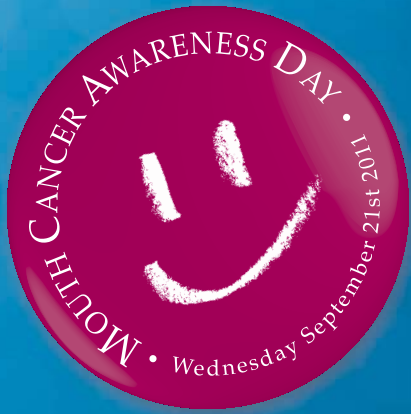


Volume 57 Number 4
August/September 2011

**IDA**
irish dental association

Journal of the Irish Dental Association

Iris Cumainn Déadach na hÉireann



Special edition: Mouth cancer awareness

new

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References: 1. Burwell A *et al.* J Clin Dent 2010; 21(Spec Iss): 66-71. 2. LaTorre G, Greenspan DC. J Clin Dent 2010; in press. 3. Efflant SE *et al.* J Mater Sci Mater Med 2002; 26(6):557-565. 4. Clark AE *et al.* J Dent Res 2002; 81 (Spec Iss A): 2182. 5. GSK data on file. 6. Du MQ *et al.* Am J Dent 2008; 21(4): 210-214. 7. Pradeep AR *et al.* J Periodontol 2010; 81(8): 1167-1113. 8. Sallian S *et al.* J Clin Dent 2010; in press. SENSODYNE® and the rings device are registered trademarks of the GlaxoSmithKline group of companies. Prepared November 2010. GSKCH/2011/0026.

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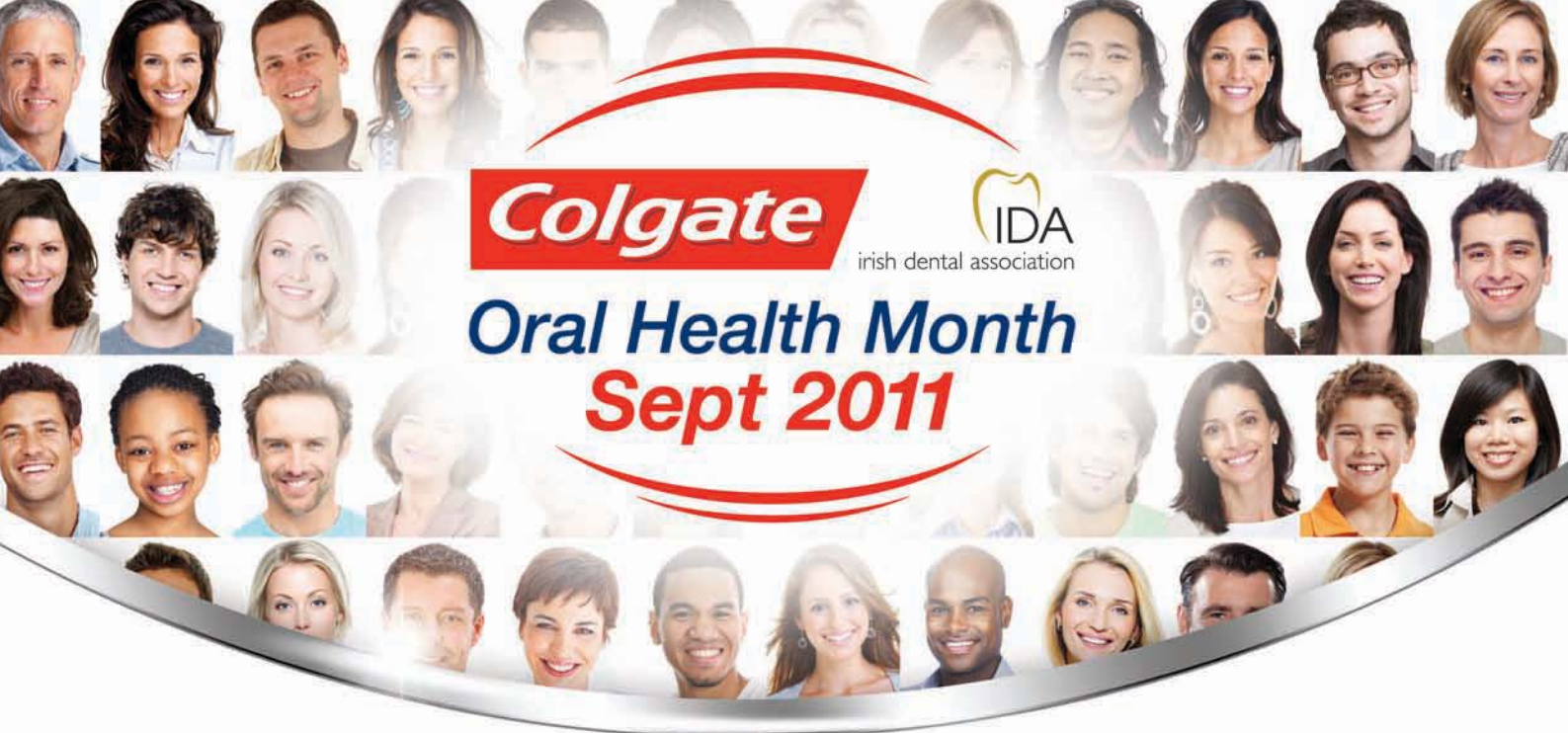
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irish dental association

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Sept 2011

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Dentists' vital role

More lives can be saved and great suffering avoided by early detection of mouth cancer. This edition is dedicated to this topic.



Welcome to a very special and important edition of the *Journal*. The Editorial Board was pleased to respond to a request from Association President Dr Conor McAlister for this special edition as part of the campaign to raise awareness of mouth cancer.

Dr McAlister's logic is impeccable. We can save more lives if we see more people in our dental chairs. As someone whose daily routine involves dealing with victims of mouth cancer, I would add that we can also greatly reduce the suffering of victims and their families through early detection.

In both his President's news (p176) and his interview (pp187-188), Conor urges every dentist in the Republic to sign up to provide free mouth cancer screening on Wednesday September 21 next. This call is backed by all of the bodies involved in the awareness campaign: Mouth, Head and Neck Cancer Ireland; the Irish Dental Association; Dental Health Foundation Ireland; Cork University Dental School and Hospital; Dublin Dental School and Hospital; and, the Irish Cancer Society. We urge you to use the posters provided with this edition of the *Journal* in your surgery and in your local community centres and supermarkets. Take every opportunity to promote your practice.

Can I direct readers to the peer-reviewed papers as sources of essential information? Dr Denise MacCarthy *et al.*'s practical guide to early detection of oral cancer (pp195-199) is an excellent reference and refresher for dentists on how to carry out a comprehensive oral and neck examination. Dr John Reidy *et al.* (pp200-202) have reviewed the literature examining the link between alcohol-containing mouthrinses and oral cancer. The authors recommend that the use of such mouthrinses in high-risk populations should be restricted pending the outcome of further research. Dr K James *et al.* (pp203-208) have provided a useful guide to performing mucosal tissue biopsies in general dental practice. This is augmented by excellent photographs of the sequence of one of the techniques involved. An excellent survey by Gabriela Decuseara *et al.* (pp209-214) suggests that dentists are underutilised in the prevention and early detection of oral cancer and one of the barriers is lack of training.

There are many benefits to increased awareness of mouth cancer, and the risk benefits for clinicians and patients are explained in detail on pp217-218 by David Croser of Dental Protection.

Excellent testimony of the worry caused by being diagnosed with and treated aggressively for mouth cancer is given by one of our own – Dr John Barry (pp189-190). It is always sobering when a professional

finds themselves on the other side of treatment. His description of smiling on the outside and screaming on the inside is apt, but thankfully he describes his outcome as fabulous. He is, we must acknowledge, one of the lucky ones, and yet he still describes the scars as more than skin deep.

And of course, there is the quiz on p180, for which we are grateful to Dr Claire Healy. Work hard on the answers before turning to p216 to see if you were right.

And as for timing, Colgate Oral Health Month (p186), in association with the Irish Dental Association, ties in perfectly with the mouth cancer awareness campaign.

Other issues in this *Journal* include the policy position and back-up scientific paper on food, diet and oral health. It was produced by an Association sub-committee under the chairmanship of Dr Michael Crowe, who are to be commended for their work.

Among many other contents, it is evident that the Association continues to work incredibly hard for its members and the profession (news: pp179-185). It saves members money too (p185). If you are not a member, can I urge you to join today. Together we are stronger. Finally, but by no means least, the *Journal* is once again joining forces with Sensodyne to find Ireland's most sensitive dentist (p184). This competition has proven in recent years to be a remarkable conduit for stories of outstanding patient care. It is very heartening in difficult times to hear from so many patients who hold their dentist in such high regard. Enclosed with this edition of the *Journal* are surgery posters and entry forms and we urge all practices – private and public – to encourage their patients to take part.



Leo F. A. Stassen

Prof. Leo F. A. Stassen
Honorary Editor

Getting ready for Mouth Cancer Awareness Day

DR CONOR McALISTER gives a round up of recent meetings, and has the latest on the preparations for Mouth Cancer Awareness Day 2011.



I hope you are all enjoying a good summer. It has been a busy time since our conference in Cavan. In late May, I was a guest of our colleagues in the British Dental Association for their Annual Conference in Manchester. In the spirit of true cross-border co-operation, I was delighted to share accommodation with my good friend Ed Livingston, President of the Northern Ireland Branch of the BDA. It was a bonus to take in Leinster's big win in Cardiff on the way home! Since then, I have had the pleasure of attending the Annual Dinner of the Medical Protection Society in London, which included a visit to the BDA headquarters in Wimpole Street.

Back home, in addition to meetings with Ministers Bruton and Reilly in Leinster House, I also attended a very successful conference of the Irish Society for Disability and Oral Health, hosted by their President, Dr Adrienne Dolan. Congratulations to all concerned on a very well attended conference. In the following week, I was honoured to attend the celebrations for graduating nursing, hygiene, technology, undergraduate and postgraduate dental students in Trinity College. I look forward to attending a similar event in Cork in December. May I take this opportunity to congratulate all our graduates and to wish them all success and happiness for the future.

Recently, I had the good fortune to meet Dr Raymond Gist, the current President of the American Dental Association, while attending a civic reception for delegates at the American Dental Society of Europe 117th annual meeting. This was another very successful event hosted by their President, Dr Billy Davis, and his wife Clodagh. Finally, it was a pleasure to accompany our CEO, Fintan Hourihan, to branch meetings in Limerick and Kilkenny. Sincere thanks to Fintan, who took his Roadshow meetings to seven branches around the country, in order to update members on current issues and activities in our Association.

Mouth Cancer Awareness Day – September 21, 2011

Sincere thanks to our Editor, Professor Leo Stassen, for dedicating this volume of the *Journal* entirely to mouth cancer. It will help to improve dentists' knowledge and heighten awareness of a disease that appears to be on the increase. Hopefully, this edition will also assist dentists who participate in Mouth Cancer Awareness Day (MCAD) 2011.

This year's event follows on from a similar day held at the Dental Hospitals in Cork and Dublin last year. Free mouth cancer examinations were offered as part of an awareness day initiated by mouth, head and neck cancer survivors (Mouth, Head and Neck Cancer [MHNC] Ireland). Both schools were overwhelmed by the numbers who attended. Six cases of mouth cancer were diagnosed out of a total of over 3,000 people who attended. Great credit is due to Dr Eleanor O'Sullivan in Cork and Dr Denise MacCarthy in Dublin for making this day come about. The idea for this year is to extend the free examinations to participating

dental practices throughout the country. Both dental schools will again be taking part. MCAD 2011 is a joint venture by MHNC Ireland, the Irish Cancer Society, Dental Health Foundation Ireland, the Cork and Dublin University Dental Hospitals, and the Irish Dental Association. However, I would like to make it clear that non-members of the IDA are fully welcome and encouraged to take part.

Further information and training is available on the dedicated website – www.mouthcancerawareness.ie. The website has a section for dentists and one for the general public. It is also planned to hold some lectures in various branches before MCAD 2011. Members and non-members of the IDA are welcome to attend these meetings.

The more I read about mouth cancer, the more worthwhile an idea I think MCAD is. Recently, the health supplement of a national daily newspaper ran a "Cancer Special" edition. It included a large graphic of the human body entitled "Cancer – the big picture". The head and neck were missing from the illustration, despite the fact that mouth cancer kills more people than cervical cancer or skin melanoma.

The intention of MCAD 2011 is to increase awareness in the profession and in the general public, not to screen the entire population for mouth cancer. Obviously the more free examinations that are carried out the better. Mouth cancer continues to be diagnosed far too late. This is our opportunity, as dentists, to increase awareness and possibly to save a life. If you would like to participate in MCAD 2011, please contact IDA House by telephone on (01) 295 0072 or by Email at info@irishdentalassoc.ie.



Dr Conor McAlister
IDA President

Negotiations, appeals, medical cards ... and much more

A number of circulars have been sent to members recently, highlighting the work of the Association in seeking to protect members' interests, and promote oral health.

DTSS – update following meeting with HSE

IDA representatives met with the HSE on June 15 to try to resolve the difficulties faced by our members in dealing with the DTSS. The IDA emphasised the demoralising effect the current chaotic system has had on patients, dentists and dental staff.

A number of actions were agreed at the meeting, including:

- The IDA insisted that an agreed protocol is essential to deal with: the handling of requests for approval for treatments by Principal Dental Surgeons; and, the administration of claims and reclaims by the PCRS.
- Both sides will exchange proposals on the treatment items that should be covered by the DTSS.
- The HSE is planning an information campaign to advise the public of what treatment is and is not covered by the DTSS.
- The HSE is to revert with details of a pilot project it plans to undertake in HSE South and West whereby dentists may tender to treat medical card holders in nursing homes.

A further meeting has been set for September 6.

DTSS challenge appealed to Supreme Court

The challenge by Drs Martin Reid and James Turner to the unilateral changes to the DTSS introduced by the HSE is to be heard by the Supreme Court.

On February 28, the High Court found against the claim. Justice Murphy found that there was no breach of contract, and that the injunctive relief that had been granted to the two dentists should end. He also held that the full costs of the action would have to be borne by Drs Reid and Turner.

An appeal has now been lodged to the Supreme Court, with nine grounds for appeal notified. The issue of costs will also be determined by the Supreme Court.

At the recent AGM there was a unanimously supported vote of thanks for Drs Reid and Turner.

It may be some time before the appeal is heard and in the meantime the IDA urges all dentists to be vigilant and to notify the Association of any new, revised or changed contractual terms that may be presented by the HSE.

Processing medical card applications

From July 1, all new medical card applications will be dealt with centrally by the Primary Care Reimbursement Service (PCRS) in Finglas. Queries and requests for general information on the medical card

scheme, assistance with completing an application form, and updates on the processing of a client's application will continue to be dealt with by staff in the Local Health Office after the changeover date.

New applicants can submit the completed form, along with all required documentary evidence, in their local health office, online at www.medicalcard.ie, or by posting their application to the Client Registration Unit, P.O. Box 11745, Finglas, Dublin 11.

All applications and reviews made after July 1, 2011, will have a unique identification/reference number, which will allow the applicant to check the progress of an application online at www.medicalcard.ie.

Complaint to Ombudsman re DTSS

The Office of the Ombudsman recently published its Annual Report for 2010, which included a case involving a patient who complained following refusal of treatment under the DTSS. The Ombudsman found as follows:

"Where resources to meet statutory requirements are not available, I believe that the approach should be to recognise the difficulty and to seek to have the law amended to reflect practice and the reality. Regretfully, the HSE and the then Department of Health and Children did not share my view ... This case is a sad reflection on a system where a person with decaying teeth who has no resources to fund private treatment has to put up with decaying teeth until his annual entitlements recommence."

A full copy of the Ombudsman's Annual Report can be read at the following link: <http://www.ombudsman.gov.ie/en/Reports/AnnualReports/AnnualReportoftheOmbudsman2010/media/Ombudsman%20AR%20EN.pdf>.

RPII licence fees

The IDA has written to the Minister for the Environment, Community and Local Government, Phil Hogan TD, seeking a reduction in the RPII licence fees. The letter reiterates the Association's continued support for the principle of ensuring the safety of radiological equipment in dental surgeries. However, in view of the draconian cuts in State funding for dentistry, the collapse in dental attendances, and the very high costs associated with meeting the statutory requirements in this area, the Association has requested that the Minister give urgent attention to our request for a significant reduction in the licence fee. The letter points out that while the State has reduced professional fees for dentists, there has been no corresponding reduction in the charges levied by State agencies.

Dublin alumnus awarded prestigious Orthodontic research prize

Dr Padhraig Fleming has been awarded the prestigious 2011 B.F. and Helen E. Dewel Award by the American Association of Orthodontists in recognition of the best clinical paper published in the *American Journal of Orthodontists and Dentofacial Orthopedics (AJO-DO)* in 2010. The article, entitled 'Randomised clinical trial of orthodontic treatment efficiency with self-ligating and conventional fixed orthodontic appliances', published in June 2010, was unanimously selected for the award by the Editorial Board of the *AJO-DO*. Padhraig graduated from Trinity College Dublin in 2002 and is currently a locum consultant orthodontist based at the Royal London Dental Institute, where he is also completing a PhD. The research was supervised by Professor Robert Lee at Barts and The London NHS Trust, who graduated from NUI Dublin in 1970. It is only the second occasion on which a UK-based research team has received this award.

Quiz questions

Submitted by Dr Claire Healy.



A 45-year-old patient attends for a routine review. He is generally fit and well, but smokes 20 cigarettes daily and drinks 40 units of alcohol per week. On examination you see the following (see photo above):

1. Describe what you see in the photograph.
2. If the patient was in the dental chair, what else would you do besides visual assessment?
3. What is your differential diagnosis?
4. What should you do?

Answers on page 216

First General Secretary Jim Ivers passes away

The Association was saddened to learn of the recent death of its first Secretary General. Jim Ivers served the members of the Irish Dental Association from 1958 to 1970.



Born in Cork in 1927, Jim began his working life with Great Southern Railways in Waterford before joining the civil service, first as a clerical officer with the Department of Posts and Telegraphs, then as an executive officer at the Department of Industry and Commerce, and finally as an administrative officer at the Department of Health, where he served until taking the post with the IDA in 1958. In 1970 he became general manager (trading) of Waterford Co-op, before moving to Donegal as the first Chief Executive of the North Western Health Board. In 1973 he was appointed director general of the Incorporated Law Society of Ireland, the first non-lawyer to hold the position. Jim was also deeply involved in the Irish League of Credit Unions, serving as national treasurer, and helping to set up branches in Dalkey and Howth. He was also a co-founder and first secretary of the Institute of Public Administration, and chaired the General Medical Services (Payments) Board. President-elect Andrew Bolas attended Jim's funeral and conveyed the condolences of the Association to the Ivers family.

New Dean in England



Miss Kathryn Harley, Consultant in Paediatric Dentistry, has taken up her post as Dean of the Faculty of Dental Surgery (FDS) of the Royal College of Surgeons of England (RCS).

Miss Harley has been an FDS board member since 2002, and most recently chaired its Postgraduate Education Committee. As Dean, she will continue to ensure that FDS Fellows, Members and

Trainees maintain the highest standards of clinical practice and patient care across the dental specialties.

Miss Harley said: "It is an honour to have been elected as FDS Dean of the Royal College of Surgeons. In post it will be my priority to support the Faculty to advance dental standards and patient care".

Miss Harley graduated from Guy's Hospital Dental School in 1981 and completed a Masters degree in Conservative Dentistry at the Eastman Dental Institute in 1986, where she was appointed Consultant and Honorary Senior Lecturer in Paediatric Dentistry in 1991. In 1999, she was appointed Consultant in Paediatric Dentistry at the Edinburgh Dental Institute, where she is currently Head of Department.



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Sensitive Dentist of the Year™

**ARE YOU IRELAND'S
MOST SENSITIVE DENTIST?**

To recognise and celebrate the exceptional patient care of the Irish dental profession, Sensodyne and the Journal of the Irish Dental Association are launching a search for the Sensodyne Sensitive Dentist of the Year.

Patients are being invited to nominate their dentist for outstanding care and treatment. Each week Sensodyne will draw out one patient's name and pay for a clean and polish. The patient who nominates the overall winning dentist will receive a family holiday to the value of €5,000.

An independent panel of judges will adjudicate on the nominations and the winning dentist will be presented at a function in Dublin in January. The winning dentist(s) will be featured in the February/March 2012 edition of the Journal.

Posters and leaflets are being provided for your surgery to encourage your patients to nominate you and your work.

And nominating you couldn't be easier: your patient can send a completed form back by post, or nominate you online at www.sensodynesensitivedentist.ie

We look forward to seeing your work and your name up in lights.



journal of the irish dental association
Iris Cumainn Déadach na hÉireann





Irish Society of Dentistry for Children

Happy 40th for the ISDC



Dr Anne O'Connell accepts the chain of office from Dr Michael Brosnan.



Margaret O'Malley accepts the 2011 O'Mullane Award from Dr Dennis O'Mullane.

The Irish Society of Dentistry for Children (ISDC) celebrated its 40th anniversary recently at its Annual Scientific Meeting in Limerick. The ISDC was established in 1961 to encourage and develop dentistry for children in Ireland. It continues to represent those in the dental profession who have an interest in the oral health of our children and is a national member society in the International Association of Paediatric Dentistry. There was record attendance for a scientific programme that included speakers from Harvard University and Crumlin Hospital.

The ISDC instituted an award last year to honour the efforts of those pursuing excellence in all aspects of dentistry for children. This year the competition attracted a record number of entries from all

members of the dental team (dentists, hygienists, dental assistants and health promoters). The O'Mullane Award was presented to Margaret O'Malley, Oral Health Promoter, HSE Dental Service, Mayo, for her project on mouthguards and she received a medal with cash award and complimentary annual session meeting registration.

The ISDC has over 120 members representing dentists and their teams working in universities, hospitals, and community (HSE) and private practice settings. The Society organises regular scientific meetings, providing a forum for exchange and discussion of information and research in paediatric dentistry.

For further information log on to www.dentistryforchildren.ie.

Independent survey shows price competition in dentistry

The IDA has welcomed an independent survey carried out in a national newspaper, which shows that most dentists are now displaying price lists, and that price competition exists in practices around the country.

The survey was carried out for the 'HEALTHplus' supplement of the *Irish Times* and results were published in the Tuesday July 12 edition. Investigators made a "whistle-stop tour" of 18 dental practices in Dublin, Cork, the Midlands, Galway and Ennis, checking to see if price lists were on display, and comparing prices for a selection of basic treatments, such as oral examinations, fillings and extractions.

The survey found that prices were clearly displayed in line with the new Dental Council code of practice, mainly in the reception areas, but in some cases also in the waiting rooms. One practice said that it was laminating its price lists prior to display. Practice staff stated that more patients are calling in advance to check prices, and there

was anecdotal evidence that patients are shopping around before deciding where to have treatment.

The survey also showed clear variation in prices for treatments, both within geographical areas and around the country. Prices for oral examinations, with or without an x-ray or clean, scale and polish, ranged from €30 to €70. Prices for fillings ranged from €50 to €160, and prices for extractions ranged from €60 to €180, depending on the type of treatment required.

Responding to the survey, IDA President Dr Conor McAlister said: "This survey proves that there is real competition on price in Irish dentistry, and demonstrates that dentists are complying with the new code of practice in displaying their prices, and that they are willing to engage with patients on the cost of treatment".

He emphasised that the Association advises patients to build a relationship with their dentist that is based on trust, and on the standard of treatment received, as well as on cost.



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They will now they can get
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HSF health plan - the low cost alternative for your patients

With HSF health plan you can have an affordable way to cover the costs of everyday health care. The plan covers you and your family for the simple day to day health costs such as dental and optical bills, as well as providing over 35 valuable benefits that help you get cash back for a wide range of treatment and out of pocket expenses.

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With HSF health plan, all the administration of the plan is run by us. With the flexibility of a combined Dental & Optical Benefit, offering up to €800 per year benefit, your patients can have the peace of mind that should they need extensive treatment or just simply an annual check up, scale & polish they have the funds available to recoup the costs of the treatment they need.

Our office in Ennis, Co Clare manages all aspects of the health plan from applications to claims handling.

Having the HSF health plan for your patients ensures that they can afford to see you for regular check ups, and should they need extensive treatment, they can relax knowing that with HSF health plan, they can afford to keep their teeth healthy.

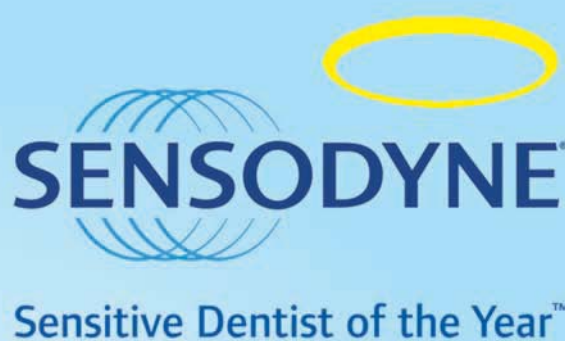
Sensodyne Sensitive Dentist of the Year 2011

Readers will recall the outstanding response by patients to the Sensodyne Sensitive Dentist of the Year competitions held in 2008 and 2009. The competition has been launched for 2011, and enclosed with this edition of the *Journal*, all dentists in the Republic of Ireland will find two surgery posters and three entry leaflets.

The quality of testimony about Irish dentists in the competition has been very encouraging and the winners have all demonstrated great care for and attention to their patients. Entries can be submitted by patients on an entry form (as enclosed) or via the website: www.sensodynesensitivedentist.ie.

All entries will be assessed by the Judging Panel chaired by Dr Barry Harrington. There will be a draw each week of the competition for a free clean and polish to be paid for by Sensodyne, and the patient who submits the best nomination for the winning entry will receive a fabulous prize of a voucher for a family holiday to the value of €5,000. Dentists, and particularly dental practice staff, are invited to encourage their patients to make an entry.

Shane Hayes, Brand Manager, Oral Healthcare with GSK, makers of Sensodyne, said: "We are delighted to once again give dental patients the opportunity to explain the superb care that they have been receiving from Irish dentists. Entries in previous years demonstrated that Irish dentists go to extraordinary lengths to care for their patients and Sensodyne and the *Journal of the Irish Dental Association* want to recognise and reward that outstanding level of patient care. Our overall winner in 2009, Dr Freda Guiney, won because her patient was so grateful for the care she received. Freda's patient was a heavily pregnant very-soon-to-be mother with intense tooth pain – and it was late on a Friday evening when Freda got the call!"



Dr Freda Guiney, third left, receives the Sensodyne Sensitive Dentist of the Year Award in January 2010 from then President of the Irish Dental Association, Dr Donal Blackwell, watched by Chairman of the Judging Panel, Dr Barry Harrington, and Nuala Beecher of GlaxoSmithKline.

Dentist and author reveals why poor dental health is shortening lives

In his new book, *Refresh Life*, Dr Dan Sindelar exhorts dentists to help their patients live longer, healthier lives. Dentists, he claims, aren't doing enough in general to address their patients' health outside their mouth. Research is only just beginning to reveal how closely systemic and oral health are related, says Dan.

"Anyone who is facing diabetes, stroke risk, heart disease, kidney failure or respiratory issues needs to go to the dentist first," says Dr Sindelar. "And dentists must be vigilant about detecting oral health issues early, before they turn into heart disease, diabetes, kidney failure, respiratory distress or a myriad of other seemingly non-dental-related maladies. Most physicians don't understand the vital connection between the bacterial condition of your mouth and its effects on your body," Dr Sindelar says. "Dentists can save the lives of patients, family members, friends and neighbours by talking about this truly important subject."

Launch of marketing services company

"Helping to get your smiles noticed" – that is the business goal of a new dental marketing service set up by entrepreneur Ruairi Gough, who has over 12 years' experience in sales, marketing and business development in Ireland, the UK and the USA. "We had a soft launch of the business six months ago, and since then have managed to acquire a number of dentist clients in Dublin and Cork, so we are optimistic about the potential to create a sustainable business," said Gough.



The concept of dental marketing is more established in the dental profession in the UK and US, and it is gradually becoming more relevant in Ireland. The increase in the uptake of dental marketing services is largely due to recent changes in the medical card and PRSI schemes, which have resulted in increased competition for private patients.



Save at least €1,000 through IDA membership

Everyone knows the benefits of the collegiality, continuing professional development, advice on all aspects of business and management including staff or employment issues, collective representation and social interaction offered by membership of the Irish Dental Association.

However, even existing members may be surprised at how much money they can save through using the affinity schemes that are only open to members. These include car, home, health and practice insurance schemes; professional indemnity insurance;

credit card terminal transactions with AIB; a gold visa card with Bank of Ireland; and, 50% savings on C courses and on classified advertising, the *Journal* and on the

website. A new and exclusive income protection scheme has recently been put in place with Omega Financial Management, who also offer mortgage advice and packages. There are also extraordinary savings to be gained in items such as computer purchases and practice websites – but again these are only for members of the IDA.



Vhi DeCare Dental Supporting Mouth Cancer Awareness in Ireland

Vhi DeCare Dental continues its support of Mouth Cancer Awareness in Ireland. Following our successful collaboration with the Marie Keating Foundation in the production of 'The Simple Facts About Mouth Cancer', we are launching a new leaflet to coincide with Mouth Cancer Awareness Day on September 21st 2011.

Copies of the leaflet will be distributed to dental practices in the Vhi DeCare Dental Directory. To request leaflets, please contact our customer service team on (094) 937 2277 or email iedentists@decare.com

DeCare Dental Insurance Ireland Limited is regulated by the Central Bank of Ireland. DeCare Dental Insurance Ireland Limited is a registered dental insurance underwriter and administrator. Registration #383762. The Voluntary Health Insurance Board (trading as Vhi Healthcare) is a Multi-Agency Intermediary regulated by the Central Bank of Ireland.



September is Colgate Oral Health Month

Colgate Oral Health Month, in partnership with the Irish Dental Association, is a leading Irish campaign to promote good oral health, and the theme for 2011 is focusing on 'The Importance of a Good Oral Care Regime for a Healthy Mouth'.

Research carried out by Colgate shows that 90% of respondents from participating dental practices rated the Colgate Oral Health Month initiative to be very good or quite good. These recipients also considered the Colgate Oral Health Month practice packs to be 'very important' to the overall initiative.

Colgate Oral Health Month 2011 will run throughout the month of September, and Colgate is once again looking to partner with the dental profession by



providing Colgate Oral Health Month 2011 practice packs.

These practice packs will contain educational materials, motivational stickers, patient samples and materials to help dental teams drive the awareness of the initiative within their own practice through creating practice displays. One pack per participating practice will be delivered at the end of August, subject to availability.

'Patients' Perception and Understanding of Prevention' will be the theme of the Colgate Oral Health Month 2011 verifiable CPD programme. To participate, visit www.colgate.ie from September 1, 2011, and download this interactive programme.

Please note that one pack per practice will be delivered at the end of August, subject to availability.

Last chance for the Nobel Biocare Symposium

Nobel Biocare is appealing to dentists not to miss out on the chance to attend its UK Symposium, an event which it describes as regularly proving a highlight of the industry calendar for dental professionals. This year's Symposium is being held at the Millennium Gloucester Hotel in London on September 9 and 10 where delegates will enjoy two days of talks and interactive workshops held by internationally acclaimed experts. After the first day, there will be plenty to discuss during the Symposium Party, an evening event in the hotel's beautiful steel and glass conservatory.

Nobel Biocare states that this annual event offers unparalleled opportunities to learn about industry innovations and to be inspired by the innovators themselves as they host seminars, live surgery treatment sessions, hands-on and workshop sessions, and take part in panel presentations and discussions.

Day one of the Symposium is dedicated to the power of implants, from inception and current use to their future development. The subject matter is examined thoroughly over a number of sessions and presented by leading experts who have years of experience to back up their work and findings. There are experts for dentists, for the whole practice team, and for laboratories.

Delegates will be able to roll their sleeves up on the second day of the Symposium and participate in one of a variety of challenging interactive masterclasses led by famous names from the world of



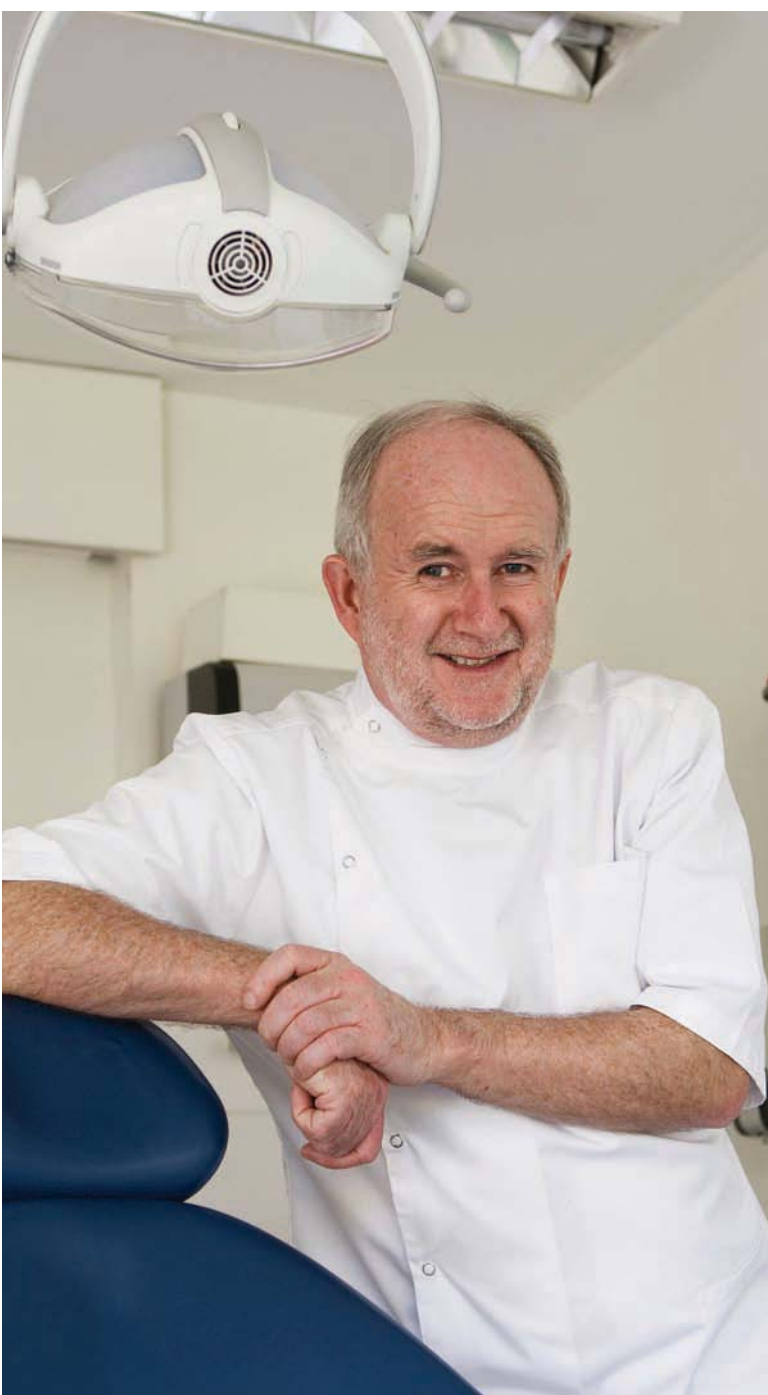
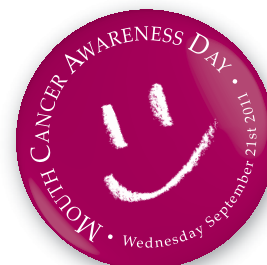
dentistry. Numbers for these sessions will be strictly limited to allow participants to engage in the detailed, in-depth interaction which is often precluded at more populous events.

There will be much to discover and enjoy at what will undoubtedly be an extremely popular event and in addition to networking, learning and nurturing a passion for your career, dentists will also be able to gain verifiable CPD.

Place numbers are strictly limited and available on a first come, first served basis. Demand is typically very high each year, so those who wish to attend the 2011 event are urged to avoid disappointment by registering your place with the Symposium without delay.

Raising awareness, bringing in patients

New President of the Association Dr Conor McAlister is sharply focused on getting as many people as possible into dental chairs.



Raising awareness of mouth cancer is the central focus of Dr Conor McAlister's efforts as President of the Irish Dental Association. He knows the figures: "Mouth cancer kills more people than cervical cancer or skin melanoma, yet we hear very little about mouth cancer. The facts are that if you get an early diagnosis, you have an excellent prognosis in the form of a five-year survival rate of 80 to 90%. Unfortunately, most cases are diagnosed late. With a late diagnosis of mouth cancer, your prognosis drops to a very poor 50% probability of being alive in five years. Early diagnosis and improved awareness are the key to combatting this disease".

Conor's motivation for his focus is two-fold. Last year he was in the Dublin Dental University Hospital (where he lectures part-time) on the morning of the free examinations and was amazed to see a queue at 8.30 in the morning stretching from the Hospital door back through Trinity College to the Pavilion. There were so many people that not all could be seen that day. Those that could not be seen were asked to return on the following Saturday. Conor volunteered to work that Saturday and carried out a little impromptu research. He asked all the people he saw if they had a regular dentist and two-thirds did not. "Dentists have a good light source and a mirror. They are much better equipped than doctors to see into the oral cavity, but obviously they cannot screen people who do not come to the dentist. That is the reason for extending the mouth cancer awareness day out to dental practices throughout the country."

And the benefits are very real. Last year, between the Cork and Dublin Hospitals, six cancers were identified. Three of them were in the early stages and Conor has no doubt that those patients' lives were saved as a result.

So what's going to happen this year? The Cork and Dublin Dental University Hospitals are participating again, but a wider coalition of interested parties has come together and is urging dentists in practice to provide free examinations for mouth cancer on September 21 next. "We announced this appeal in the Slieve Russell at the Association's AGM and the response so far has been terrific. By the time dentists are reading this, they should have received an email from the IDA asking them to confirm their participation. If they haven't, or if they just want to find out some more information, I would appeal to them to look us up at www.mouthcancerawareness.ie."

Promoting dentistry

Conor has other priorities as President of the Association, but they are all linked. He explains: "Currently, fewer than one in three Irish people attend the dentist regularly. If we could make it one in two, we could surmount many of the problems that currently afflict dental practices.

The average in the UK is approximately one in two and there is no reason why it shouldn't be the same in Ireland. We need to be more proactive in our promotion of the benefits of regular visits to the dentist. I think that, specifically, we need to work hard to make the link between oral health and general health for our patients". He says that a major part of that work is being undertaken by the public relations committee of the IDA, which has been making excellent inroads into turning around the negative image of dentists so often portrayed by the media.

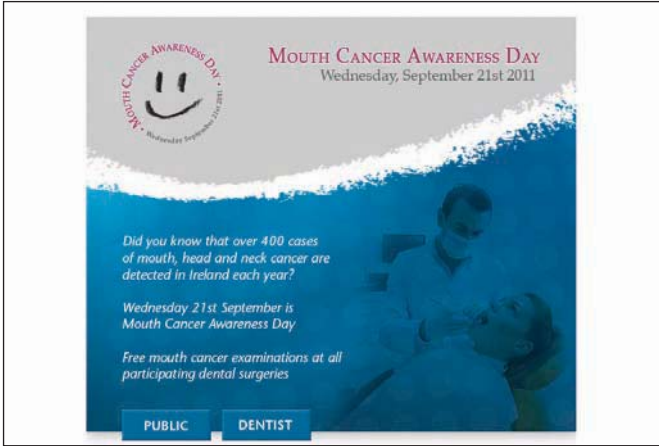
Another priority for Conor is to help to create the conditions for Irish dental graduates to stay in Ireland or, at least, to be able to return to Ireland if they go abroad. Of the Trinity class of 2011, Conor estimates that at least seven are going to Australia. "This is a worrying trend. The country has invested so much in their education and the quality of the graduates we are producing is so high, that we need to make it possible for these dentists to return. One way we could stem the tide would be to restore the Vocational Training Scheme, which no longer exists. It is the ideal bridge between being a dental student and being a dentist in practice. This is another short-sighted cut. We intend to do what we can to have it restored."

Conor's other goal is to try to have the scale and polish restored under the terms of the Dental Treatment Benefits Scheme (DTBS). "This would encourage more insured workers to attend the dentist and would have obvious benefits for patients' oral health." At a recent meeting with the Minister for Social Protection, Joan Burton, Conor noted that she was very receptive to the idea but not in a position to make any promises. Neither does the Medical Card scheme make any provision for a free scale and polish. "This is really short sighted. The Government needs to consult with us on how the dental budget could be best spent in the interests of improving dental health in Ireland. It beggars belief that people cannot avail of a free cleaning, not to mention some of the ludicrous restrictions on treatment for Medical Card holders."

Collegiality is our great strength

Asked about the strength of the Association, Conor is convinced that the IDA is very good at support: "Collegiality is our great strength. Our smaller classes at university tend to result in close friendships and we are envied for that reason by other professions. Generally, we have a great togetherness and that is really evident to me in the Association. The other point I would make is that we now have so many good commercial schemes for our members in practice, that it doesn't make financial sense anymore not to be a member – especially in these difficult times".

If there is a weakness in the Association, Conor says, it lies in the inactivity of some of the branches: "I would like to re-energise those branches that have not been meeting of late. The branches provide continuing dental education, professional networking and personal support. These functions are crucial right now and I would like to see all branches functioning fully and making a contribution to the Association. I'd also like to see more female members politically involved in our activities and would appeal to them to get even more involved if possible. Ideally I would like the Association to be more representative of the membership from a geographic, gender and age point of view".



The home page of www.mouthcancerawareness.ie.

A life in dentistry



Conor McAlister is from Terenure in Dublin and was educated at Castleknock College and Trinity College. He qualified in 1979 and worked in England until 1984. While there he spent a year at the Eastman Institute, where he gained a masters degree in restorative dentistry. On his return to Ireland, he joined his father, John, in practice in Walkinstown, Dublin. John had set up the practice in 1954 and retired in 2005. Conor says: "Some of the

patients have been coming to the practice since before I was born!" Conor continues to practise there and has lectured at the Dublin Dental School since 1985.

He is married to Gervaise Corbet, a doctor in Stewart's Hospital. Together they have four children ranging in age from 18 to 25. John has just completed his Leaving Cert and Zita is studying physiotherapy, while Ailbhe and Nicola are qualified in medicine. A self-confessed sportaholic, he is a season ticket holder at the RDS and Lansdowne Road. Conor also enjoys golf at Grange and Rosslare. He plays indoor football every week at Loughlinstown with a group of friends including former classmates Eamon Croke, Niall MacDonagh, John Nolan, Declan Meagher and Tom O'Connor. Ages at a recent game ranged from 13 to 59.



God obviously has a sense of humour!

JOHN BARRY gives a very personal view of his experience as a survivor of oral cancer.



It's amazing when one recollection really sticks out in your mind. It could be your sense of the smell of hay in the summer, a whiff of a favourite flower, a word spoken, a joke, a smile or a vision. These are unique imprints that I feel are stamped far more heavily than average on our mind's hard drive and we keep experiencing them over and over. I refer to them in the singular as 'a moment in time', as when we experience them we are immediately transported back to that moment no matter how far it is away.

Without doubt my most memorable 'moment in time' was when my brilliant surgeon and now friend John Devine at the Southern General in Glasgow said to me: "The tumour is very invasive so we will have to remove the lingual and the IDN as well so unfortunately, as you know John, you will be permanently numb after the surgery on your left hand side". "You can't be serious," I said, "permanent parasthesia" (I knew that term!), and then it struck me and I blurted it out: "God obviously has a sense of humour". It was a bit dumb to say that, I suppose, but it was the only thing I could think about. How many blocks had I given over the previous 20 years? How many times have I heard from patients that they hate that numb feeling? Sure I was always gentle and tried to be kind but did I ever really empathise? The answer is probably not, as we as dentists just get on with the job of making people numb and fixing their teeth. God must have a sense of humour to make a dentist experience that feeling 24/7. It may seem strange, but it is true that it is the very first thing that I am aware of every morning when I wake and every time I have some food or drink. The feeling of numbness is always there but does fade from thickness to less thick at other times.

This article is in the special edition on mouth cancer awareness and I volunteered to write for it as I have had major free flap surgery to treat a tonsillar squamous lesion, which turned out to be a major life- and attitude-changing event. My intention here is not to go through the mechanics of the surgery or the physical aspects of the rehabilitation, but to maybe give a little insight into the emotional and attitudinal effects of the disease and to hopefully guide other dentists to handle the process and the people in a better and more productive way.

The first moments

I knew I had a problem one morning when a piece of fruit caused me to wince and I saw that there was a lesion in the tonsil area. I knew it was not an aphthous ulcer and immediately sought help from the best experts, including walking in unannounced with no appointment to the OS department in Trinity where, purely by chance, Professor Stassen was in clinic. He kindly saw me immediately and started a chain of events that saw me have the full surgery in ward 62 in the Southern General with John Devine and his awesome formidable team within a very short time.

Here is the mind-altering bit: one day you are running a busy successful outfit and all is exciting and going well and you have a great eventful future, and the next day a black curtain, and it actually was physically a black curtain in my mind, is drawn over another moment in time. In this case it was Monday November 13, 2006.

Trying to prepare

Leading up to that day, I had loads of tests and scans and x-rays and physical tests and some of those experiences were horrible considering that I am an educated medical person myself. I had some serious words with some of those people about their totally uncaring attitude, but that's another story. I listened intently to what was happening and nodded lots of times to the explanations, but I can admit now that I didn't hear it all because although I was listening and attempting to understand, I didn't get it all because I was screaming inside my head: "Why me? Why is this happening? It can't be happening. I'm far too young for this". I went through the very short weeks trying to arrange my businesses, engaging with my wife Regina and my three children and extended family, and trying to sort out financial affairs including getting power of attorney sorted in case I was unable to function afterwards. One misguided boy in my nine-year-old daughter's class told her that I was dying for sure cos his dad said so! My brother-in-law Paul McCabe and his wife Lorna, both dentists, did tons of work researching for us about what to do and expect. I owe them all a great deal.

I had biopsies, which made it very difficult to eat. It's no fun with stitches in your palate. I had loads of people around to wish me luck and try to

help. I can honestly say that it was a blur of noise and grief and stress, and although I was smiling on the outside and screaming on the inside, it just went by in a haze of a sense of being outside looking in. I certainly killed the pain (not physical) by downing loads more alcohol than I should have but, as I was thinking then, what the hell does it matter anyway? I got great support to be sure from my family and friends and was humbled by those who rallied around during that period. My sister Barbara, an intensive care qualified nurse, spent the post-op time by my side helping and cleaning tubes!

Recovery

The operation was major and I have had a fabulous result in reality with not many people knowing now about the radical neck dissection, the lip split, the mandible split and the 600 stitches or so along with the chunk of free flap on the left arm. Physically I am fine now and mentally I am a lot stronger too having thrown myself back into my purpose, which is to bring assistance to my colleagues, some of whom are smiling on the outside and screaming on the inside for different reasons.

Having mouth cancer really plays with your head and no matter how strong you are, you end up having feelings of anger and resentment (like any other cancer). Mouth cancer, unlike some other cancers, can also

have physical manifestations like some mutilation caused by removal of tissue, and can be noticeable, and this alters one’s self image, which is hard to deal with. I have managed to deal with this and can honestly say I am over that aspect (I was too good-looking anyway I joke).

I wanted to write this article for the *Journal* so that I could get a very simple message across:

Mouth cancer is an awful disease. As practising dentists, we have a uniquely placed great opportunity every time we examine a patient for whatever reason to detect lesions very early and treat very early, usually involving minor surgery and minor effects and minor affects too. Use your undoubted skills to check patients properly and thoroughly. Tell all your patients that you are examining their hard and soft tissues and that you are looking for lumps and bumps. Ask them the right questions. It will enhance your professional status as a caring health professional and you may affect someone’s life far more meaningfully than just discovering a lesion. I am available for counselling free of charge for anyone who needs to have a chat about mouth cancer. The scars are far more than skin deep.

John Barry is Operations Director of The Dental Plan and the Dental Business Academy.



Tender for dentists – to provide dental services to the Irish Prison Service

The Irish Prison Service (IPS) invites tenders for the provision of dental services.

Dentists are now being sought to provide dental services in the Irish prisons outlined below. The contract will be managed by the Healthcare Directorate, IPS.

- Lot 1: Castlerea Prison, Harristown, Castlerea, Co Roscommon**
- Lot 2: Cork Prison, Rathmore Road, Cork**
- Lot 3: Midlands Prison, Dublin Road, Portlaoise, Co. Laois**
- Lot 4: Limerick Prison, Mulgrave Street, Limerick**
- Lot 5: Portlaoise Prison, Dublin Road, Portlaoise, Co. Laois**
- Lot 6: Loughan House, Blacklion, Co. Cavan**

For full tender information please visit the public sector procurement opportunities website at www.etenders.gov.ie

Tender documents are available on www.etenders.gov.ie; or by email from cputenders@irishprisons.ie.



irish dental association

Food, diet and oral health

A specially convened Association group has produced a policy paper on 'Food, diet and oral health'. Chaired by Dr Michael Crowe, the group included Drs Donal Blackwell, Michaela Dalton and Ed O'Reilly, and Chief Executive Fintan Hourihan. The *Journal* brings you both the policy position and the scientific basis for that position.



Dental caries is a preventable disease, yet it is still a major health problem in most western countries. In Ireland, half of all 12 year olds and three-quarters of all 15 year olds have had decay in their permanent teeth.¹ While the causes of dental caries are multi-factorial, there is overwhelming evidence that sugars in food and beverages are the main dietary cause of caries in children and adults.²⁻⁵ The consequences can include pain, infection, absenteeism and an impact on self-esteem. For children there can also be a negative effect on the permanent dentition, growth and development, and specialist or hospital treatment may be required.

Oral health is vital to overall general health, and chronic diseases such as obesity, cardiovascular disease, diabetes and dental caries have common risk factors. As a diet high in sugary, energy-dense foods is a common aetiological factor for some chronic diseases, a common risk factor approach in their prevention has been suggested by the WHO.⁶

Irish Dental Association's position

The Association:

- supports measures aimed at promoting a healthy lifestyle, especially those concerned with encouraging healthy eating habits based on the food pyramid, increasing physical activity and improving access to oral healthcare;
- particularly supports any measures that result in a reduction in the frequency of consumption of sugary foods and drinks, which are the most important dietary cause of dental caries and dental erosion. These measures should also be directed towards increasing public awareness of the oral and general health risks associated with excessive frequency of consumption of dietary sugar, clearer labelling of foods and appropriate marketing of high energy/sugary foods and drinks;

- calls on all healthcare providers and interested parties, including Government, parents, schools, the food industry, the FSAI and the HSE to co-operate and foster relationships aimed at improving the oral and related general health of the population;
- encourages all members to support this position in their efforts to communicate with the public and while providing oral health education for their patients;
- feels that branches should support the continuing education of members by providing regular scientific updates on diet and oral and general health; and,
- encourages all members to promote public awareness of the link between diet, oral health and general health.

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Scientific basis for opinion

This technical support paper was prepared for the Association by Professor Mike Gibney, Head of Nutrition, UCD Institute of Food and Health.

Issue 1: Frequency of intake versus the percentage of energy from added sugars

The definitive evidence that frequency of consumption of cariogenic foods could influence dental caries came from intervention studies¹ in institutionalised children in Scandinavia. The cut-off point above which caries would most likely develop from frequency of sugar consumption was four occasions per day of cariogenic foods. Translating the frequency of consumption of sugary foods into overall dietary guidelines posed a challenge, in that for all other forms of macronutrients, the goals set were as a percentage of energy. A figure of 10% of energy from sugar emerged as a value equivalent to the consumption of sugary foods four times per day. Using data from dietary surveys in Irish adults, teenagers and children, the relationship between the percentage of energy gained from added sugars and frequency of consumption (on times per day) was examined.² The results are shown in **Figure 1**. Clearly, a relationship exists between percentage of energy gain from added sugars and frequency of added sugar intake, but this varies across age groups. This reinforces the value of adhering to frequency of intake of added sugars for the issue of dental caries rather than percentage of energy from added sugars.

Issue 2: Patterns of food intake in relation to frequency of added sugar intake

Where a relationship is found between the pattern of consumption of a particular food type and some public health condition, and when this observation is found across time and geographic locations, a powerful case exists for the targeting of that food in relation to the

public health condition. The possibility that such a relationship existed between the frequency of consumption of added sugars (a surrogate marker of dental caries) and the intake of particular foods associated with dietary added sugars, was examined by Joyce *et al.* (2008).² In the ensuing section, the data is presented solely for the intakes among consumers of the target foods, thus excluding non-consumers.

(a) The data for three food categories can be jointly considered since the findings are similar. These are: (i) table sugars and preserves; (ii) biscuits; and, (iii) cakes. In the case of children and teenagers, there was no statistically significant association between intake among consumers of these foods and the frequency of added sugar intakes. For each of these food categories, there was a strong statistical link for adults in this regard. The data are shown in **Table 1**.

Clearly, these foods are not an issue at a population level in relation to dental caries in children and teenagers, but they are very strongly associated with the main risk factor for caries in adults, namely frequency of added sugar intake.

(b) In this section, sugary drinks are considered. Carbonated sugar-containing beverages are frequently implicated as a contributory factor to dental caries. In the case of children, no statistically significant association was seen between frequency of added sugar intake and the consumption of fizzy sugared drinks. In the case of teenagers and adults, a statistically significant finding was observed and the data are summarised in **Table 2a**.

The same data for the food category squashes and cordials is given in **Table 2b**, where a statistically significant association between intakes and frequency of added sugar intakes was seen only for children and adults.

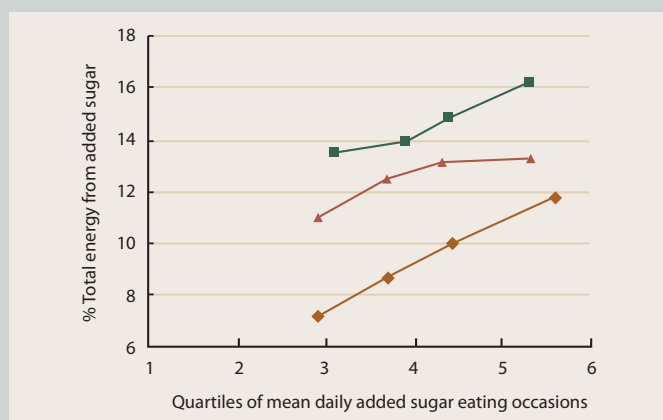


FIGURE 1: Relationship between the mean values for percentage total energy from added sugar and the quartiles of added sugar intake in Irish children (■), teenagers (▲) and adults (◆).

Table 1: The relationship between quartiles of the frequency of added sugar intake and mean daily intakes of table sugar and preserves, biscuits, and cakes.

Food category	Quartile 1	Quartile 2	Quartile 3	Quartile 4
	(lowest)			(highest)
of the frequency of added sugar intake				
Intake of food category g/d				
Table sugar and preserves	16	21	25	37
Biscuits	14	17	23	27
Cakes	26	29	32	35

Table 2a: Intakes of fizzy sugared drinks in grams per day (g/d) among consumers only across quartiles of frequency of added sugar intakes.

	Quartile 1 (lowest)	Quartile 2	Quartile 3	Quartile 4 (highest)
	of the frequency of added sugar intake			
Population group	Intake of fizzy sugar drinks g/d			
Teenagers	234	243	188	165
Adults	173	169	173	199

Table 2b: Intakes of cordials and squashes in g/d among consumers only across quartiles of frequency of added sugar intakes.

	Quartile 1 (lowest)	Quartile 2	Quartile 3	Quartile 4 (highest)
	of the frequency of added sugar intake			
Population group	Intake of squashes and cordials g/d			
Children	81	79	76	133
Adults	92	108	88	111

Table 3a: Intakes of chocolate confectionery in g/d among consumers only across quartiles of frequency of added sugar intakes.

	Quartile 1 (lowest)	Quartile 2	Quartile 3	Quartile 4 (highest)
	of the frequency of added sugar intake			
Population group	Intake of chocolate confectionery g/d			
Children	17	19	20	25
Teenagers	18	19	29	33
Adults	16	16	21	25

Table 3c: Intakes of non-chocolate confectionery in g/d among consumers only across quartiles of frequency of added sugar intakes.

	Quartile 1 (lowest)	Quartile 2	Quartile 3	Quartile 4 (highest)
	of the frequency of added sugar intake			
Population group	Intake of non-chocolate confectionery g/d			
Children	11	11	18	16

Table 4: Intakes of ready-to-eat (RTE) breakfast cereals, breads and ice creams in g/d among consumers only across quartiles of frequency of added sugar intakes.

	Quartile 1 (lowest)	Quartile 2	Quartile 3	Quartile 4 (highest)
	of the frequency of added sugar intake			
Population group	Intake of chocolate RTE breakfast cereals g/d			
Teenagers	31	40	36	45
Population group	Intake of breads g/d			
Children	72	88	86	82
Population group	Intake of ice cream g/d			
Adults	35	46	48	51

Table 5: The contribution (in percentage terms) of each food category to the intake of added sugars.

	Children	Teenagers	Adults
Table sugars and preserves	10	14	28
Biscuits	8	8	11
Cakes, buns and pastries	8	10	13
Carbonated sugary beverages	20	27	20
Squashes and cordials	15	12	10
Chocolate confectionery	15	18	15
Non-chocolate confectionery	12	12	8
Breads	5	5	8
RTE breakfast cereals	12	13	8
Ice cream	8	8	11

The obvious conclusion from this analysis is that the widely held view that frequency of added sugar intakes is associated with soft drinks, fizzy or otherwise, is not correct. The analysis on which these data are based did not extend to diet drinks, but one possibility is that at the upper end of frequency of added sugar intakes, where options exist to select a sugar-free variety, such options may be exercised. Squashes and cordials do not offer such an option and so feature highly at the upper end of frequency of added sugar intakes, particularly for children.

(c) This section will focus on confectionery and data are presented in **Tables 3a and 3b** for the relationship between frequency of added sugar intakes and intakes of chocolate (statistically significant

association for all age groups) and non-chocolate confectionery, respectively (statistically significant association for children only).

It would appear that for all populations, the frequency of intake of added sugars is driven in part by intakes of chocolate confectionery.

(d) The data for breads, ready-to-eat breakfast cereals and ice creams are presented in **Table 4** across quartiles of frequency of added sugar intakes. Data are included only for those population groups that show a statistical difference in mean daily intake of the target foods and frequency of intake of added sugars.

Both RTE breakfast cereals and breads would be important foods in shaping overall healthy eating and should not become a main focus

for dental caries. Ice cream is not of great importance here. Overall conclusion from a consideration of the contribution of foods to frequency of added sugar intake: there is no clear and obvious pattern that helps to shape a specific focus on one particular food category in relation to the frequency of added sugar intake.

Issue 3: Overview of the contribution of food categories to added sugar intake

Table 5 provides data on the contribution (in percentage terms) of each food category to the intake of added sugars. Clearly, the main sources for adults are: table sugars and preserves; biscuits, cakes and pastries; carbonated soft drinks; and, chocolate confectionery (accounting for 87% of added sugar intake). For teenagers, the main food categories are: table sugars and preserves; carbonated soft drinks; biscuits, cakes, buns and pastries; and, all confectionery (accounting for 89% of added sugar intake). For children, the main contributors are: biscuits, cakes, buns and pastries; carbonated soft drinks and cordials; all confectionery; and, RTE breakfast cereals (accounting for 90% of added sugar intakes).

Key conclusions

It would be wiser to focus any public health message on the frequency of intake rather than total intake since consumers probably recognise frequency as very important for dental health. It is impossible to single out a specific food group or selection of food groups, which are universally associated with the frequency of added sugar intake. Thus, the best strategy might be to simply focus on sugar-rich foods, which make a significant contribution to added sugar intakes (giving examples) and to advise on “snacking between meals”.

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Oral and neck examination for early detection of oral cancer – a practical guide

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Précis

Unfortunately, over 60% of patients presenting with oral (mouth) cancer have either regional or distant spread. We need to detect oral cancer early and thereby improve the prognosis and save lives. Dentists are effective clinicians in the early detection of mouth cancer. An examination system for the oral cavity and neck is described.

Abstract

Cancer of the head and neck region presents a challenge since, unlike other areas of the body, the boundaries are not always easy to delineate. The functional morbidity associated with head and neck cancer and its treatment are considerable. Head and neck cancer is described as cancer of the lip, mouth, tongue, tonsil, pharynx (unspecified), salivary gland, hypopharynx, larynx and other. Oral cancer refers to cancers of the lip, tongue, gingivae, floor of the mouth, palate (hard and soft), maxilla, vestibule and retromolar area up to the anterior pillar of the fauces (tonsil).

When patients present with oral cancer, over 60% of them have regional (lymph node) and sometimes distant (metastatic) spread. The overall five-year survival rates for oral cancer average at between 50 and 80%, depending on the stage of the disease, varying from 86% for stage I to 12-16% for stage IV. The incidence of 'field cancerisation'/unstable oral epithelium is high (17%), and even after successful treatment our patients need to be monitored for dental care and further disease.

Unlike other areas in the body, the oral epithelium is readily accessible for examination and even self-examination. Dentists and dental hygienists are effective clinicians in the examination of the oral cavity for mouth cancer. An oral and neck examination must be part of every dental examination. An examination protocol is suggested here, which is similar to, but more detailed than, the standardised oral examination method recommended by the World Health Organisation, and consistent with those protocols followed by the Centres for Disease Control and Prevention and the National Institutes of Health.

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Introduction

Head and neck cancer is described as cancer of the lip, mouth, tongue, tonsil, pharynx (unspecified), salivary gland, hypopharynx, larynx and other. Oral cancer refers to cancers of the lip, tongue, gingiva, floor of the mouth, palate (hard and soft), maxilla, vestibule and retromolar area up to the anterior pillar of the fauces.¹ Unlike other areas in the body, the oral cavity/neck is readily accessible for inspection and self-examination. Over 60% of patients present with oral cancer with either

regional or distant spread.² The five-year survival rates for oral cancer average at between 50 and 80%, depending on the stage of the disease, varying from 86% for stage I to 12-16% for stage IV.^{3,4}

A major factor in poor outcome for oral cancer is its late presentation due, in part, to lack of awareness about oral cancer in the community among doctors, dentists, pharmacists and, more importantly, patients.⁵ Despite a considerable amount of



FIGURE 1: Neck exposed for examination.



FIGURE 2: Submental triangle.



FIGURE 3: Submandibular triangle.

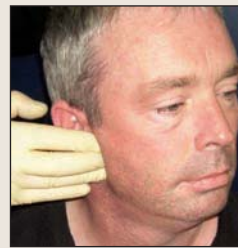


FIGURE 4: Pre-auricular.



FIGURE 5: Parotid.



FIGURE 6: Posterior auricular.



FIGURE 7: Occipital triangle.



FIGURE 8: Jugulo-digastric node.



FIGURE 9: Jugulo-omohyoid node.

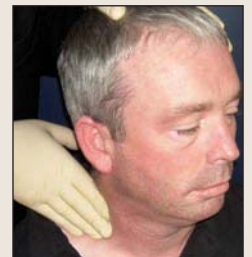


FIGURE 10: Posterior triangle.

research, there is no clear evidence for the management of 'potentially malignant' lesions. The issue is whether all lesions deemed to be 'high risk' should be surgically removed or whether the clinician should follow a 'watch and wait' policy. However, national screening programmes cannot be advocated for head and neck cancer at the present time.⁶ Targeted screening of risk groups has been found to be effective.⁷ However, opportunistic screening of the oral soft tissues by the dentist at every dental check-up is recommended.⁸ Dentists are very effective clinicians in examination of the oral cavity, as are dental hygienists.⁸ Examination for mouth cancer must be part of every dental, oral and neck examination.

Oral and neck examination

This exam requires adequate lighting, two dental mouth mirrors, and gloves. It should take no longer than five minutes.⁹ The examination is conducted with the patient seated comfortably. Removable intra-oral prostheses are removed before starting. The extra-oral and peri-oral tissues are examined first, followed by the intra-oral tissues.

Step 1: Extra-oral assessment

The extra-oral assessment includes inspection of the face, ears, head and neck, noting any asymmetry or changes on the skin such as crusts, fissuring, growths, lumps and/or colour change. The neck lymph node drainage areas are examined and the neck palpated to detect enlarged nodes. If enlargement is detected, the examiner should determine the size, mobility and consistency of the nodes.

The patient should be seated, relaxed and with the neck exposed from jawbone to clavicle (Figure 1). The examiner should lean the head towards the area being examined to allow the muscles to relax and allow easier palpation. The left and right sides of the neck should not be examined at the same time (this can cause sick sinus syndrome, leading to collapse). A recommended order of lymph node examination is to start in the submental triangle with the head bent forward, then the submandibular triangle (Figures 2 and 3), the facial node, the parotid tail, parotid gland, pre-auricular area, post-auricular area and occipital triangle (Figures 4, 5, 6 and 7). The same process occurs on both sides. Then palpate the upper cervical (jugulo-digastric), mid-cervical, and lower cervical nodes (jugulo-omohyoid), and finally the posterior triangle



FIGURE 11: Bimanually palpate sublingual and submandibular glands.



FIGURE 12: Lips.



FIGURE 13: Labial mucosa, maxilla.



FIGURE 14: Labial mucosa, mandible.



FIGURE 15: Buccal mucosa.



FIGURE 16: Gingiva.

(Figures 8, 9 and 10). The same process is followed for both sides. Do not forget the parotid gland, and bimanual palpation of the submandibular and sublingual glands (Figure 11).

Step 2: Lips

Observe the lips with the patient's mouth both closed and open. Note the colour, texture and any surface abnormalities of the vermilion borders. Check for lip sensation (cranial nerve V) and lip movement (cranial nerve VII) and record the result (Figure 12).

Step 3: Labial and buccal mucosa

With the patient's mouth partially open, visually examine the labial and buccal mucosa and the sulcus of the maxillary vestibule and frenum, as well as the mandibular vestibule. Note any colour change, abnormal texture, and any swelling or other abnormalities of the vestibular mucosa and gingiva (Figures 13, 14 and 15).

Step 4: Gingivae

Examine the buccal and labial aspects of the gingival and alveolar

ridges by starting with the right maxillary posterior gingival and alveolar ridge and then moving around the arch to the left posterior area. Drop to the left mandibular posterior gingivae, retromolar area and alveolar ridge, and move around the arch to the right posterior area. Then examine the palatal and lingual aspects as on the facial side, from right to left on the palatal (maxillary) aspect and left to right on the lingual (mandibular) aspect (Figure 16).

Step 5: Tongue – dorsal and ventral surfaces

With the patient's tongue at rest and mouth open, inspect the dorsum of the tongue for any swelling, ulceration or variation in size, colour or texture. Ask the patient to protrude his or her tongue and examine it for any abnormality of mobility (cranial nerve XII), fixation, pain on movement or its position (Figure 17).

Step 6: Floor of the mouth and lingual pouch

Ask the patient to roll their tongue back into their mouth, and inspect and palpate the floor of the mouth (Figure 18). Look for changes in colour and texture, and for swellings or other surface



FIGURE 17: Tongue, dorsum.



FIGURE 18: Tongue, ventral.



FIGURE 19: Tongue, lingual pouch.



FIGURE 20: Tongue, lateral border.



FIGURE 21: Hard palate.



FIGURE 22: Soft palate and anterior pillar of fauces (tonsil).

abnormalities. Irregularities are more easily detected if gauze is used to wipe the floor of the mouth dry; the gauze can also be used to keep the tongue out of the way.

Ask the patient to push their tongue out to the left and examine the lateral tongue; use the mirror to pull the tongue to the left, and examine and palpate the lingual pouch (Figure 19). This area is between the tongue and mandible in the lower molar areas. It is a high-risk site and tissue changes can be easily missed. Follow the same process with the tongue pushed to the right.

Step 7: Lateral border of the tongue

Examining the posterior third of the tongue (oro-pharynx) can be difficult. Grasp the tip of the tongue with a piece of gauze to assist in full protrusion of the tongue. Use a mouth mirror to visually assess the more posterior aspects of the tongue's lateral borders and, with another mirror, retract the cheek. Also, gently run your index finger along the

lateral borders of the tongue to feel for any hardness (induration). A normal tongue should feel a little softer than touching your own cheek, induration feels like touching the tip of your nose, and infiltrating cancer feels like when you touch your forehead – hard (Figure 20).

Step 8: Palate (hard and soft)

With the patient's mouth wide open and head tilted back, gently depress the base of the tongue with a mouth mirror. Inspect the hard and soft palates and anterior lateral pharynx for white/red patch(es) and palpate for hardness. Remember that the pterygoid hamulus is normal (Figures 21 and 22).

Step 9: Floor of the mouth

If not done earlier, bi-manually palpate the floor of mouth (sublingual gland) and submandibular area for any signs of swelling or hardness (induration) (Figure 11).

Table 1: Points to remember when completing a check-up for oral cancer.¹⁰

- Most oral cancers are located on the lateral borders of the tongue, floor of the mouth, retromolar area and lips – special attention should be focused in these areas.
- Tell your patient what you are doing with each procedure and why.
- Always note any changes in colour and texture of all soft tissues, or any swelling.
- If you detect an abnormality, determine the history of the lesion, correct any possible aetiological factors and review after two weeks.
- If the abnormality has been of more than three weeks' duration, take appropriate action to obtain a biopsy. If you are suspicious of a malignant lesion, refer. Always take a photograph before a biopsy.
- Follow up to ensure a definitive diagnosis of an abnormality.
- Teach your patients about the symptoms and signs of oral cancer.
- If a patient uses tobacco products, provide appropriate counselling or refer for counselling.
- Remove all removable prostheses before starting the examination.

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A review of the role of alcohol in the pathogenesis of oral cancer and the link between alcohol-containing mouthrinses and oral cancer

Précis

The link between alcohol-containing mouthrinses and oral cancer is investigated, concluding that limited use of alcohol-containing mouthrinses in high-risk populations would be advisable.

Abstract

This article will review the most recent literature on the effects of alcohol on the oral mucosa, and the possible mechanisms by which alcohol is thought to act as a carcinogen. The article will also consider the possible link between alcohol-containing mouthrinses and oral cancer. The authors recommend that the use of alcohol-containing mouthrinses in high-risk populations should be restricted, pending the outcome of further research.

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Introduction

Alcohol consumption is a significant risk factor for the development of oral cancer,^{1,2} in addition to other cancers of the head and neck such as pharyngeal and laryngeal cancer.^{3,4}

However, the precise role of alcohol in the pathogenesis of the disease is not fully understood. Not all oral cancer patients consume alcohol, while not all people who drink alcoholic beverages develop oral cancer.⁵ Smoking and alcohol consumption are synergistic risk factors for oral carcinogenesis, further complicating the specific role of each,⁵⁻⁷ with approximately 75% of all oral cancers arising in association with both alcohol and tobacco use.^{2,7} Measurement of alcohol intake is also difficult to quantify, with patient subjectivity and variation in quantity, type and alcohol concentration existing between patients, which further complicates investigating the role of alcohol in oral cancer.⁸

Constituents of alcoholic drinks

The alcohol family is comprised of three main members: methanol, propan-2-ol and ethanol.⁹ Methanol and propan-2-ol are toxic to consume,⁹ while ethanol, in addition to water and glucose, is the main constituent of alcohol-containing beverages.⁸ Alcoholic beverages may also contain certain carcinogenic impurities. These include N-nitrosodiethylamine in some beers and whiskeys, and polycyclic aromatic hydrocarbons in some whiskeys.⁸

Carcinogenic effects of ethanol

Ethanol consumption can act as a risk factor in the development of oral cancer.¹⁰ Local effects of ethanol include:

- Increases in mucosal permeability to other toxins and carcinogens;^{8,10,11,12}
- altered mucosal morphology with a reduction in epithelial thickness;^{13,14,15}

- acetaldehyde (the first metabolite of ethanol) is a mutagenic and carcinogenic substance,^{16,17} which causes cellular damage to the oral epithelial cells;¹⁰
- ethanol may potentiate the carcinogenic effects of other agents;⁵ and,
- ethanol disrupts salivary gland function,¹⁸ reducing the clearance of locally acting carcinogens and thus increasing the risk of cancer development.^{10,19}

Alcohol-containing mouthrinses and oral cancer

Mouthrinses are used for the treatment of a variety of oral conditions, ranging from the management of halitosis to the treatment of oral infections.²⁰ Ethanol is used as a solvent for the active agents in many mouthrinses, with concentrations ranging from 6-26.9%.²⁰ The advantages of using ethanol in a mouthrinse include its antiseptic and preservative properties, its low cost and ease of production.²¹

A possible harmful effect of alcohol-containing mouthrinses has been suggested. This is because these mouthrinses contain high concentrations of ethanol, and are kept in the mouth in direct contact with the oral mucosa for relatively long periods.²² Some of the suggested adverse effects include an increased risk of developing oral cancer, as well as causing a burning sensation in the mouth, drying of the oral mucosa and softening effects on composite filling materials.²¹

A recent meta-analysis of the relationship between alcohol-containing mouthrinses and oral cancer by La Vecchia in 2009 concluded that a link between the use of alcohol-containing mouthrinses and oral cancer is not supported by epidemiological evidence.²³ Reviews by Cole *et al.* in 2003 and Elmore and Horowitz in 1995 also concluded that the available epidemiological evidence did not support a link between alcohol-containing mouthrinse use and oral cancer.^{3,24}

In addition, a population-based case-control study of oral cancer in Puerto Rico by Winn *et al.* in 2001 did not provide any evidence of increased risk associated with the use of alcohol-containing mouthrinses.²⁵

However, the results of other studies are in conflict with these conclusions. A review article by McCullough and Farah in 2008 concluded that there is sufficient evidence to indicate that the risk of developing oral cancer is increased with the use of alcohol-containing mouthrinses.²⁶ They recommended that alcohol-containing mouthrinses should be restricted to short-term use. Two multi-centre case-control studies conducted in 2007 in Central Europe and South America also found that the use of alcohol-containing mouthrinses twice daily significantly increased oral cancer risk among current and former smokers and drinkers, as well as among lifelong alcohol abstainers.²⁷

Lachenmeier *et al.* in 2009 found that the acetaldehyde content of saliva following mouthrinse use was significantly above physiological levels. This was found to be equivalent to levels of acetaldehyde detected in saliva following alcoholic beverage

consumption.²⁸ Poggi *et al.* in 2003 advised against the use of alcohol-containing mouthrinses, due to acetaldehyde accumulation in the mouth following their use.²⁹

Conclusion

The relationship between alcohol consumption and oral cancer is complex. Oral cancer is a disease whose multifactorial nature results in difficulties in determining the precise role of each agent independently. However, the evidence supporting the role of alcohol in the aetiology of oral cancer is convincing, with a significant proportion of oral cancer cases attributable to heavy alcohol consumption.⁷ This illustrates the need for increased public awareness campaigns to reinforce the harmful effects of chronic heavy alcohol consumption.

Evidence regarding the carcinogenic effect of alcohol-containing mouthrinses is inconsistent, and a link between the use of alcohol-containing mouthrinses and the development of oral cancer has not yet been firmly established. Nevertheless, considering what is known about the local effects of ethanol on the oral mucosa, it may be prudent to limit their use, particularly in high-risk patients such as smokers.

The authors recognise the difficulty in isolating alcohol as an independent factor in the pathogenesis of oral cancer. Considering the continually increasing use of alcohol-containing mouthrinses in certain populations, there is potential for further research to be conducted on a broader scale.

It is hoped that the outcomes of this review will allow clinicians to provide the public with informed advice on the harmful effects of alcohol exposure.³⁰

Acknowledgements

For further information on alcohol and oral cancer, please see 'A review of the relationship between alcohol and oral cancer', published online in *The Surgeon* on February 22, 2011.³⁰

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Performing mucosal tissue biopsies in general dental practice

Abstract

One of the roles of a dental practitioner is the identification and management of oral mucosal disease (pathology) in its many forms. A tissue biopsy is an important step in the diagnostic process for oral lesions, while the skill required to perform a biopsy should be well within the capability of most practising dentists.¹ The purpose of this article is to help dental practitioners to identify lesions suitable for biopsy in a dental practice setting, and to outline the equipment and explain the techniques used.

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Introduction

Biopsy technique is a competence skill that is easily learned. Research shows that only 15% of general dentists would perform a biopsy on their patients.² Waiting times for patients to be seen at specialist centres may, however, be long. The heavy workload at these centres, and the delay for the patient, could be alleviated if patients with small and clinically benign lesions could be investigated and treated in the primary care setting. This would have the benefit of improved patient compliance and speedier diagnosis. Dentists providing this service should work closely with their specialist colleagues and the oral pathologist.

Lesions that may require biopsy: clinical description

Whether a lesion is noticed initially by the dental practitioner or by the patient, the first step in the process of diagnosis (as with any pathology) is the taking of a thorough history.

The pertinent information required with regard to a lesion includes the duration of the lesion, its progression (slowly enlarging or recurrent with episodes of quiescence) and any associated symptoms. A full medical history, including medications, dental history and social history are also vital to help determine any systemic or local causes for the lesion.

The clinical examination is a vital step in correctly identifying a lesion, but it is also important to be able to use the correct terminology in describing a lesion. This enables a dental practitioner to communicate effectively with a referral centre or pathologist, as the language used will help the staff at the referral centre to determine the urgency of a referral. The steps for clinical examination should be followed as for any lesion anywhere in the body, and follow the sequence of: 1) look; 2) feel; 3) move; 4) measure; and, 5) record with a photograph. Note should be taken of the:

1. Site, shape, morphology, colour and border.
2. Consistency (soft, firm, lobulated, hard), tenderness, associated symptoms (e.g., discharge) and pulsations (beware).
3. Tethering (fixation to mucosa, skin or underlying structures).
4. Size (using a ruler or callipers for exact measurement).
5. The exact appearance and size recorded by photograph for future reference.

Radiographic images can also aid in the diagnosis of lesions and should be taken when a dental or bony cause for a mucosal lesion is suspected.

It is important at this stage to stress the importance of taking a photographic record

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of lesions that one comes across in the dental practice. While a drawing in the patient's notes can be helpful in recalling details, there is no substitute for the usefulness of obtaining photographs of any suspicious lesions. They make the long-term follow-up of benign lesions a simple matter of comparing previous photos to the current state of a lesion, and are also vital when a seemingly benign lesion turns out to be dysplastic or malignant. The pathologist would also welcome a copy of the photographed lesion when receiving a specimen. The relatively low cost of digital cameras and the user-friendliness of modern computer operating systems make the maintenance of a photographic record well within the capability of all dental practitioners.

Lesions that may require biopsy: further steps to diagnosis

It is up to the dental practitioner to decide first of all if the lesion in question warrants a biopsy and, if so, if it is a lesion that is suitable to be biopsied in the general dental practice setting.

A presumptive diagnosis is a great help. The surgical sieve (see **Table 1**) approach is taken when the dental practitioner is presented with an oral lesion and makes an initial differential diagnosis of the lesion. Sometimes a diagnosis can be made on clinical grounds alone using a combination of history, examination, knowledge and experience. An experienced clinician can often recognise a fibro-epithelial polyp for what it is and can counsel the patient on whether a biopsy is necessary. Some patients will elect to have the lesion excised due to its nuisance value, while other patients will be reassured and are content to have no treatment.

Patients with lesions that have a history and/or clinical appearance highly suggestive of malignancy (white, red, hard or ulcerated) should be immediately referred to a specialist centre (e.g., dental hospital) by letter and phone. A non-healing ulcer present for more than three weeks must be regarded as a cancer until proven otherwise. This is also true for a hard lump in the neck or sublingual area. Lesions that raise the possibility of significant pathology (such as pemphigus or Stevens-Johnson syndrome) should also be referred urgently to a specialist centre.

Large benign-looking lesions that are unlikely to resolve spontaneously (e.g., a large fibrous polyp >1cm), and that require excision, should also be referred after the initial consultation.

Other lesions, such as a traumatic ulcer or clinical evidence of candidiasis, can be treated (e.g., removal of the cause of trauma, antifungal medication) and following the initial consultation, a review appointment should be made for approximately two weeks' time. If at this stage the lesion is persisting or, indeed, progressing, a decision can be made as to whether a biopsy is necessary and also if referral to a specialist centre is required (see **Table 2**).^{3,4}

In many cases it is wiser to perform the biopsy in a specialist referral centre (see **Table 3**).^{3,4} Consideration should also be taken of the possibility of complications such as excessive bleeding, scarring and damage to other structures (e.g. nerves) when undertaking a biopsy. These can arise due to the morphology or location of the lesion or the patient's medical history (see **Table 4**). In any individual case, the clinician must decide if performing the biopsy is within their level of experience and ability.

Table 1: Surgical sieve for a lesion: consider as a cause.

Developmental
■ White sponge naevus
Inflammatory
■ Trauma
■ Physical (hot/cold)
■ Chemical (acid/alkali)
■ Irradiation
■ Infection (bacterial, viral, fungal, protozoal, etc.)
■ Immune-mediated
Neoplastic
■ Benign
■ Malignant
Metabolic/endocrine
Degenerative
Miscellaneous
■ Specific to area (e.g., salivary gland disease)
Other

Table 2: Lesions suitable for biopsy in general dental practice.^{3,4}

- Fibroepithelial polyp:
- pyogenic granuloma;
- epulis; and,
- mucosal lichen planus (for experienced practitioners; if in doubt, refer).

Biopsy technique

Dental practitioners are adept at many minor surgical procedures and performing a biopsy follows the same basic steps.

Goal

The overall goal of a biopsy is to obtain tissue that can be analysed by a pathologist in order to reach a diagnosis and therefore influence future treatment decisions regarding a patient. To that aim, it is the responsibility of the person performing the biopsy to obtain sufficient tissue and manage that tissue appropriately, so that it arrives to the pathologist in a condition suitable for processing and analysis.

Planning

There are a number of types of biopsy techniques available (incisional, excisional, a scraping and punch) and the dental practitioner, if trained to take a biopsy, must decide on whether an incisional or an excisional biopsy is the most appropriate for the given patient, based on the presumptive diagnosis, the size and location of the lesion, and whether adequate closure of the wound can be made. An excisional biopsy is preferable as it makes the procedure both diagnostic and therapeutic, in that the offending lesion can be completely removed. Excisional biopsies imply that all of the abnormal tissue is removed and are typically performed for clinically

Table 3: Lesions not suitable for biopsy in general dental practice.^{3,4}**Any lesion showing clinical features of malignancy (needs urgent referral)**

- Ulcer lasting more than three weeks with no obvious traumatic cause
- Induration, hardness, recurrent bleeding
- Verrucous (exophytic type) appearance

Leukoplakia/erythroplakia (refer to specialist unit)

- All white patches and red patches (velvet like) should be biopsied
- May need multiple biopsies and follow-up in a specialist unit

Haemangiomas and other vascular lesions (refer to specialist unit)

- May bleed excessively and require complete excision

Bullous lesions (refer to specialist unit)

- Requires tissue close to bulla
- Fresh specimen required for immune-fluorescence

Lesions suspicious for salivary gland pathology other than mucocoeles

- High likelihood of salivary gland malignancy (needs urgent referral)

Inaccessible lesions

- Lesions on the soft palate or fauces may cause excessive gagging when attempting to biopsy, making wound closure difficult
- Increased likelihood of a non-diagnostic biopsy
- Patient may need a general anaesthetic to achieve adequate tissue sampling

benign lesions less than 1cm in size (in dental practice a conservative maximum size of 1cm should probably be adopted).

Incisional biopsies involve removing only part of the lesion for analysis. It is generally regarded as advantageous to include some normal mucosa in the biopsy specimen to allow comparison with the abnormal tissue, but the majority of the specimen should be lesional. When planning any surgical incision, one must also take account of the surrounding anatomy and plan on how a wound is going to be closed. While wounds on the buccal mucosa will close quite easily, wounds on areas of attached gingiva will not and may need to be left to heal by secondary intention (see **Table 4**).

Preparation

As with any surgical procedure, it is vital to obtain a patient's fully informed consent to having a biopsy.

A pre-operative photograph of the lesion should be taken. Local anaesthetic (with adrenaline to aid haemostasis) is then administered with a number of small infiltrations around but not into the lesion to be biopsied. A field block can also be used to aid anaesthesia.

Relatively little equipment is required to perform a biopsy (see **Table 5**) but it is important to lay the equipment out ready to be used before commencing the biopsy.

Table 4: Locations where caution is needed when taking oral biopsies.**Hard palate midway between molar teeth and midline**

- Risk of haemorrhage from the greater palatine artery
- Manage bleed with direct digital pressure for 10-20 minutes
- If uncontrollable, will need emergency referral to a maxillofacial unit

Lip

- Risk of distortion of the lip contour if biopsy comes close to the external skin
- Lesions close to the external surface of the lip should be referred to a specialist centre
- The labial artery runs between the mucosa and the orbicularis oris and is easily cut

Areas of attached gingival/mucosa

- Primary closure may not be possible
- Wounds generally heal very well by secondary intention
- May need prolonged direct pressure for haemostasis
- Risk to gingival contour if near the gingival margin

Floor of mouth

- Difficult access due to nearby teeth and tongue
- Highly vascular area and can bleed heavily and/or develop a haematoma
- Thin friable mucosa, which is difficult to close
- Lesions in this area should be referred to a specialist centre

Buccal mucosa

- Generally a safe area to take a biopsy from but take care to avoid the parotid duct orifice adjacent to the upper second molar

Tongue

- Highly mobile and vascular structure
- Requires a good assistant to hold the tongue using a piece of dry gauze throughout the procedure
- If well anaesthetised, a 2.0 or 3.0 silk suture can be passed through the tip of the tongue to aid retraction

Buccal sulcus adjacent to lower premolar teeth

- Risk of injury to mental nerve
- Perform superficial biopsies only

Table 5: Equipment needed to perform a biopsy.

- Sterile gloves
- Fine-toothed forceps
- 15-blade scalpel
- 4mm or 5mm punch biopsy (if a punch biopsy is going to be performed)
- Fine sharp scissors
- Sterile gauze
- Sterile saline
- Suture material
- Procedure drape (for maintaining a clean field and protecting the patient's clothes during the biopsy)
- Sterile specimen container containing formalin

Table 6: Punch biopsy technique.

- The area to be biopsied is identified and, if mobile, should be held under tension using the opposite hand. The assistant can retract the lip or tongue using fingers, a dental mirror or wooden spatula if required.
- The punch should be held perpendicular to the lesion.
- Using a gentle twirling motion and almost no downwards pressure, the punch should be allowed to cut through the mucosa and just into the submucosal tissue.
- The punch blade should not be buried to its full depth (oral mucosa is quite thin).
- It will be clear if a deep enough punch was performed as the tissue sample will be freely mobile from its surrounding mucosa and only attached to the underlying submucosal tissue.
- The tissue sample can now be gently held with forceps while the submucosal tissue at the base of the biopsy specimen is cut using a sharp, fine scissors or scalpel.
- While the assistant puts direct pressure on the wound, the freed biopsy specimen is then examined to assess whether it is of suitable size and condition.
- The specimen is then placed in a container of formalin (see section on specimen).
- The wound is inspected for haemostasis and one or two sutures should be placed to aid haemostasis and also to aid identification of the biopsy area when reviewed.

Punch or knife

There are two main methods of performing a biopsy. A punch biopsy involves using a cylindrical, very sharp, sterile blade of a given diameter (usually 4 or 5mm) to incise an even circle into the epithelium (see **Table 6**).

A knife biopsy involves using a scalpel (usually 15 blade) to make an incision in the mucosa (see **Table 7**).

In our opinion, the punch biopsy is ideal for performing intra-oral biopsies as it is very user friendly, easy to judge the depth of the biopsy, offers an adequate size of tissue for the pathologist, and the resulting wound is easily closed with one or two sutures. The small dog ears formed when closing a punch biopsy wound are not an issue with intra-oral biopsies as they heal well and are almost invisible after two to three weeks.

Regardless of the type of biopsy performed, haemostasis can be achieved by direct pressure with damp gauze. The wound can then be closed with size 4.0 silk or vicryl sutures.

Some biopsy locations are not amenable to direct closure such as on attached gingiva or on the attached mucosa of the hard palate. Once haemostasis is achieved in these areas by direct pressure, the wound can be allowed to heal by secondary intention. Materials such as Coe-pack and the patient's denture can be useful in some circumstances.

Table 7: Incisional biopsy technique using a scalpel.

- The area to be biopsied is identified and held under tension (skin tension is vital when performing biopsy with a scalpel).
- The blade should be held in a pen grip and the incision should be made using a light, even stroke at right angles to the mucosa (avoid undercutting the mucosa specimen).
- The incision should be deep enough to pass through the mucosa and into the submucosal tissue. This allows the mucosa to pull away from the biopsy and makes the technique very simple.
- If the wound is going to be closed primarily a trapezoidal or elliptical incision is made, making sure that the length of the ellipse is at least twice as long as the breadth.
- If the wound is going to be left to close by secondary intention, then the incision should be tailored to the size and morphology of the lesion.
- If performing an excision biopsy, cut around the lesion with a small margin of normal tissue (cancer is not suspected so a large margin is not necessary).
- Once the mucosa has been incised, the specimen can be gently picked up at one end using a forceps and the underlying soft tissue can be cleared using the scalpel.
- A 3.0 silk stitch can be passed through polyps during excision to aid retraction.
- For flat mucosal lesions, a silk stitch can be passed through one end of the specimen to aid handling and to provide orientation.
- Once the biopsy specimen is removed, the wound can be closed as normal.

The specimen

It is important that a tissue specimen arrives to the laboratory in a condition suitable for analysis by the pathologist. To achieve this goal the specimen should be large enough to be processed, and must be handled as gently as possible while being collected. The gentle use of a fine forceps is necessary while it is being collected (in one study, crush artefacts were found to be present in 27% of biopsies taken by general dental practitioners).⁵ Some clinicians recommend the use of a fine hypodermic needle or suture passed through the specimen during retrieval to avoid crushing it with forceps, but note that this can also damage the specimen.

For all excision specimen sizes, it is useful to orientate it by placing a fine black silk suture through one end. The specimen could also be placed on blotting paper to prevent curling.

Once taken, the specimen should immediately be placed in a sealable container filled with 10% neutral buffered formalin with a volume at least 10 times that of the specimen volume. The formalin works by creating intermolecular bridges between proteins, thus preventing autolysis. This process renders a specimen unsuitable for evaluation by immuno-fluorescence and therefore, in situations where this is required, the biopsy should be performed at a specialist centre.

If an instrument contacts the formalin, put it aside for sterilisation to avoid contaminating the wound with formalin.

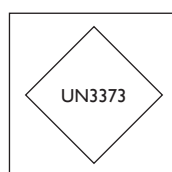
A pathology request form must be adequately completed. Details that must be entered include: the date of the biopsy; the patient's name, address and date of birth; and, the name, location and contact details of the referring dental practitioner. Clinical details should include a description of the lesion, its location in the mouth, the provisional diagnosis or differential diagnosis, the type of biopsy (incisional or excisional, punch, etc.) and the orientation if a location stitch has been placed. A drawing and/or photograph is often extremely useful to the pathologist. In some circumstances, contacting the pathologist directly would be appropriate, particularly if there is a complex history.

Sending the specimen

There are regulations in place governing the transport of human tissue (Agreement Dangerous Routier [ADR], UN/ECE European Agreement Concerning the International Carriage of Dangerous Goods by Road, and the WHO Guidance on Regulations for the Transport of Infectious Substances 2007-2008, for example). The specimen must be transported to the hospital pathology laboratory in a manner that will ensure that it arrives intact and minimising any chance of leakage or loss of the specimen. The specimen must be sent by courier or taxi in a package with the following components:

- leak-proof primary container (filled with formalin and specimen, and labelled with patient details);
- secondary sealable package to enclose the primary container (sealable plastic specimen bag with sufficient absorbent material to absorb the entire content of the inner container); and,
- outer packaging (a rigid container able to withstand a free fall drop and containing material to protect the inner packaging).

The outer container must be marked as follows:



Adjacent to the diamond-shaped mark, the shipping name 'BIOLOGICAL SUBSTANCE, CATEGORY B' must also be written.

Specimens contained as outlined and marked as above can be transported by any driver and do not need any ADR documentation. In Ireland, tissue specimens must not be sent by post.

There are several companies that provide suitable containers and their details are usually available from the local laboratory. Most laboratories in Ireland are staffed by general pathologists who are competent in interpreting the pathology of the more common oral mucosal lesions, particularly if the clinical details are adequate. Where necessary, they may seek the advice of a pathologist with a specialist interest in oral and maxillofacial pathology.

Follow-up

A biopsy report may be available within two to three days of the specimen's arrival at the laboratory, but since most reports are sent to

the general practitioner by post, this extends the turnaround time. Delay also occurs in some cases due to the need to cut further sections, to do special stains, or where there is difficulty in interpretation and the case needs to be examined by more than one pathologist. An appointment should be made with the patient for approximately two weeks after the procedure to inspect the wound and discuss the biopsy results. At this stage the patient can either be reassured that no further treatment is needed or, if required, he/she can be referred to a specialist centre for further management. If there is any concern about the lesion, do not remove the sutures until the patient is seen in the appropriate centre (with an accompanying photograph of the original lesion).

Example of a punch biopsy

The images overleaf illustrate the steps taken when performing a punch biopsy for a lesion with the clinical appearance of a small fibro-epithelial polyp on the dorsum of the tongue. The lesion was excised as it was a nuisance for the patient. After consultation, consent was given for the procedure by the patient.

The relevant clinical details are entered on the histopathology form and the specimen is sent to the pathology laboratory for processing. The patient is booked for a review appointment for two weeks' time.

Conclusion

There are a myriad of possible diagnoses when one is presented with a patient with oral soft tissue pathology and these patients often first present themselves in general practice. A combination of clinical knowledge and experience will enable the dental practitioner to determine if the lesion warrants a biopsy and whether the lesion is of serious concern.

Biopsy of small clinically non-suspicious lesions can be performed relatively easily in the dental practice and is often swifter and more convenient for the patient than referral to a hospital unit.

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Further information on histological specimen handling and transport is available at:

www.dentalschool.ie/oral-pathology/www.stjames.ie/GPsHealthcareProfessionals/LaboratoryPolices/transportation.pdf

www.who.int/csr/resources/publications/biosafety/WHO_CDS_EPR_2007_2cc.pdf

Example of a punch biopsy

The following images illustrate the steps taken when performing a punch biopsy for a lesion with the clinical appearance of a small fibro-epithelial polyp on the dorsum of the tongue.



FIGURE 1: A fibro-epithelial polyp is deemed suitable for biopsy.



FIGURE 2: The required equipment is laid out.



FIGURE 3: Local anaesthetic is administered around the lesion.



FIGURE 4: A 5mm punch is selected.



FIGURE 5: The punch is positioned perpendicular to the lesion.



FIGURE 6: The punch is 'twirled' into the lesion.



FIGURE 7: The specimen is held in by the underlying tissue.



FIGURE 8: The specimen is cut free from the underlying tissue.



FIGURE 9: The wound is ready for primary closure.



FIGURE 10: A 3.0 silk suture is used to close the wound.



FIGURE 11: Haemostasis and adequate wound closure.



FIGURE 12: The specimen is placed in formalin.

Oral cancer: knowledge, practices and opinions of dentists in Ireland

Précis

A cross-sectional survey of Irish dentists assessing the knowledge of risk factors, diagnostic concepts and training needs with regard to oral cancer.

Abstract

Purpose of the study: Early detection of oral cancer improves prognosis, but the malignancy is often detected at advanced stages, when more aggressive therapies, often with poor and devastating outcomes for the patient, are needed. Oral cancer can be detected by opportunistic screening of oral mucosa without need of sophisticated equipment. Dentists are important in primary and secondary prevention of oral cancer; therefore, assessing their knowledge, opinions and practices is crucial.

Materials and methods: A questionnaire survey of dentists was conducted regarding knowledge of risk factors and diagnostic concepts of oral cancer, practices of primary and secondary prevention, and opinions of the effectiveness of formal undergraduate training for early detection and prevention of this disease. The survey explored dentists' potential training needs.

Results: Dentists appear to be generally knowledgeable regarding diagnostic concepts and risk factors. A total of 89% reported providing screening of intra- and extra-oral soft tissue to adult patients (18+) to exclude oral cancer. A total of 27% always provide tobacco use cessation counselling, and 12% provide alcohol moderation/cessation assistance. A total of 54% felt adequately trained to palpate the lymphatic nodes associated with oral cancer. Over half of dentists reported that their knowledge of and training on oral cancer was current; however, 74% reported lack of patient education materials regarding prevention and early detection of oral cancer.

Conclusions: The survey findings suggest that dentists are underutilised in the prevention and early detection of oral cancer, and one of the barriers is lack of training. Dentists' knowledge and skills must be reinforced and systematically updated by continuing professional education. Greater emphasis should be placed on the fact that dentists have a larger role to play in the prevention and detection of this malignancy at its early, curable stages.

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Introduction

Ongoing training regarding the prevention and early detection of oral cancer may impact on dentists' opinions, knowledge and clinical practice¹⁻³ and is essential, as incidence is increasing,⁴ with more than 419,000 new cases diagnosed annually worldwide.⁵ Despite advances in treatment, the five-year survival rate is 50%,⁶ mostly because of the advanced stage at diagnosis.⁷

Epidemiologic studies estimated that early detected disease has a relative survival rate of 82%, but this reduces to only 54% and 32%, respectively, for regional and distant spread.⁸ Alcohol and tobacco are important contributors to the malignancy, and involvement of human papillomavirus (HPV) has been suggested as a co-factor, particularly in the development of

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carcinoma of the pharynx in younger populations.^{4,9-13} Suspicious oral changes can be detected by visual and tactile examination of the oral mucosa without use of sophisticated equipment, and can be referred for further investigation.

A majority of oral cancer is detected at advanced stages,⁸ when more aggressive therapies are needed¹⁴ that may impact on the function of the oral cavity, and produce facial disfigurement affecting the patient's quality of life.¹⁴⁻¹⁸

A total of 60% of patients with oral cancer in Ireland are diagnosed at a late stage, and there is a lack of awareness about the disease.¹⁹ A UK study suggested that populations at risk of developing oral cancer are least knowledgeable about risk factors, signs and symptoms.²⁰ Early, curable stages of oral cancer are small, asymptomatic lesions²¹ that may be easily missed by the patients, highlighting the important role of dentists in reducing the burden of oral cancer.

Dentists are qualified to opportunistically screen for oral cancer and to provide preventive advice and counselling interventions during routine examinations. It is vital that dentists have accurate knowledge about oral cancer to identify individuals at risk, examine the mouth to document tissue changes and provide appropriate interventions, thus potentially contributing to the reduction in oral cancer incidence, morbidity and mortality.

Previous studies in the US,^{2,22-25} Canada,²⁶ Spain²⁷ and the UK^{28,29} investigated the knowledge, opinion and practices of dentists in the prevention and early detection of oral cancer. These studies revealed that dentists were generally knowledgeable about this malignancy; however, there were gaps in their knowledge, and insufficient preventive activities.

Little is known about the knowledge, opinion and practices of Irish dentists regarding oral cancer. With this background the research aim was:

- to evaluate the knowledge of practising dentists regarding oral cancer risk factors and diagnostic concepts;
- to evaluate cessation strategies provided by dentists for patients who use tobacco products and alcohol excessively;
- to investigate dentists' opinions regarding the adequacy of formal undergraduate training towards primary and secondary prevention of oral cancer; and,
- to explore potential educational needs, if any, with regard to the prevention and early detection of oral cancer.

The survey findings may be useful for planning undergraduate and continuing professional education programmes regarding prevention of oral cancer and diagnosis of early disease.

Method

A 25-item online survey was constructed using the following subheadings: general information; oral cancer risk factors; oral cancer diagnostic concepts; and, dentists' opinions. The survey was developed using previously published tools^{2,30} with modifications and additions for the Irish context. The survey was distributed to 1,400 dentists practising in Ireland during October-November 2010. The

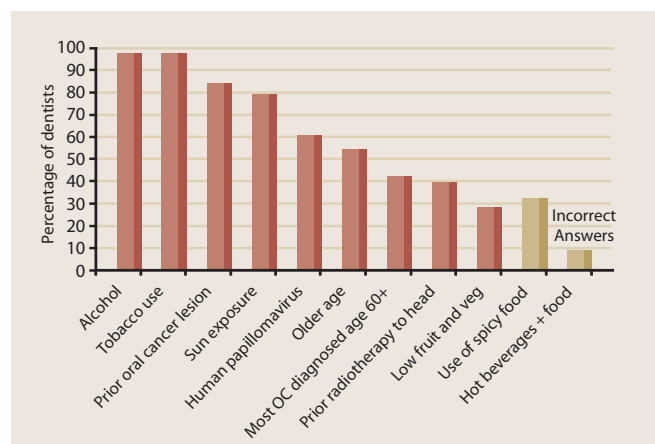


FIGURE 1: Showing percentage of dentists' responses to 'risk factor' questions.

online survey was sent out by the Irish Dental Association to members of the Association using email contact addresses. Ethical approval was sought and received from the Trinity College Board of Ethics prior to commencement of the study.

Each correct answer (similar to the study carried out by Yellowitz and colleagues²) was marked with a score of '1'. The scores were added to create an index score (low, medium, high) for risk factors, ranging from 0-9, and diagnostic concepts ranging from 0-11. The dentists were classified into three groups in accordance with the scores received in order to create a characteristic (gender, timing of graduation and continuing education course, experience, perceived knowledge) of dentists' knowledge of both risk factors and diagnostic concepts associated with oral cancer.²

Statistical software SPSS v18 was used to evaluate the association between dentists' background (gender, timing of graduation and continuing education course, experience) and the knowledge of both risk factors and diagnostic concepts. Dentists' perceived knowledge ('my knowledge is current') and actual knowledge was also evaluated. A level of $P < 0.05$ was considered statistically significant.

Results

A total of 254 dentists participated in the study, of which 105 (41%) were female, with the time of graduation ranging from before 1980 to 2010. Over 60% of participants had practised for more than 15 years as a dentist. Risk factor knowledge is summarised in **Figure 1**.

Oral cancer awareness and preventive interventions

Over 90% ($n=211$) of the respondents assess current smoking status, with nearly 60% ($n=135$) assessing previous smoking status. However, only 59% ($n=134$) of dentists assess current alcohol status, with less than 30% ($n=68$) asking about past alcohol use. Nearly 70% ($n=160$) ask about previous head and neck cancer.

Figure 2 summarises tobacco and alcohol counselling interventions provided by dentists for patients who use tobacco products and alcohol excessively. Some 83% ($n=175$) and 49% ($n=103$) of participants,

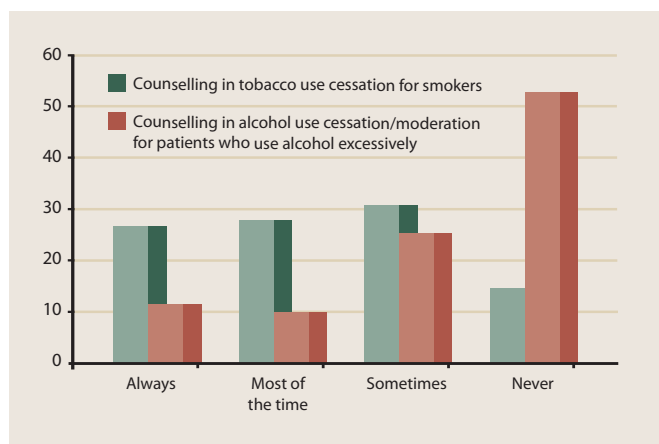


FIGURE 2: Showing how often dentists offer counselling in tobacco and alcohol cessation.

respectively, felt that it is their professional duty to provide tobacco use and alcohol cessation assistance to their patients. A high proportion of dentists reported performing oral screening to exclude oral cancer in all adult patients (18+) regardless of their tobacco and/or alcohol status, and 97% (n=202) provide this examination for edentulous patients. Some 74% (n=155) reported a lack of patient education materials (brochures, leaflets, posters) regarding prevention and early detection.

Knowledge of diagnostic concepts

Although a majority of dentists surveyed (99%, n=221) agreed that early detection of oral cancer improves its five-year survival rate, and around 95% (n=211) knew that a patient is usually asymptomatic during the initial stages of the disease, a lower proportion of participants (86%, n=188) were aware that most oral cancer is diagnosed at advanced stages. Similarly, 87% (n=192) of respondents knew that the ventral lateral border of the tongue is the most common site of tongue lesions.

Over 80% of dentists identified erythroplakia and leukoplakia as the most common types of lesions associated with oral cancer. However, a higher proportion of dentists identified leukoplakia (87%, n=193) than erythroplakia (82% n=181), a fact that will be addressed in the discussion section. Moreover, only 72% (n=159) of respondents identified both lesions. In addition, 11% (n=25) of participants incorrectly identified nicotine stomatitis and frictional keratosis as the most common lesions associated with oral neoplasia.²¹

Over 70% (n=162) identified the tongue, and 86% (n=190) identified the floor of the mouth, as the two most common sites for intra-oral lesions. However, only 64% (n=141) correctly identified both sites.

Oral cancer knowledge and dentists' demographics

The relationship between the time of graduation and the knowledge of risk factors indicated a weak correlation (Spearman correlation = 0.124, p=0.04) between the two variables, with higher risk factor scores associated with more recent graduation. Similarly, more recent graduation was associated with higher score in diagnostic concepts

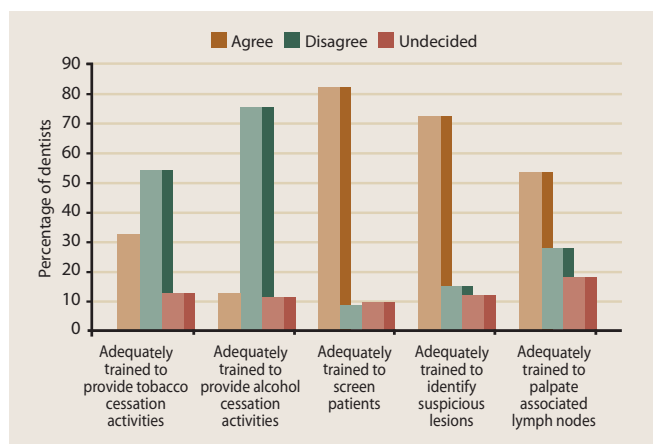


FIGURE 3: Showing self-reported training levels.

(Spearman Correlation = 0.212, p=0.001). In addition, completion of a more recent continuing education course was associated with higher scores in both diagnostic concepts (p<0.001, r=0.298) and risk factor knowledge (p=0.03, r=0.146).

Dentists' training

The self-reported level of training is shown in Figure 3. The vast majority of dentists identified that they were not adequately trained to provide tobacco and alcohol cessation advice; however, they did feel adequately trained with regard to screening and identifying suspicious lesions and nodes. The dentists who stated adequate training appeared to have a better knowledge of diagnostic factors (p<0.001). A total of 42% (n=87) of participants attended a continuing education course (seminar, conference, study day) regarding oral cancer in the last two years, and 34% (n=71) in the last five years, while 6% (n=13) attended a course more than 10 years ago and 8% (n=18) never received such an education update.

When asked about dentists' training needs, the most common response was for the "recognition of suspicious lesions" and on "suspicious lesions referral guidelines" (more than 95% of respondents chose these). Alcohol (74%) and tobacco (79%) cessation education were the least selected of the answer options.

Discussion

Knowledge of oral cancer risk factors and diagnostic concepts

The results of the present study show that dentists practising in Ireland are generally knowledgeable regarding oral cancer risk factors and diagnostic concepts; however, similar to other studies,^{2,25-27} there is variability in their knowledge.

Although the vast majority of dentists identified alcohol and tobacco as the main risk factors, similar to other studies previously carried out in the US,^{2,22-25} Canada²⁶ and Europe,²⁷ a smaller proportion of dentists were aware that HPV, low consumption of fruit and vegetables, prior oral cancer lesion and sun exposure in the case of lip cancer are also potential risk factors.

There is an increased incidence in patients under 45 years of age;³¹⁻³⁵ however, the majority of cases occur in patients 45 years or older, with most patients at the time of diagnosis being in their sixties.^{2,36} Only 55% of dentists identified older age as a potential risk factor for development of oral neoplasia. This figure is low in comparison to similar studies carried out in the US,^{2,22} Canada²⁶ and Spain.²⁷ Participants were more knowledgeable regarding risk factors that are not scientifically proven to be associated with oral cancer, as a significantly lower proportion of participants in comparison to other studies^{2,22,26,27} identified hot beverages and spicy food as risk factors for oral neoplasia.

Nearly all participants identified squamous cell carcinoma as the most common type of oral cancer, and over 80% of dentists knew that erythroplakia and leukoplakia are the main precancerous lesions associated with oral neoplasia. However, leukoplakia was identified by a slightly higher percentage of dentists in comparison to erythroplakia. Although both lesions have malignant potential, erythroplakia, and the red component of erythroleukoplakia, known as speckled erythroplakia, have a greater chance to progress to oral cancer.^{21,37} In addition, it has been reported that on histopathological assessment over half of erythroplakias were invasive carcinoma, and 40% showed carcinoma *in situ*.³⁸

A very high proportion of dentists reported performing oral examinations to exclude cancer in all adults and edentulous patients during routine visits, and although 86% identified floor of the mouth and 73% identified the tongue, only 64% identified both sites as high risk. Similarly, some dentists were not aware that the ventral and lateral border of the tongue is a high-risk area for suspicious lesions in the case of tongue carcinoma.^{21,37}

Part of the examination to exclude oral cancer is palpation of the cervical lymphatic nodes. A total of 46% of respondents did not agree with the statement that they were adequately trained to palpate lymphatic nodes and identify the associated lymphadenopathies (28% disagree and 18% undecided). However, 80% correctly answered the knowledge questions about this subject.

The survey revealed that only 53% agreed that their oral cancer knowledge is current. Furthermore, statistical analysis indicates that dentists who stated that their knowledge is current actually have a better knowledge than those who took the opposite view, suggesting that participants' perceived knowledge is in line with actual knowledge. Dentists who both graduated and attended continuing education courses more recently were more likely to receive high scores for both risk factors and diagnostic concepts. This suggests that dental schools provide training regarding this topic, and continuing professional education programmes are a reasonable approach in maintaining the appropriate level of knowledge.

With increasing time since graduation, dentists tend to have a slightly lower level of knowledge regarding the diagnostic concepts and risk factors. It has been reported that the knowledge acquired in medical schools tends to decrease with time, and that the half-life of this knowledge is approximately five years.³⁹ As oral cancer incidence, although rising,⁴ is still low in comparison to other malignancies,

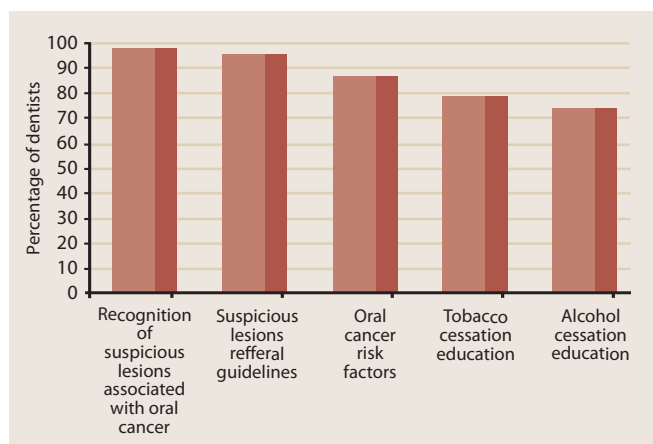


FIGURE 4: Showing self-reported training needs.

dentists may not frequently encounter this malignancy. This highlights the need for continuing professional education with a focus on both risk factors and clinical diagnostic concepts.

Tobacco and alcohol cessation

More than half of dentists never provide counselling in alcohol moderation/cessation for patients who abuse alcohol. A relatively small proportion of dentists provide counselling in tobacco cessation for patients who smoke. These findings are similar to other surveys,^{24,29,40} and suggest that dentists find providing tobacco and alcohol cessation assistance to their patients challenging.

In line with other studies,^{24,25,28,41} dentists in Ireland reported being unprepared to offer tobacco and alcohol cessation assistance, as 54% and 76% of respondents, respectively, felt inadequately trained to provide tobacco and alcohol cessation education to their patients.

A review of 149 dental schools reported that 69% taught tobacco interventions in their undergraduate curricula.⁴² However, Davis and colleagues in 2010 suggested that schools provide only "basic knowledge-curricula that rarely incorporate effective, behaviourally-based components affecting long-term change," and emphasised the importance of and need for new strategies regarding tobacco preventive activities.⁴³

A high proportion of dentists reported that they have a role to play in providing patients with tobacco cessation counselling, but less than half felt that alcohol abuse counselling is part of their professional duty. This is in line with the results from Figure 4 regarding specific training needs. Dentists ranked tobacco and alcohol cessation at the lower end of the spectrum, with between 70 and 80% of dentists specifying a need for further training in these areas.

Conclusion

The response rate to the survey was approximately 18%; therefore, the results have to be interpreted with care, as it may not describe the knowledge, opinions and practices of all practising dentists in Ireland. Furthermore, the dentists who participated in the study are a self-

selected group and may be more interested in the subject, and as a consequence may be more knowledgeable than non-respondents. In addition, a general limiting characteristic of self-reporting surveys is the probability of socially acceptable responding, and therefore the results may not necessarily fully reflect dentists' daily professional practice.

Similar to studies in other countries, the findings of this survey suggest that dentists practising in Ireland are generally knowledgeable of oral cancer risk factors and diagnostic concepts. Recent graduation and continuing education were associated with better knowledge of risk factors and diagnostic concepts.

Dentists find providing tobacco and alcohol cessation assistance to their patients challenging, and a high proportion felt insufficiently trained to incorporate these interventions in their practices. However, dentists feel confident to provide oral screening examinations for adults, including edentulous patients, although not all dentists are aware of high-risk sites.

Dentists' knowledge and skills must be updated by continuing professional education regarding recognition and prevention of pre-malignant and malignant oral lesions. Only half of participants indicated that their knowledge and training regarding this malignancy was current and a large majority of respondents expressed their desire to attend continuing education courses.

Silverman and his team recently suggested that dentists' knowledge, attitudes and practices can be positively influenced by continuing education courses.¹ Furthermore, Robertson and his colleagues argued that "CE which is ongoing, interactive, contextually relevant, and based on need assessment can improve knowledge, skills, attitudes, behaviour and patient health outcome".⁴⁴

In order to design effective educational strategies that would benefit both future and practising dentists and their patients, it is crucial to evaluate dentists' knowledge, opinion and practices. Dentists are capable of and have an excellent opportunity to bring about positive change in reducing the rising incidence of oral cancer and ultimately saving lives.

It appears that the study is the first in Ireland to evaluate the readiness of dentists to be involved in oral cancer prevention and early detection. Further studies that focus in more depth on tobacco and alcohol cessation interventions, and dentists' ability to recognise pre-malignant and malignant lesions, are much needed.

Declaration

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Appendix 1 – Questionnaire

The full questionnaire is available at www.dentist.ie/resources/jjida

Tooth loss in aggressive periodontitis after active periodontal therapy: patient-related and tooth-related prognostic factors

Bäumer, A., Pretzl, B., Cosgarea, R., Kim, T.S., Reitmeir, P., Eickholz, P., et al.

Objectives: To assess prognostic factors for tooth loss after active periodontal therapy (APT) in patients with aggressive periodontitis (AgP) at tooth level.

Material and methods: Eighty-four patients with AgP were re-evaluated after a mean period of 10.5 years of supportive periodontal therapy (SPT). Some 2,054 teeth were entered into the model. The tooth-related factors, including baseline bone loss, tooth location and type, furcation involvement (FI), regenerative therapy, and abutment status, as well as time of follow-up and other patient-related factors, were tested for their prognostic value at tooth level. Multilevel regression analysis was performed for statistical analysis to identify factors contributing to tooth loss.

Results: During SPT, 113 teeth (1.34 teeth per patient) were lost. Baseline bone loss, use as abutment tooth, tooth type, and maxillary location contributed significantly to tooth loss during SPT. Molars showed the highest risk for tooth loss after APT. Moreover, time of follow-up and the patient-related factor "educational status" significantly accounted for tooth loss at tooth level.

Conclusion: Baseline bone loss, abutment status, tooth location and type, as well as time of follow-up and educational status were detected as prognostic factors for tooth loss during SPT in patients with AgP at tooth level.

J Clin Periodontol 2011; 38 (7): 644-651.

Three-dimensional tomographic mapping related to primary stability and structural miniscrew characteristics

Silvestrini Biavati, A., Tecco, S., Migliorati, M., Festa, F., Marzo, G., Gherlone, E., et al.

Objectives: To evaluate the maxilla, mandible, and cortical plates on computerised tomographic (CT) scans to achieve accurate three-dimensional bone thickness measurements.

Setting and sample population: We selected the CT scans of 25 subjects (among 102), aged 18-58 years (10 men, 15 women), with nearly complete dentition.

Materials and methods: We performed interradicular and bucco-lingual (including cortical plate thickness) measurements in dental

areas distal to the canines in both alveolar arches, at three levels (5, 8, and 11mm) from the alveolar ridge.

Results: The mean thicknesses of the cortical plates in the maxilla were 1.10mm buccally and 1.27mm on the palatal side ($p < 0.05$). In the mandible, cortical plates were 2.23mm buccally and 2.02mm lingually. Mandibular buccal and lingual cortical plates became thicker distally in the second and third molar areas. There was considerable variation in cortical thickness (from 0.25 to 5.50mm).

Based on interradicular distances, only 13% of measured sites in the maxilla were suitable for miniscrew insertion (≥ 3.3 mm), but 63% of sites were suitable in the mandible.

Conclusion: This study showed considerable individual variation in bone thickness. Our data suggested that the palatal/lingual side may provide greater primary stability for miniscrews. The palatal area, between the second upper bicuspid and the first molar, appeared to be the most suitable area for tapered 7-9mm miniscrews, starting at 1.5-2mm from the alveolar crest.

Orthod Craniofac Res 2011;14: 88-99.

Clinical reproducibility of three electronic apex locators

Miletic, V., Beljic-Ivanovic, K., Ivanovic, V.

Aim: To compare the reproducibility of three electronic apex locators (EALs) – Dentaport ZX, RomiApex A-15 and Raypex 5 – under clinical conditions.

Methodology: Forty-eight root canals of incisors, canines and premolars with or without radiographically confirmed periapical lesions required root canal treatment in 42 patients. In each root canal, all three EALs were used to determine the working length (WL) that was defined as the zero reading and indicated by 'Apex', '0.0' or 'red square' markings on the EAL display. A new K-file of the same size was used for each measurement. The file length was fixed with a rubber stop and measured to an accuracy of 0.01mm. Measurements were undertaken by two calibrated operators. Differences in zero readings between the three EALs in the same root canal were statistically analysed using paired t-tests with the Bonferroni correction, Bland-Altman plot and Linn's concordance correlation coefficients at $\alpha = 0.05$.

Results: Mean and standard deviation values measured by the three EALs showed no statistically significant differences. Identical readings by all three EALs were found in 10.4% of root canals. Forty-three per cent of readings differed by less than ± 0.5 mm and 31.3% exceeded a difference of ± 1 mm.

Conclusions: The clinical reproducibility of Dentaport ZX, RomiApex

A-15 and Raypex 5 was confirmed, with the majority of readings within the ± 1.0 mm range. However, the small number of identical zero readings suggests that EALs are not reliable as the sole means of WL determination under clinical conditions.

International Endodontic Journal 2011; 44: 769-776.

Role of bonding agents in the repair of composite resin restorations

Staxrud, F., Dahl, J.E.

Six commonly used composite resin materials and recommended bonding systems were tested to assess shear bond strength at the interface between aged and new composites with and without bonding. Test specimens were aged in water for 60 days before the new composite was placed. Shear bond strength was assessed after

22 ± 2 h (Test 1) and after additional ageing by thermocycling ($5-55^\circ\text{C}/5,000$ cycles) (Test 2). After an additional 180 days in water, the aged specimens were randomly divided into three groups to blind the test with respect to the aged composite. New composites were placed on aged specimens (two groups with and one without bonding agent) and thermocycled (Test 3). After 24 hours (Test 1), the mean shear bond strength of the test specimens was 21-26MPa when bonding agents were used, as opposed to 10-15MPa without bonding agents. After thermocycling (Test 2), the mean shear bond strength was 16-23MPa with a bonding agent and 17MPa without a bonding agent. After 180 days in water and subsequent thermocycling (Test 3), the mean shear bond strength was 9-13MPa with bonding agent and 2-3MPa when no bonding agent was used. The results of this study therefore indicate that the use of bonding agents significantly improves the quality of composite repair.

Eur J Oral Sci 2011; 119: 316-322.



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Quiz answers

(questions on page 180)

1. Describe what you see in the photograph.
A. A homogenous white patch with well-defined margins on the left lateral border of the tongue, measuring approximately 2cm x 1cm. The white patch is raised anteriorly and flat posteriorly.
2. If the patient was in the dental chair, what else would you do besides visual assessment?
A. Palpation looking for hard/indurated areas (suggestive of invasion).
3. What is your differential diagnosis?
A. Idiopathic leukoplakia, tobacco-induced leukoplakia, frictional keratosis, plaque lichen planus, candidal leukoplakia (chronic hyperplastic leukoplakia), squamous cell carcinoma, lichenoid reaction to drug or amalgam, or oral hairy leukoplakia.
4. What should you do?
Photograph the tongue.
If there is any evidence of induration, urgent referral is recommended.
Address any sharp cusp tips, etc., which could be traumatising the tongue.
Offer smoking cessation advice.
If there is evidence of candidiasis, treat with a topical antifungal (do not use miconazole if the patient is on warfarin).
If the white patch is still present after two weeks, the patient should be referred.

Oral cancer awareness

In the latest article from Dental Protection, DAVID CROSER explains the risk management benefits, for clinicians and patients alike, associated with an increased awareness about oral cancer.



Oral malignancy may be on the increase but it still remains a rare finding in primary dental care practice. The management of the condition depends on the specific diagnosis and on the staging of the tumour. Therefore, it is crucial to refer any suspicious lesions to an experienced specialist at the earliest opportunity. A delay in referral can have devastating consequences for the patient, leading to allegations of negligence.

Effective patient management in these cases involves using best clinical practice, informed by regular continuing professional development and underpinned by accurate and appropriate record keeping.

Clinical practice

Dentists are fortunate that so many patients routinely present themselves for examination. Whatever the evidence for and against a regular six-monthly examination, these visits have always provided an excellent opportunity to screen the oral mucosa. Any such screening should be informed by a simple lifestyle enquiry (use of tobacco, alcohol, paan [betel leaf wrapped around areca nut and slaked lime paste], etc.), and a regular review of the patient's medical history. Smokers should be encouraged to seek professional help with smoking cessation (see overleaf). We are also seeing an increase in the number of younger patients, who have no apparent risk factors, presenting with oral malignancies.

Screening

The most effective oral screening is one that follows a reproducible format for each and every adult patient. Ideally, this should involve a visual inspection of all areas of the mouth, with a good light. These include the floor of the mouth, gingivae, sulci, palate, tongue and oropharynx. Any unusual lesions should be palpated (examined by

touch). A note should be made of the site, size, colour and consistency of any lesion.

An extra-oral examination should be performed, routinely checking the salivary glands, lymph nodes and bones of the lower face. A careful view of the rest of the face can reveal a variety of skin lesions, melanoma, and basal cell and squamous cell carcinoma. It is entirely appropriate for a dentist to make a referral to the appropriate specialist for further investigation. A solid mass in the salivary glands and nodes can be simply detected, and an early referral made.

It is important to assess nerve function, particularly with regard to facial pain patients, and areas of sensory loss associated with pain should be investigated by a maxillofacial surgeon or a neurologist, as these have been reported to be associated with malignant change at the base of the skull. Facial nerve weakness in a case with a parotid mass suggests rapid growth associated with malignant change.

Improving levels of awareness

A number of conditions have been linked with malignant change. The role of human papillomavirus as a precursor to cancerous change is just one such example, and lichen planus is another. Most practitioners will see very few cases during their career, but such patients require prompt and accurate assessment of such lesions. It is important to keep your knowledge of this subject up to date, and several interactive distance-learning programmes are now available to help you to achieve this.

Recently, a number of high-profile celebrities have made public their experience of mouth cancer. This, together with public health initiatives like the forthcoming Mouth Cancer Awareness Day (September 21, 2011), will help to improve levels of patient awareness, which makes the subject a little less alarming to discuss in a clinical setting.

Referral

When you see something unfamiliar in the mouth or lips, it is crucial to be able to establish a differential diagnosis yourself, to seek an expert opinion, and then to carefully monitor any conditions where no evidence of malignancy can be found. Part of that monitoring process should involve educating the patient about what changes to look out for, as well as explaining what is normal. Monitoring is most successful when patients are actively involved and feel that they can report any changes or concerns to a receptive and caring clinician.

If there is any doubt about an individual case, ask a colleague in your practice to have a look at the patient with you and/or make a referral to the local maxillofacial surgeon or oral medicine clinic. This referral should be made with the patient's consent and an explanation of why a second opinion is being sought. This is often a difficult conversation, because while you do not want to unnecessarily alarm the patient, you do need to convince them of the need for an expert opinion.

A referral letter should consist of a proper summary of the case, including a provisional diagnosis or, at least, a clear statement of your concerns about the patient. It should include all the necessary data that the specialist will require in order to contact the patient and a statement about the patient's relevant medical history. A clinical photograph is often helpful to demonstrate the area of concern. All of this will allow the specialist to properly prioritise the referral. Many departments provide a downloadable or pre-printed referral form, which can serve as a useful prompt to ensure that all the relevant information has been provided.

Record keeping

Best clinical practice is hopeless without records to match!

The purpose of record keeping is to be able to demonstrate that, over a period of time, whether long or short, the clinician has set down, logically, the findings of one or more clinical events in sufficient detail that the event can be recalled with accuracy. These records will show positive and negative findings, perhaps with the aid of diagrams, photographs or charts. It should be possible for another clinician, picking up the records, to find out the immediate and distant history of a particular problem or finding.

A legal challenge associated with a missed or late diagnosis of malignancy is extremely serious and the records would be essential in providing a response from the clinician. If the records contain no reference to the mucosa having been examined, it is difficult to reject the allegation that 'an ulcer' was reported to the dentist by the patient six months ago. Equally, if the records can show that an ulcer was found, described clearly, and the patient was advised to return for review ten days later, there is some hope for the dentist. If the records also mention that the patient failed to attend the review and ignored documented attempts to seek a review appointment, any allegation of negligence can be rejected. It goes without saying that the patient still needs an empathetic response from the dental team in such an unfortunate situation. It is also important that a note is made of the examination in the clinical records, even if no pathology is detected.

Smoking cessation

The links between smoking and oral cancer, and between smoking and periodontal disease, are well established. It follows, therefore, that dentists should alert patients to the risks of smoking, emphasising the potential links to dental disease as well as the broader health promotion message. Such warnings should be clearly recorded in a dated entry in the patient's notes, to demonstrate the fact that the advice was given.

The patient's compliance with this recommendation should be checked periodically and the advice repeated and reinforced if necessary. Each such provision of smoking cessation advice should always be recorded in the clinical notes.

This simple expedient could make a real difference to the patient's general and oral health. It could also significantly strengthen a dentist's position if and when a negligence claim is made against the dentist alleging that the patient's periodontal disease or oral cancer could have been avoided (or treated sooner) if they had been made aware of the risks. In today's litigious environment, this is not as far fetched as it might sound.

The fact that a patient smokes (or continues to smoke, despite warnings to the contrary) is particularly relevant when carrying out extractions or other oral surgical procedures, including the provision of implants. Smoking delays wound healing, and makes dry sockets more likely. This should be explained to patients before any such procedure, and the patient should be clearly warned of the adverse effect that smoking is likely to have on the outcome. This warning should be recorded in the clinical notes and reinforced in any preoperative or postoperative advice sheets given to the patient.

A proactive approach to smoking cessation is a risk management strategy of ever-increasing importance. It is a message that needs to be reinforced by the entire practice team. Ultimately, it could save the patient's life.

Continuing professional development

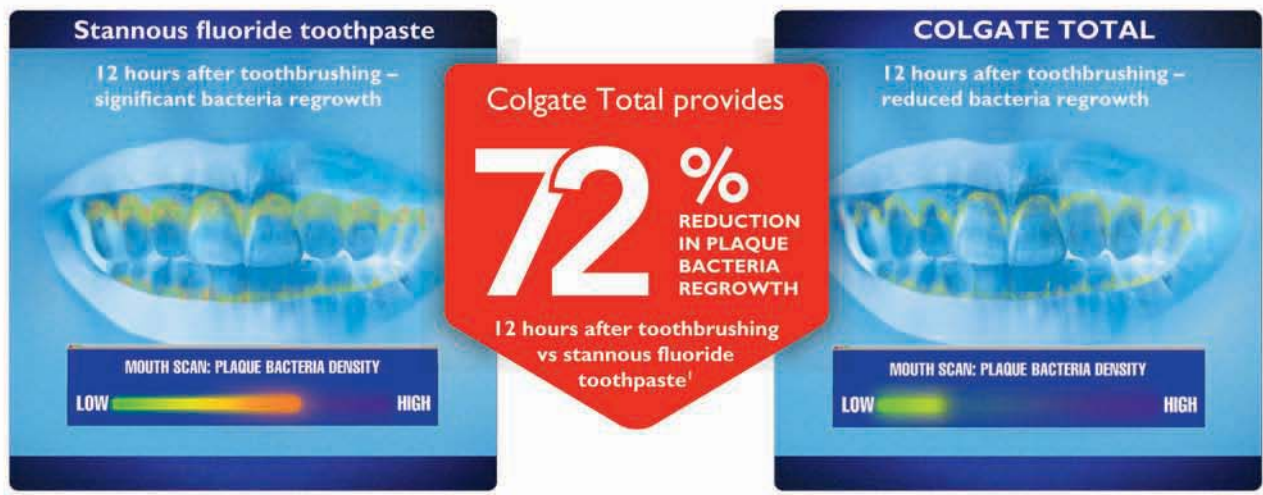
Oral cancers are still relatively rare clinical findings. Most practitioners will see very few cases during their career, but such patients require prompt and accurate assessment of such lesions, and failure to do so can have devastating consequences for patient and dentist alike. It is important to keep your knowledge of this subject up to date and there are now several interactive distance-learning programmes available to help you to achieve this.

Members of Dental Protection can obtain a 20% discount on the oral cancer programme published by Smile-on. More details are available on the DPL website – <http://www.dentalprotection.org/UK/RiskManagement/InteractiveDistanceLearning/>.



David Croser is Communications Manager at Dental Protection.

Only one toothpaste provides clinically proven non-stop 12 hour protection against bacteria...



*Dramatisation illustrating reduction of plaque bacteria 12 hours after toothbrushing with Colgate Total vs stannous fluoride toothpaste.

...and protects against most common dental problems, including:

- ✓ Plaque
- ✓ Sensitive Teeth
- ✓ Tartar
- ✓ Enamel Erosion
- ✓ Cavities
- ✓ Bad Breath
- ✓ Gum Problems
- ✓ Staining

For a healthy mouth recommend NEW Colgate Total.

Colgate Total provides 12 hour clinically proven antibacterial protection and is approved by the Irish Dental Association



Classified advert procedure

Please read these instructions prior to sending an advertisement. Below are the charges for placing an advertisement for both members and non-members. Advertisements will only be accepted in writing via fax, letter or email (fionnuala@irishdentalassoc.ie). Non-members must pre-pay for advertisements, which must arrive no later than September 9, 2011, by cheque made payable to the Irish Dental Association. If a box number is required, please indicate this at the end of the ad (replies to box number X). Classified ads placed in the *Journal* are also published on our website www.dentist.ie for 12 weeks.

Advert size	Members	Non-members
up to 25 words	€75	€150
26 to 40 words	€90	€180

Non-members must send in a cheque in advance with their advert. The maximum number of words for classified ads is 40.

Only if the advert is in excess of 40 words, then please contact:

Think Media

The Malthouse, 537 North Circular Road, Dublin 1.

Tel: 01-856 1166 Fax: 01-856 1169 Email: paul@thinkmedia.ie

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

Positions Wanted

Positions Vacant

Practices for Sale/To Let

Practices Wanted

Unwanted/Second Hand Equipment for Sale

Classified adverts must not be of a commercial nature. All commercial adverts must be display advertisements, and these can be arranged by contacting Paul O’Grady at Think Media, Tel: 01 856 1166.

POSITIONS WANTED

Experienced, hardworking, friendly, enthusiastic female dentist is looking for a full- or part-time position in Dublin and suburbs area (Saturdays included). Please contact me on dentistaa@ymail.com.

POSITIONS VACANT

Associate dentist required for immediate start in busy, modern practice in Kilkenny. Flexible days. Fully computerised, OPG, hygienist. Email CV and availability details to kilkennydentist@hotmail.com.

Dental associate required West Dublin. Very flexible hours and days. Minimum two years post qualification. Start July 2011. Tel: 087-787 1648, or Email: wmunroe@eircom.net.

Bray seafront practice requires an associate for one day per week or evenings. There is a fully equipped prosthetics and crown and bridge laboratory on site. Email enquiries and CV to: info@thedentalsuite.ie.

Part-time associate required to replace departing colleague. Modern, well-established group practice 20 minutes from Galway City. OPG, hygienist and excellent support staff. Email CV to phewatal@eircom.net.

Part-time associate (two to three days) required for busy dental practice in Carlow. Fully computerised modern surgeries with digital radiography and hygienists. Excellent support staff. Applicant must be patient focused and a good team player. Email: montgomeryhousedc@gmail.com.

Full-time associate required for busy West Cork practice. OPG, computers, etc. Experience desirable. Full book. Tel: 086-172 7064.

Private practice – South West Dublin. Part-time associate required

two to three evenings per week leading to full-time – December. Fully computerised, modern surgery, excellent support staff. Two years’ experience preferable. Email CVs to emmalou3scot@yahoo.co.uk.

Full-time associate required to replace departing colleague in busy West Cork practice. Full book. Experience desirable. Computerised, OPG, etc. Tel: 086-172 7064.

Part-time associate dentist required to join a family practice in south east County Galway. Modern surgeries, full chair-side and clerical support, OPG, etc. Please Email: rothwellau@eircom.net.

Associate required for full-time position in Derry City practice. Mixed NHS/private. Experience desirable. Start date August/September. Email CV to derryassociate@hotmail.com.

Part-time associate wanted for busy modern clinic dedicated to high-quality dentistry, one hour south of Dublin. Digital imaging, computerised, overhead screens, hygienists, website. Tel: 086-198 4592.

Associate dental surgeon with experience in general practice required for busy group dental practice in Dundalk. Will have support of other dentists, hygienists. Fully computerised, air-conditioned surgeries with digital x-rays. Excellent remuneration for successful applicant. Email: info@dbholly.com.

Drogheda. Associate position available September to replace departing colleague. Contact Sandra, Tel: 041-983 8740, for an information pack.

Cork. Superb career opportunity for experienced, competent dentist looking for associate/partnership in friendly, growing modern dental practice. Fully computerised, digital panoramic/lateral cep., etc. Ideal opportunity for someone

upbeat and enthusiastic about dentistry. Tel: 087-289 8391, or Email: thelodgedentalpractice@eircom.net.

Full-time dentists required for practice in Karratha (North Western Australia). Earning potential of €400k per year. Positions available from December 2011. Must be experienced, hardworking and patient-oriented. For further information, please contact Mairead, Tel: 01-299 3550, or Email: mdonovan@locumotion.com.

Full-time positions available for dentists in suburbs of Perth, Western Australia. Earnings from €200k. Starting from December 2011. To discuss these opportunities further, please contact Mairead, Tel: 01-299 3550, or Email mdonovan@locumotion.com.

Single-handed dental practice in Drogheda seeks like-minded single-handed practitioner who might be interested in practice merger or expense sharing type arrangement. All replies in strictest confidence to sharedexpensesdrogheda@gmail.com.

Experienced dentist required part-time for well-established busy modern practice in Limerick City. Tel: 087-997 7763, or Email: ruthmurphybds@gmail.com.

Experienced, personable dentist required for Thursdays and Saturdays, from start of August, in modern, computerised practice. Please Email: care@skerriesdental.com.

West of Ireland, modern practice, OPG, intra-oral camera, computerised, minimum four years' experience with an interest/qualification in endo an advantage. Tel: 087-365 7926, or Email: dentistvacancy@hotmail.com.

Urgent: locum required immediately – min. three months – Meath area – Guaranteed weekly salary. Contact Marguerite at Irish Dental Jobs, Tel: 01-849 4070, or Email: cv@irishdentaljobs.ie.

Busy multi-general dental surgery looking for implant/oral surgery/perio specialist to visit practice. Replies to Box No. J 42011.002.

Dental surgery assistant required part-time for holiday cover and some Saturday mornings in Dublin 12. Experience essential. Contact Marie, Tel: 086-851 1141, or Email CV and/or enquiries to: info@galtymoredental.ie.

Qualified DSA required for busy private practice in Dublin 6W. Three-day week and holiday cover required commencing August. No agencies. Computer literacy essential. Email CV with cover letter to office@gantercrowdedentalcare.ie.

Experienced dental assistant/nurse required for busy dental practice in Galway City. Full-time position. Please note: experience is essential. Email: mpayton_tmplcl@yahoo.co.uk.

Experienced dental hygienist required in Limerick City practice, part-time to cover maternity leave. Tel: 087-997 7763, or Email: ruthmurphybds@gmail.com.

PREMISES FOR SALE/TO LET

For sale. Rural Australian general dental practice established in Dubbo, NSW, in 1978 by vendor (1966 graduate) now available with or without real estate. Practice has hygienist four days/wk and dentist four days/wk. Gross fees AUD\$1,000 pa. Email: sarah.brown@mags.nsw.edu.au.

Rent a room in growing specialist only practice in Sandyford. Would suit endodontist looking to move, establish or develop another location. Modern purpose-built computerised practice, digital x-rays, endo motors. Flexible days/extremely favourable daily or half-day rates. Email: ciarabev@yahoo.com.

Busy modern two-surgery practice for sale in Co. Wicklow. Tel: 01-280 6414, or Email: steven@medaccount.ie.

For sale, central Tralee. Established 80 years. Located above large pharmacy. Busy footfall. Three surgeries. High turnover proven in '08/'09/'10. Low overheads. Experienced staff. Large active patient list. Premises leasehold. Immediate sale. Practitioner retirement. Competitively priced. Tel: 087-679 5618, or Email: jr.chute@gmail.com.

Dublin City Centre – unit to rent. Exclusive, high profile, top-class facilities on flexible basis. Fully-equipped, serviced turnkey surgeries. Qualified, knowledgeable, experienced staff included. Storage available for materials. Cost effective. Tel: 086-807 5273, or Email: niall@innovatedental.com.

Aberdeenshire CHP

Salaried Dental Practitioner

Ref: RM1524

Full-time (part-time would be considered) posts in Ellon, Banff and Huntly

Salary: £34,618 - £54,223 per annum (pro rata for part-time)

Aberdeenshire CHP is looking to recruit enthusiastic, adaptable Dentists who can provide a comprehensive range of dental care to patients in the surgery and in the local community in and around Aberdeenshire.

The posts are varied and as well as providing routine dentistry under the GDS candidates should have an interest and experience in working with paediatrics and special needs' patients. Undertaking domiciliary visits to care homes and housebound patients will also be required.

You will form part of a dynamic and rapidly expanding team, alongside our existing Dental and Oral Health Promotion staff to have a positive impact on the oral health of Aberdeenshire. The Aberdeenshire area has one of the best qualities of life in the United Kingdom. With high quality education and health services, excellent facilities for outdoor pursuits and wide geographical diversity it is an ideal location for leisure, work and family life. Applicants must be fully registered with the GDC.

Informal enquiries to: Brian Dawson, Dental Clinical Lead on 07584 217203.

Apply for this post by visiting www.nhsgrampian.org/jobs and search for Reference Number RM1524.

Closing date: Friday, 26th August 2011.



For all other vacancies visit www.nhsgrampian.org/jobs



SEPTEMBER 2011

IDA Golf Society – Captain’s Prize

September 3

Carlow Golf Club

The 24th Annual Meeting and Refresher Course of the European Society of Head and Neck Radiology (ESHNR)

September 8-10

Congress Center Oud Sint-Jan, Bruges, Belgium

More information on the programme can be found on the website – www.eshnr2011.be.

Munster Branch, IDA, in conjunction with Cork University Dental School & Hospital – Preparation Course for National Mouth Cancer Awareness Day

September 14, 7.30pm-9.30pm

Cork University Hospital Lecture Theatre

This course will be run by Drs Eleanor O’Sullivan and Christine McCreary, and is free of charge. For further information, contact Catherine Nevin, Tel: 021-490 1294, or Email: c.nevin@ucc.ie.

IDA MEMBERS ONLY

The Irish Academy of American Graduate Dental Specialists (IAAGDS) Annual Scientific Conference 2011

September 24, 9.00am to 12.30pm

Radisson Blu Hotel, Golden Lane, Dublin

NOVEMBER 2011

Orthodontic Society of Ireland, Autumn Meeting – Orthodontics: Art meets science

November 18-19

Hayfield Manor Hotel, Cork

The speakers are Dr Kevin O’Brien and Dr Jonathan Sandler.

Munster Branch, IDA – Annual Scientific Meeting

November 18

Fota Island Resort and Spa

Programme will be available in early September.

IDA MEMBERS ONLY

JUNE 2012

Europerio7 – 7th Congress of the European Federation of Periodontology

June 6-9, 2012

Vienna, Austria

Learn the newest techniques and treatment methods in the fields of periodontology, implantology and dental hygiene from renowned experts. More information on this conference can be found on the website – www.europerio7.com.



OCTOBER 2012

21st Congress of the International Association for Disability and Oral Health

October 17-20, 2012

Sydney, Australia.



For further information, see www.iadh2012.com.

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ALSO AVAILABLE:

Colgate® Sensitive Pro-Relief™ Toothpaste the first toothpaste to be clinically proven to provide instant* and lasting superior** relief from dentine hypersensitivity



* When directly applied with finger tip to the sensitive tooth and gently massaged for one minute

** Vs potassium and strontium based sensitive toothpastes

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with immediate loading.



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for vertical bone
augmentation.

Wide variety of prosthetic
options with maximum
function and fit.

High stability with
only four implants.

Maximum bone-to-implant contact and
preservation of vital structures.

All-on-4 was developed to provide clinicians with an efficient and effective restoration using only four implants to support an immediately loaded full-arch prosthesis.* Final solutions include both fixed and removable prostheses such as NobelProcera Implant Bridge Titanium or Implant Bar Overdenture. The tilted posterior implants help avoid relevant anatomical structures, can be anchored

in better quality anterior bone and offer maximum support of the prosthesis by reducing cantilevers. They also help eliminate the need for bone grafting by increasing bone-to-implant contact. All-on-4 can be planned and performed using the NobelGuide treatment concept, ensuring accurate diagnostics, planning and implant placement.

Nobel Biocare is the world leader in innovative and evidence-based dental solutions. For more information, call + 44 (0) 208756 3300 (UK), 1800 677306 (Ireland) or visit our website.

www.nobelbiocare.com