases. Contains sucrose

decesses, contains success. Interactions: Other NSADa, anti-coagularits, heparins, corticostaroids, lithium, methotrexate, hydantoines and suphonamides, diurettics, ACE inhibitors, antibacterial aminoglyocides and angiotensin II receptor antagonists, pentosyfiline, zidovudine, suforyluneas, beta-blockers, cyclosporin and tacrolimus, thrombolytics, anti-platelet agents and SSRs, probenecid, cardiac glycosides, mitepristone, quincione antibiotics.

Pregnancy and lactation: Do not use in pregnancy, lactation or in women attempting to conceive. Undesirable effects: As with other NSADs, the most commonly observed adverse events are gastrointestinal.

Unders, perforation or gastrointestinal beaching, iber indis construited y develope event and gastrointestinal registrointestinal registrointestin neutropenia, thrombocytopenia, anaphylactic reaction including anaphylactic sbock, blurred vision, timitus, tachycardia, hypotension, bronchospasm, dyspnoea, pancreatitis, hepatocellular injury, Stevens Johnson syndrome, toxic epidermal necrolysis (Lyell's syntrome), angloedema, facial oedema, photosensitivity reactions, prurtus, nephritis or neptrotic syndrome. Not known laryngeal oedema, hepatitis, acute renal failure. As with other NSAIDs the following undesirable effects may appear; aseptic meningitis, which might predominantly occur in patients with systemic lupus erythematosus or mixed connective tissue disease; and haematological reactions (purpura, aplastic and haemolytic anaemia, and rarely agranulocytosis and medullar hypoplasia).

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References:

1, MMS edition, November 2013 2. Keral 25 mg granules for oral solution Summary of Product Characteristics, last updated September 2013

December 2013 / 13Keral014

Handling a complaint after patient has moved

DR SUE BOYNTON from Dental Protection discusses the learning points from this anonymous case.

Because of her new job, the patient in this case decided to change her dentist because it was now difficult for her to get to the practice during working hours. The same dentist (Dr A) had treated her for the past 20 years.

Different eyes

She booked an examination with another dentist (Dr B) near her new place of work. At the initial examination, the dentist commented that a number of her very heavily restored teeth required crowns and some of the old fillings needed replacement. He took radiographs and photographs of her mouth, which showed many large amalgam restorations. Dr B said that although there was no evidence of decay, a number of the existing restorations were exhibiting signs of wear. He advised her that the treatment was necessary and although expensive, should ensure that she would require little or no treatment in the years to come.

The patient was distressed to learn that she needed so much treatment and felt she had been let down by her original dentist for not advising her about such treatment at an earlier stage. She also felt financially disadvantaged because her previous job provided insurance for her dental treatment, something which she had given up in her current position. Because the cost of the recommended treatment was substantial, she considered seeking financial compensation from Dr A and she decided to write to him.

An angry letter

The patient's letter, accompanied by Dr B's treatment plan and estimate, accused Dr A of failing in his professional responsibility and explained why she was now expecting financial compensation.

'....I trusted you for 20 years and was extremely distressed when Dr B told me about my current treatment needs.'

'.... If only you had pointed this out much earlier, my treatment would have been funded by insurance. I have a new job and that financial responsibility is now mine. I just can't afford that amount of money and so I expect you to compensate me for the cost of all the extra treatment I need.'

Dentist A contacted Dental Protection for advice. He was hurt because the patient had totally accepted the word of the new dentist she had only met for 20 minutes, rather than believing in his own professional integrity built up over the 20 years under his care. He was also angry

August/September 2014 202 : VOLUME 60 (4) because Dentist B, in his view, was suggesting treatment which was unnecessary. He hoped that the serial bitewing radiographs of this patient, taken over the years, could demonstrate that the patient did not require any additional treatment when last he had examined her mouth. The dentist's letter to us explained his feelings:

'.... I feel extremely hurt by the patient writing to me in this way. Her new dentist has prescribed treatment that is completely unnecessary. How can he justify the unnecessary destruction of the dental tissues? I will also send a copy to the patient.'

Vindication

Dental Protection examined the patient's records and radiographs from Dr A and agreed there was no evidence that the patient required such extensive treatment. He was advised to stand by his own views rather than to criticise his colleague.

Dr A wrote a letter of response to the patient with support from DPL's dento-legal adviser. The letter expressed surprise at the diagnosis from Dr B, as her mouth had been clean and stable for a considerable number of years. He invited the patient to return to the practice so he could show her his radiographs taken over the years and even offered to pay for a taxi to take her there and return her to work.

The patient accepted the offer and attended Dr A's practice, where he used the radiographs to explain why he did not feel there was any need to provide such invasive treatment in the absence of clinical necessity. The patient could now understand the philosophy behind Dr A's treatment and also the advice given by her new dentist. On balance, she decided to return to Dr A, who was equally happy for her to return to his care.

Learning points

Two or more dentists may have a difference of clinical opinion, each being equally valid and justifiable, especially if one of the dentists is seeing the patient for the first time.

Serial bitewings can provide an invaluable record, provided they are correctly taken from a reproducible angle, carefully processed and accurately labelled.

By acting professionally and not adopting a critical approach towards another clinician, the reputation of the two dentists in this case study remained untarnished. Naturally, the patient also dropped her complaint and the need for expensive legal action was avoided.

Dentist A's records were comprehensive and clear and supported his management of the patient over the period.

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- Dentist required for immediate start in busy, long-established west Dublin practice. Two to three days a week available. Excellent terms for the right candidate. Reply to: dentistrequired0@gmail.com.
- Experienced dentist required Cork city to cover part-time for a few months. Immediate start. Email CV to: oscardermody@eircom.net.
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- Full-time, qualified dental nurse required in Blessington, Co. Wicklow. Mid-August start date. Please send CV to: blessingtondental@eircom.net.
- Part-time hygienist required for south-east dental practice to cover maternity leave. Email CV to: mike_dent_os@hotmail.com.
- Experienced hygienist required. Two days initially, with potential to increase hours. Please email CVs to: stillorgandentalcare@gmail.com. Please include references.
- Experienced hygienist required on a sessional basis. Fortnightly to commence with. In Howth practice, beside dart and bus stop. Saturday morning ideal, but other times would also suit. Your own fully-equipped surgery, very helpful professional staff. Immediate start. Email: lod@orthocosmetics.ie.
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- Dental practice for lease in east Galway. Reply to: reginaduggan142@gmail.com. Continued overleaf

Continued from previous page

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SEPTEMBER 2014

Munster Branch AGM

Wednesday 10

Maryborough House Hotel, 8.00pm

3rd World Congress of Clinical Safety (3WCCS)

Wednesday 10 - Friday 12University of Cantaberia, SpainClinical risk management. See http://www.iarmm.org/3WCCS/.

FDI World Congress

Thursday 11 – Sunday 14

New Dehli, India

Munster Branch Meeting

Monday 15Maryborough House HotelStrategies for providing care for patients with neurological disorders.



Mouth Cancer Awareness Day Wednesday 17

Metropolitan Branch Meeting

Thursday 18Alexander Hotel, Dublin 2Speakers are Drs Dermot Canavan and Justin Moloney.



IDENTEX 2014 Friday 19 – Saturday 20

City West Hotel, Dublin

IDA Golf Society Captain's Prize Saturday 20

Carlow Golf Club

Annual Conference of European Prosthodontic Association – EPA 2014 Thursday 25 - Saturday 27 Istanbul, Turkey For further information contact info@ipa2014.org.

IAAGDS Annual Meeting

Saturday 27, 9am-1pm Radisson Blue Hotel, Golden Lane, Dublin 8 www.iaagds.ie

PRACTICES WANTED

Practice wanted in Co. Galway. Single-handed, parking, low medical card preferred. Email: dentalsurgeryco.galway@gmail.com.

EQUIPMENT FOR SALE

Magnification. Surgitel loupes 2.75N system with mini halogen light. Flip up with standard glasses frame. Magnification – 2.5. €775. Contact: 087 927 3631 or Email: morahilly@gmail.com.

Infection Prevention 2014

Monday 29 - Wednesday October 1SECC GlasgowThe UK's largest infection prevention and control event. To registercontactwww.ips.uk.net.Forfurtherinformation:ipsconf@fitwise.co.uk.

OCTOBER 2014

Munster Branch Meeting

Thursday 9Maryborough House HotelNew generation orthodontic materials – what does the future hold?Speaker is Dr Gerry Buckley.

HSE Dental Surgeons Seminar 2014

Thursday 16 – Friday 17 Mount Wolseley Hotel, Tullow, Carlow

 Faculty of Dentistry RCSI Annual Scientific Meeting 2014

 Thursday 30 – Friday 31
 RSCI Dublin

 For further information email facdentistry@rcsi.ie.
 RSCI Dublin

NOVEMBER 2014

Oral Surgery for the General Practitioner – Hands-on CourseSaturday 8Bewleys Hotel, LeopardstownSpeakers are Drs Seamus Rogers and Naomi Rahman.



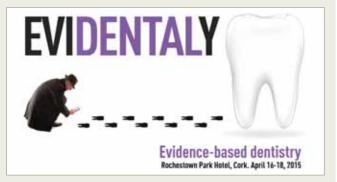
Munster Branch Annual Scientific Meeting Friday 21

APRIL 2015

IDA Annual Scientific Conference 2015

Rochestown Park Hotel, Cork

Fota Island



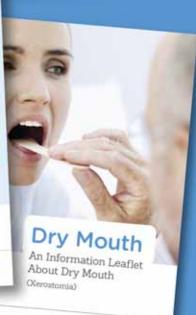
Edited by Denise MacCarthy and Lia Mills

Coping with and Surviving Mouth, Head and Neck Cancers





-DeCare Dental



DeCare Dental

DeCare Dental is proud to support Mouth Cancer Awareness in Ireland

As part of our continued commitment to raising awareness for Mouth Cancer in Ireland, DeCare is delighted to contribute a free Word Of Mouth Book to every Dental Practice that participates in Mouth Cancer Awareness Day on Wednesday 17th September.

If you would also like us to supply your surgery with our Oral Cancer Awareness booklet or Dry Mouth leaflets please contact 1890 130 017 or email rbrady@decare.com

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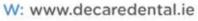
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