

THE MAGAZINE FOR DENTAL PROFESSIONALS IN IRELAND

Ireland's Dental

AUTUMN 2022

RRP £5.50



Restore confidence

Outlining dental implants, page 22

Plus: Simple breathing re-education techniques for your dental toolkit, page 28

Suction Simplified

All your suction needs met from a single supplier



Monitor the performance of your suction unit – faults and maintenance messages are immediately displayed



Devices, materials and accessories to ensure the safety and longevity of your equipment



UK based technical support



Reassurance of German manufacturing standards

 @durr_dental_uk  Duerr Dental UK

For more information visit www.duerrdental.com/en/GB



DÜRR
DENTAL

- 05** Editorial: A glimpse into the future
- 06** Word of mouth: Ideas of a French dentist, born in 1679, are still relevant today
- 08** News: Drop in medical card patient treatments

FEATURES

- 16** A preview of the Lindsay Society Annual Conference - open to anyone interested in the history of dentistry
- 18** BAOMS ASM22: 'Facing the Future' 2022 meeting tackled education, recruitment and retention
- 22** Upper arch rehabilitation using dental implants
- 28** Oral breathing: A problem for nearly 20 per cent of the population but expert advice can help patients combat it

CLINICAL

- 32** A timely referral means a happy patient, out of pain

MANAGEMENT

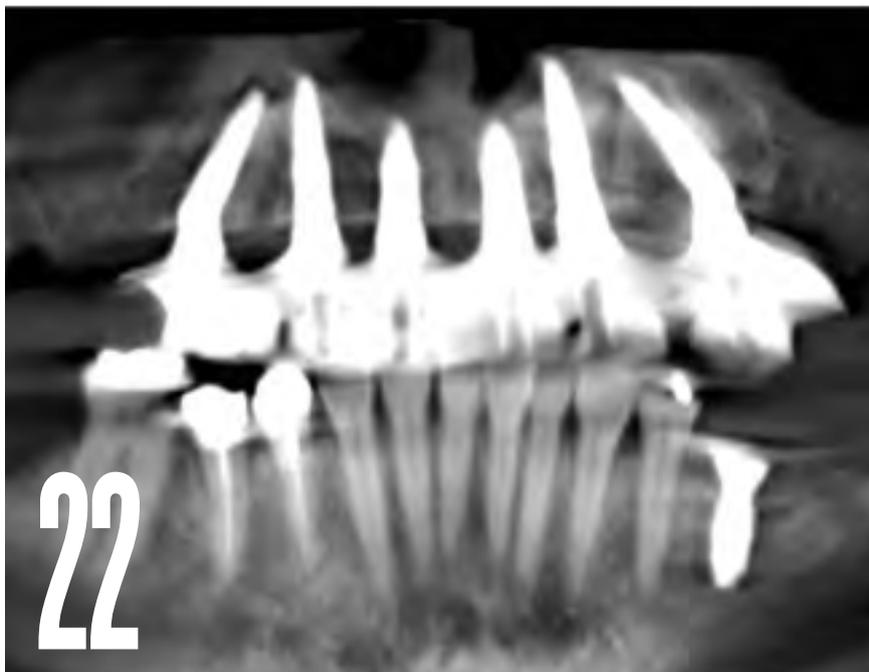
- 37** Work life balance – a myth?

PROFESSIONAL FOCUS

- 39** Product News
- 42** BOCOUTURE® masterclasses to support new practitioners or those starting their journey

FOLLOW US

-  irelandsdentalmag.ie
-  [@irelandsdentalmag](https://twitter.com/irelandsdentalmag)
-  [irelandsdentalmag](https://www.facebook.com/irelandsdentalmag)



Ireland's Dental

CONNECT
ENGAGEMENT IS EVERYTHING
connectmedia.cc

THE MAGAZINE FOR DENTAL PROFESSIONALS IN IRELAND

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

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

DESIGN
Ruth Turnbull

SUBSCRIPTIONS
Stephanie Koetsier
Tel: +44 (0) 141 561 0300
stephanie@connectmedia.cc

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

The copyright in all articles
published in *Ireland's Dental*
magazine is reserved, and
may not be reproduced
without permission. Neither
the publishers nor the editor
necessarily agree with views

expressed in the magazine.
ISSN 2043-8060
Ireland's Dental magazine
is designed and published
by Connect Publications
(Scotland) Ltd
Studio 2001, Mile End
Paisley PA1 1JS
Tel: +44(0)141 561 0300
Fax: +44(0)141 561 0400
info@connectcommunications.co.uk

SDI | LUNA 2

UNIVERSAL COMPOSITE



SUPERIOR STRENGTH & AESTHETICS

» Beautiful aesthetics in the new Luna 2 composite, with great handling properties including easy sculpability

DR LINDA GREENWALL BDS MGDs RCS MSC MRD RCS FFGDP FICO BEM
UNITED KINGDOM



PERFECT CREAMY & SMOOTH HANDLING



HIGH RADIOCAPACITY
250% AI



HIGH COMPRESSIVE STRENGTH
360MPa



HIGH FLEXURAL STRENGTH
130MPa



BPA FREE FORMULATION



HIGH POLISH AND WEAR RESISTANCE

COMPOSITES | GLASS IONOMERS | TOOTH WHITENING | SDF RIVA STAR | CEMENTS | ADHESIVES | ETCHANTS | SEALANTS | AMALGAMS | ACCESSORIES | EQUIPMENT

Call Amy on mobile
083 806 0228 (Ireland)
Amy.costigan@sdi.com.au

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

SDI | YOUR OUR
SMILE. VISION.

SDI Dental Innovations Ltd.
Fondriestrasse 10
D-51411 Dülmen -
www.sdi.com.au

A glimpse into the future

Artificial intelligence shows promise for interpreting dental X-rays

According to research¹ presented at EuroPerio10 over the summer, a deep learning algorithm has successfully detected periodontal disease from 2D bitewing radiographs. The study's lead author, Dr Burak Yavuz, of Eskisehir Osmangazi University in Turkey, said it showed the potential for artificial intelligence (AI) to automatically identify periodontal pathologies that might otherwise be missed. Dr Yavuz said this could reduce radiation exposure by avoiding repeat assessments, prevent the silent progression of periodontal disease, and enable earlier treatment.

Previous studies have examined the use of AI to detect caries, root fractures and apical lesions but there is limited research in the field of periodontology. Dr Yavuz's study evaluated the ability of deep learning, a type of AI, to determine periodontal status in bitewing radiographs. It used 434 bitewing radiographs from patients with periodontitis. Image processing was performed with u-net architecture, a convolutional neural network used to quickly, and precisely, segment images.

An experienced specialist physician also evaluated the images using the segmentation method. Assessments included total alveolar bone loss around the lower and upper teeth, horizontal bone loss, vertical bone loss, furcation defects, and calculus around maxillary and mandibular teeth.

The neural network identified 859 cases of alveolar bone loss, 2,215 cases of horizontal bone loss, 340 cases of vertical bone loss, 108 furcation defects, and 508 cases of dental calculus. The success of the algorithm at identifying defects was compared against the physician's assessment and reported as sensitivity, precision and F1 score, which is the weighted average of sensitivity and precision.

For sensitivity, precision and F1 score, 1 is the best value and 0 is the worst. The sensitivity, precision and F1 score results

for total alveolar bone loss were 1, 0.94 and 0.96, respectively. The corresponding values for horizontal bone loss were 1, 0.92 and 0.95, respectively, while AI could not identify vertical bone loss. For dental calculus, the sensitivity, precision and F1 score results were 1.0, 0.7 and 0.82, respectively, and for furcation defects the corresponding values were 0.62, 0.71 and 0.66, respectively.

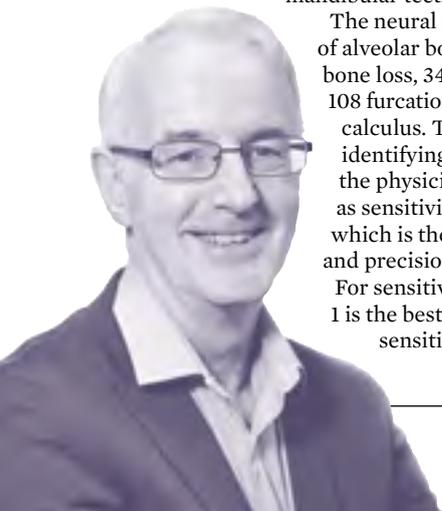
Dr Yavuz concluded that AI can pick up many types of defects from 2D images, which could aid in the diagnosis of periodontitis, although he added that more comprehensive studies are required on larger data sets to increase the success of the models and extend their use to 3D radiographs.

Nonetheless, his study provides a glimpse into the future of dentistry – where AI automatically evaluates images and assists dental professionals to diagnose and treat disease earlier.

¹ www.researchgate.net/publication/361487439_Detecting_periodontal_bone_loss_with_an_artificial_intelligence_approach_on_dental_bitewing_radiographs

“

HIS STUDY PROVIDES A GLIMPSE INTO THE FUTURE OF DENTISTRY – WHERE AI AUTOMATICALLY EVALUATES IMAGES AND ASSISTS DENTAL PROFESSIONALS TO DIAGNOSE AND TREAT DISEASE EARLIER.”



A true father figure

The ideas of a French dentist born in 1679 are still relevant today

Pierre Fauchard is regarded by most as the “Father of Modern Dentistry”. He was born in Saint-Denis-de-Gastines in 1679. He served as a combat medic with the French Navy and, on leaving the service, he worked in the University of Angers Hospital. He described himself as a “surgeon dentist”. He was regarded as a very capable surgeon, often improvising and improving on existing instruments. It is noted that he converted various instruments from watch makers, jewellers and even barbers – and used them all in the surgical treatment of patients.

However, it wasn't just for this surgical expertise that his fame is known; his curiosity and study brought about even more innovation and scientific research.

Fauchard introduced dental restorative treatments for dental cavities. He was convinced that sugary acids were responsible for dental decay. He posited also that “tumours” could appear in the latter end stages of tooth decay.

Fauchard also pioneered brace therapy – using gold wires held in place by threads. He noted that teeth would move under pressure from the wires. The ongoing practice gained Fauchard great prestige within medical circles, particularly with his invention and use of dental prosthesis. His move to Paris in 1718 allowed him to concentrate on writing a much needed text book. Five years of research, interviews and study culminated in *The Surgical Dentist*, published in 1723 at the age of 45. A further edition, in two volumes, appeared some years later, as he incorporated feedback and observation from the scientific and medical communities.

Among the 38 chapters of that book were topics such as dental anatomy, pathology, surgery, dental caries, orthodontics and therapeutics. Fauchard was a firm believer in science – and wished to see dentistry leave the idea of being a “craft” and become a “profession”.

He was responsible for identifying more than 100 different oral diseases and also championed dental hygiene for each patient. He was also responsible for introducing the idea of a dental light over a dental chair – and made detailed drawings of a working dental drill.

Fauchard died at the age of 82, and is reputedly buried on the grounds of the Saint Come Church, not too far from the Faculty of Medicine (University of Paris). His grave is suggested to be below the Boulevard Saint-Michel.

The ideals that Fauchard held in wishing

to see dentistry develop into its own profession were underlined by his tireless work and study. His publication and practices transformed the practice of dentistry throughout Europe and beyond. He is rightly regarded as a visionary leader.

The Pierre Fauchard Academy is an international dental organisation that was founded in 1936 by Dr Elmer S. Best, a Minnesota dentist. Among its objectives is to recognise and acknowledge the more dedicated and conscientious dentists by inviting them to Fellowship in the Academy. The Academy ensures that Fauchard's legacy to dentistry is sustained by sponsoring mentorship programmes and fostering the sharing of information among colleagues. It maintains a Hall of Fame, which honours the most famous dentists in the history of our profession.

Awards for outstanding achievement in dentistry are presented annually. The Academy is particularly mindful of its role in encouraging students and presents a prestigious Undergraduate Certificate of Merit to one student each year in every participating dental school. Through the PFA Foundation, it offers scholarships, funds research and training programmes, and supports a broad range of charitable activities such as projects that increase access to care for underserved populations.

The Pierre Fauchard Academy is currently comprised of nearly 11,000 Fellows worldwide. It is comprised of 142 sections – 55 in the United States and another 87 throughout the world, including South America, Europe, Asia, Africa and Australia.

The membership is made up of dentists who are among the most outstanding leaders in various fields of dentistry. The Academy is administered by a Board of Trustees, consisting of five officers and 11 trustees from around the world. Section organisation includes a Chairperson and such other officers or committee members as the Section may elect. The administrative office of the Academy is located in Rockville, Maryland, USA.

Over the past two years, I have been honoured to represent Europe as the European Trustee, and have been privileged to work alongside the dedicated Board and fellows throughout the continent and worldwide. The pandemic and ongoing war in Ukraine has made organisation of face-to-face meetings/gatherings challenging, but the hope is that 2023 will see a return to in-person meetings. I am planning to assist in the re-launch of the Irish Section later this year, with the help of our new Section Head and plan to make the PFA a staple member of dental life here in Ireland once more. It is fitting that the ideals of the Father of Modern Dentistry are held high once more, as a beacon, as we exit the recent global pandemic.





RCSI FACULTY OF
DENTISTRY



AMERICA'S PEDIATRIC DENTISTS

THE BIG AUTHORITY on little teeth

**RCSI Faculty of Dentistry and
American Academy of Pediatric Dentistry
JOINT SYMPOSIUM**



**Same Problems
New Directions**



**28 - 29 OCTOBER 2022
ROYAL COLLEGE OF SURGEONS IN IRELAND**

More info:
asm.facultyofdentistry.ie



Drop in medical card patient treatments

The fall has been exacerbated by an exodus of private dentists from the scheme over the last three years

NEW figures have revealed a sharp fall in the number of medical card holders being treated by private dentists.

The total has dropped from nearly 1,500 down to fewer than 1,100 since 2019.

Nearly 40 dentists left the scheme in the first three months of this year. A total of 270 removed themselves from it during 2020, followed by another 200 last year.

The Dental Treatment Services Scheme allows practices to treat people on low incomes and provide them with extractions, fillings, clearing and examinations.

Caroline Robins, the President of the Irish Dental Association, said in an interview with

Newstalk that the scheme did not look after patients. It wasn't fit for purpose and needed to be reformed, she added.

Ms Robins said: "My patients have to go to Cork if they have other needs – gum needs or anything like that. There's just nowhere that I can refer them to."

Sinn Féin has also joined the debate, saying the system is on the "verge of collapse" and also claiming that it urgently needs to be reformed.

The latest figure of 1,091 dentists treating patients signed up to the Dental Treatment Services Scheme was calculated at the end of March this year.

Ukrainian dentists want to practise

A UKRAINIAN family of dentists who are currently living as refugees in Northern Ireland have flagged up the barriers that exist to stop them from practising in the UK.

Anastasiia Saviska and her relatives are being hosted by a family based in County Down. She operated a family dental practice in Ukraine alongside her husband and father before leaving the country due to the conflict with Russia.

To practise in the UK, they would need to take Overseas Registration Exams (ORE). At present, however, there is a backlog in places for these as the examinations were suspended for two years because of Covid and this has increased demand.

Anastasiia said: "I know it's a long process and there's a long list for waiting – it's years. For me, it's very sad. I can help, but I can't do this now."

A spokesperson for the General Dental Council said in a statement that the organisation was working through the backlog. But, they said, the exam is also subject to "outdated and inflexible legislation which effectively prevents us from offering more places." The official added: "This legislation is in the process of being reformed and we look forward to being able to run a more efficient system in future."

“

I KNOW IT'S A LONG PROCESS AND THERE'S A LONG LIST FOR WAITING – IT'S YEARS. FOR ME, IT'S VERY SAD. I CAN HELP, BUT I CAN'T DO THIS NOW.

ANASTASIIA SAVISKA

Revealed: city's cost



Dental work in Dublin can cost five times more than the same work carried out in rural areas

A SURVEY has uncovered an urban-rural divide in the cost of dental treatment. The study, conducted by the Irish Independent, featured 200 dentists in total and showed wide differences in pricing across the state.

A tooth can be filled for just €35 in Donegal, though if they do not live locally patients will have to calculate whether it is worth making the journey.

There is also a substantial variation in prices within the same areas. For example, a filling in Limerick, which is in the middle of the cost range, can vary between €70 and €120 depending on the practice chosen by the patient.

The city was found to be more expensive than Galway for treatment but less expensive than Cork. In general, western counties were cheaper for treatment than those in the east.

An issue remains when it comes to patients finding dentists to take them on in the first place, especially if they are relying on medical cards. The results of

the study reflect the pressure that dental practices are under. Some 500 new dentists are needed annually, but just 200 are registering with the Dental Council.

The Irish Dental Association wants the Government to reform the medical card system and replace it with a fit-for-purpose scheme that better reflects modern dental practices and standards.



AN ISSUE REMAINS WHEN IT COMES TO PATIENTS FINDING DENTISTS TO TAKE THEM ON IN THE FIRST PLACE, ESPECIALLY IF THEY ARE RELYING ON MEDICAL CARDS.

Pay disparity revealed

Cited as major contributor to low morale among trainees in Northern Ireland

A SURVEY of dental core training (DCT) by the British Dental Association has revealed "worrying trends", particularly among trainees in Northern Ireland.

More than half of respondents rated their morale as low during their training post. Pay disparity was a major factor, with many finding it demoralising to take a pay cut at the same time as trying to take the next steps on the career ladder.

After qualifying, dental students complete a year of compulsory training as Dental Foundation Trainees (DFTs). DCT then gives students the opportunity to spend up to two or three years learning different specialities.

The survey shows that more than 70 per cent took a pay cut when moving from a DFT to a DCT post in Northern Ireland, with three in four not being aware of the pay cut before taking the post. Trainees also report feeling very demoralised; many are feeling underappreciated, doing the same job as

peers for significantly lower pay.

Trainees moving from DCT to speciality training are losing up to £10,000 a year compared with those in other nations.

"This is leaving dentists who are right at the start of their careers, already facing health and wellbeing issues," said Peter Dyer, of the Central Committee for Hospital Dental Services.

"We've raised the situation with the Department of Health and the postgraduate Deanery. I've personally sent letters to the Minister of Health in Northern Ireland, and we have met with the Department of Health. Each new conversation brings excuses and lost information or files, rather than answers. Each time a deadline has been set to take things forward, it has slipped."

Dyer said that the BDA was gathering more data on pay disparities across the UK nations and would continue to lobby on members' behalf.



BASCD Autumn Scientific Meeting 2022

THE BRITISH ASSOCIATION for the Study of Community Dentistry (BASCD) is planning to hold an Autumn Scientific Meeting in London in November 2022.

The event will continue to examine the topic of Inclusion Oral Health which was highlighted during the Summer Scientific Meeting in Glasgow in June.

The theme for the forthcoming conference will be *A Place to Call Home: Rescue or Repair*. It will look at the response in providing dental care to two vulnerable groups in our society.

The morning session will be on asylum seekers and refugees while the afternoon session will focus on looked-after children.

There will be an update on the revised BASCD position statement on recommended actions to reduce the consumption of free sugars and improve oral health. During the conference, there will also be a BASCD-Borrow Foundation Early Career Award competition.

The poster award is sponsored by the two organisations: the foundation is actively engaged in promoting

oral health and disease prevention.

In addition to the poster display, there will be an exhibition showcasing the work of Dentaid in the UK and overseas alongside a collection for donation to this charity.

The closing date for abstracts submission was Friday 2 September 2022 and the meeting is scheduled to take place on 10 November

Details of the conference programme, abstracts submission and registration are available at <https://bascd-events.co.uk>

Restorations that cross generations



EQUIA Forte® HT
from GC

Bulk fill glass hybrid
restorative system



Courtesy of Dr. Z Bilge Kütük, Turkey

GC

GC UNITED KINGDOM Ltd.
info.uk@gc.dental
<http://uk.gceurope.com>

Alliance NI comments on dentistry

Dentistry cannot just be seen as 'some optional extra', says the party's health spokesperson

DENTISTRY has to be a fundamental part of future overall healthcare provision in Northern Ireland, it has been claimed. Paula Bradshaw, the spokesperson on health for Alliance, said the profession could not be viewed as an optional extra.

"Ensuring and encouraging access to dentists, as well as planning to have more of them, has to form an urgent part of our overall Health and Social Care Transformation process," she said. Ms Bradshaw's comments followed a BBC investigation which revealed that the vast majority of adults in Northern Ireland

cannot get registered with dentists within the public system. The South Belfast MLA said: "The inability to access dentistry within the public health and social care system has long been known and this investigation confirms it.

"Add the fact that Northern Ireland has notably inferior dental health to other parts of the UK, including for example far higher rates of tooth extraction, and the situation is evidently beyond crisis point."

There had been a clear difficulty, she added, in establishing that dental services were intrinsic to the health and social care

system. For example, a dentist may well be the first person to pick up evidence of oral cancer or other serious conditions.

"With a third of the adult population still unregistered, we can see the scale of the problem, both in terms of lack of early intervention across a range of conditions and in terms of general dental and oral health. Ensuring and encouraging access to dentists, as well as planning to have more of them, has to form an urgent part of our overall Health and Social Care Transformation process.

"Dentistry cannot just be seen as some optional extra: it must be a fundamental part of overall healthcare provision."

“

A DENTIST MAY WELL BE THE FIRST PERSON TO PICK UP EVIDENCE OF ORAL CANCER OR OTHER SERIOUS CONDITIONS.”



Sharp rise in students opting for dental course

Figures show increase against a backdrop of falling applications for healthcare overall

THE number of students applying to join dentistry courses in Ireland has risen by 11 per cent.

However, the rise is against a background of the numbers applying for healthcare courses falling, according to the Central Applications Office (CAO).

There has been a 27 per cent drop in first preferences in nursing – numbers for nursing and midwifery are down by nearly 1,700 this year. In other others, construction industry

applications have risen by 13 per cent, with humanities up 11 per cent and arts rising by 9 per cent.

Perhaps surprisingly for a rural nation like Ireland, agriculture applications are down a sizeable 17 per cent.

One reason for the increase in interest, according to experts, may be that because of Brexit many EU students are now closed out of studying in the UK and are applying to the Republic instead.



NI dental services 'at tipping point'

BDA NI says new system must ensure health service dentistry is financially sustainable 'without being kept afloat by income from private work'

NINE out of 10 dental practices are unable to offer appointments to new adult patients, according to the British Dental Association Northern Ireland.

Access is now at a "tipping point", it says, as 246 practices out of 274 confirm they are not accepting new patients.

The findings come as part of a survey said to be the most extensive of its type ever carried out. The BBC study, carried out between May and July this year, asked every UK dental practice with an NHS contract if they were willing to take on new patients.

The BDA NI is now pressing the UK Government to "step up and deliver" urgent reform.

Of those practices not taking on adults in Northern Ireland, 20 per cent – a total of 48 – said they had an open waiting list, and 11 per cent – 28 – said the wait time was a year or longer or were unable to forecast how long it would be.

Practices were only recorded as taking on new health service patients if they could get an appointment within eight weeks. In one local authority area, Antrim and Newtownabbey, none of the dentists

contacted were taking on any new adult patients.

Belfast had the highest number of health service practices, but only 8 per cent of them – five out of a total of 64 surveyed – were accepting new health service adults and children.

In all, 88 per cent of the surveyed practices were also unable to accept new child patients.

Ciara Gallagher, chair of the BDA NI's Dental Practice Committee, commented: "We can only hope dental care in Northern Ireland has not yet reached the point of no return.

"Dentists are already moving on and practices are struggling to remain viable, because the numbers that health service dentistry is based on simply don't add up. This postcode lottery our patients now face will only end when we see real reform backed up by fair funding."

The BDA NI said that health service dentists had suffered an overall reduction in their incomes of 40 per cent in real terms" since 2008/09.

It added that practices were facing soaring costs, with dental inflation

estimated at more than 11 per cent. The association says that many dentists now face the prospect of delivering NHS care at a financial loss. The body believes that the "discredited" high volume/low margin model the service has used for the past 30 years is no longer delivering for patients or the dental profession and should now be discarded.

The BDA NI added: "A new system must ensure health service dentistry is financially sustainable in its own right without being kept afloat by income from private work undertaken by practices."

Leaders in the profession are pressing for interim support measures to be put in place until a new contract is implemented. "However, there remains huge uncertainty about whether the level of investment needed for this service to survive will be forthcoming"

According to the survey, 67 per cent of the Northern Irish population is currently registered with a dentist. This represents an increase from the 64 per cent registered in the 2014-2021 period.

Stormont's Department of Health said it was developing a dedicated scheme to improve access to dental care for unregistered patients.

DATES FOR YOUR DIARY

2022

22-23 SEPTEMBER

**International Conference
on Dentistry**

London

<https://tinyurl.com/2bhenu8m>

7-8 OCTOBER

BADT Conference 2022

Crewe

[www.dental-tribune.com/event/
badt-conference-2022](http://www.dental-tribune.com/event/badt-conference-2022)

13-14 OCTOBER

**Restorative and
Aesthetic Dentistry**

London

<https://tinyurl.com/56uxea2t>

10-12 NOVEMBER

BACD

Newport

<https://bacd.com>

18-19 NOVEMBER

**Periodontics and
Preventive Dentistry**

London

<https://tinyurl.com/4cfk9rhk>

9-10 DECEMBER

**Restorative Dentistry
and Oral Implantology**

<https://tinyurl.com/yrjsu6e>

2023

19-20 MAY

Scottish Dental Show

Braehead Arena, Glasgow

www.sdshow.co.uk



New digital strategy unveiled

It aims to ‘unlock opportunities for health service improvements’

WORKING in partnership with the Northern Ireland Medical and Dental Training Agency, and other arm’s length bodies, the Department of Health has published a digital strategy¹ “designed to streamline information sharing and optimise data use to improve services and create better outcomes for people”.

It aims to develop and deliver digital services over the next eight years that will support patients and users in receiving the best care, better support staff through joined-up systems and optimise the use of data to improve the safety, quality and experience of care.

Robin Swann, the Health Minister, said: “This landmark strategy has the potential to change how the general public use health and social care services in Northern Ireland. We will use technology to unlock opportunities for improvements across the entire system. We will be able to provide more personalised care, including full visibility of health data and care pathways, moving towards precision medicine to identify the best approaches and care pathways for everyone.

“People will be able to feel the real benefits of this strategy, including easier online communications, virtual assistance and consultations, as well as the ability to view their personal health record. Throughout Covid, we saw the importance of digital interventions in our overall response and we want to harness the increased digital uptake experienced during the pandemic to deliver excellent services more sustainably.”

He added: “While continued efforts have seen staffing numbers across the health and social care system increase, demand for services continues to outpace that expansion. This strategy illustrates the

potential that exists for digital advances to play an important role in closing that gap.”

It outlines a number of “significant investments” that are required to advance the digital health infrastructure and move the health and social care system closer to the required level of digital maturity. This includes the Encompass Programme, which will create a unified health and care record for Northern Ireland. The programme forms part of the major programmes portfolio, which also includes investments to improve diagnostic information management systems for both imaging and laboratories.

Dan West, the Department’s Chief Digital Information Officer, said change will come in three phases. “We must first focus on implementing a series of foundational technologies such as the Encompass Programme. Once they have been successfully embedded, we will begin to turn our attention to making the best use of our tools and products to meet the emerging challenges in our health and social care system. This focus will help us to deliver tangible improvements in our use of digital services and find new ways to work with our partners to serve the people of Northern Ireland.

“As our digital transformation matures, we will begin to invest more resources into innovation so that we remain ready to participate in the development and application of the next wave of digital capabilities. This will ensure we maintain a continuous improvement approach that ensures we improve our digital health and care services over the long term. Together, we will deliver the quality of digital services that the people of Northern Ireland have asked for and deserve.”

¹www.health-ni.gov.uk/digitalstrategy

BF Mulholland offer more than just consumables.

Your first choice in service, supply and support in Ireland.

Take a look at what we can offer you:



Consumables



Capital Equipment



Medical Aesthetics



CPD Training Courses



Engineering Service & Repair



General Pharmaceuticals



Practice Management



Surgery Design

Contact

+44 (0) 28 94 452 668

sales@bfmulholland.com

www.bfmulholland.com



Scan QR
to check out
our website

Celebrating 60 years



Lillian Lindsay, a leading dental historian and the first woman to qualify as a dentist in the UK

A preview of The Lindsay Society Annual Conference – open to anyone interested in the history of dentistry

Founded in 1962, the Lindsay Society¹ exists to promote interest and study into the history of dentistry, bringing together people with like-minded interests. This year on 7-9 October, we're combining our Annual Conference and memorial lecture into one event held in Belfast.

The weekend offers a great atmosphere and the opportunity to learn about dentistry along the way. We start the event off on Friday evening, with relaxed chatter as people arrive, enjoying a buffet alongside a few drinks and a chance to catch up on each other's news.

The conference will be held at the Hilton Hotel, Lanyon Place, Belfast city centre, and will include an opportunity to take part in an organised trip to the wonderful Titanic Centre on Saturday. On Saturday evening, we'll celebrate the Society's Diamond Jubilee with a black tie four-course dinner. A harpist will play throughout prosecco reception and there will be drinks, food, and entertainment throughout the evening.

Anaesthesia and curios

You're bound to enjoy our interesting lecture programme² which has something for everyone. The

WORDS
ROZ
MCMULLAN

talks will begin on Saturday with Andrew Sadler, a retired Oral Maxillofacial Surgeon, giving a talk named 'Margaret Seward & the Strange Affair of the Robbery at the Horncastle Dispensary'. He will be followed by a local speaker, David Hussey, presenting on the Maryland bridge, a resin-bonded fixed partial denture which includes a floating tooth to replace a missing one but adheres to the other teeth in a unique way.

Nairn Wilson will meanwhile give a fun talk involving a colourful tie collection he has gathered over the years from associations and clubs with connections to dentistry. The memorial lecture will then be given by well-known international speaker Trevor Burke. It will be called 'From Robinson's Rules to a Ten Million Restoration Dataset'. It's not to be missed!

Titanic Dentistry

Sunday morning will see us head back into the lecture theatre for more engaging talks. Laura Crawford, a young Northern Irish dentist, will be giving a talk called 'Titanic Dentistry', encompassing what dentistry was like then and the current exodus from the profession we are seeing today.

Margaret Wilson will be talking about the use of plants in dentistry. Next year marks the centenary of the Northern Ireland BDA branch, and so Richard Graham will be giving a

special celebratory talk to mark the occasion. We have a couple more talks still to be confirmed and these will be followed by an AGM for members, alongside a short buffet lunch to give people time to get refreshed and ready before the journey back home.

Anyone is welcome to come along to any part of the event, even if you would just like to attend one specific part or talk. The full weekend ticket costs £245. However, we offer a ticket price for you based on how much of the event you wish to attend. Please complete a registration form³ and email it to Brian Williams to register for the meeting.

If you would like to stay in the Hilton Hotel during the event weekend, you will need to get in touch with them separately to make your booking. We have a special discount rate arranged with the hotel of £149 for a king room or £159 for a twin/double when booking using our unique code. We would love to see more people than ever with us this year to celebrate and sincerely hope you will join us.

¹ bda.org/museum/lindsay-society

² bda.org/museum/Documents/Provisional-Programme-lindsay-society-conference-2022.pdf

³ bda.org/museum/Documents/registration-form-lindsay-society-conference-2022.docx (Word document download)

“

THE WEEKEND OFFERS A GREAT ATMOSPHERE AND THE OPPORTUNITY TO LEARN ABOUT DENTISTRY ALONG THE WAY”

invis is expanding your dental portfolio.



With systems designed to educate dentists at every step, we provide first-class support to certification and beyond. Working with us means you will be able to gain from the unparalleled expertise that comes from having treated more than **11 million Invisalign patients**¹.

Find out more at:

www.invisalign-go.co.uk

www.invisalign-go.ie



invisalign go

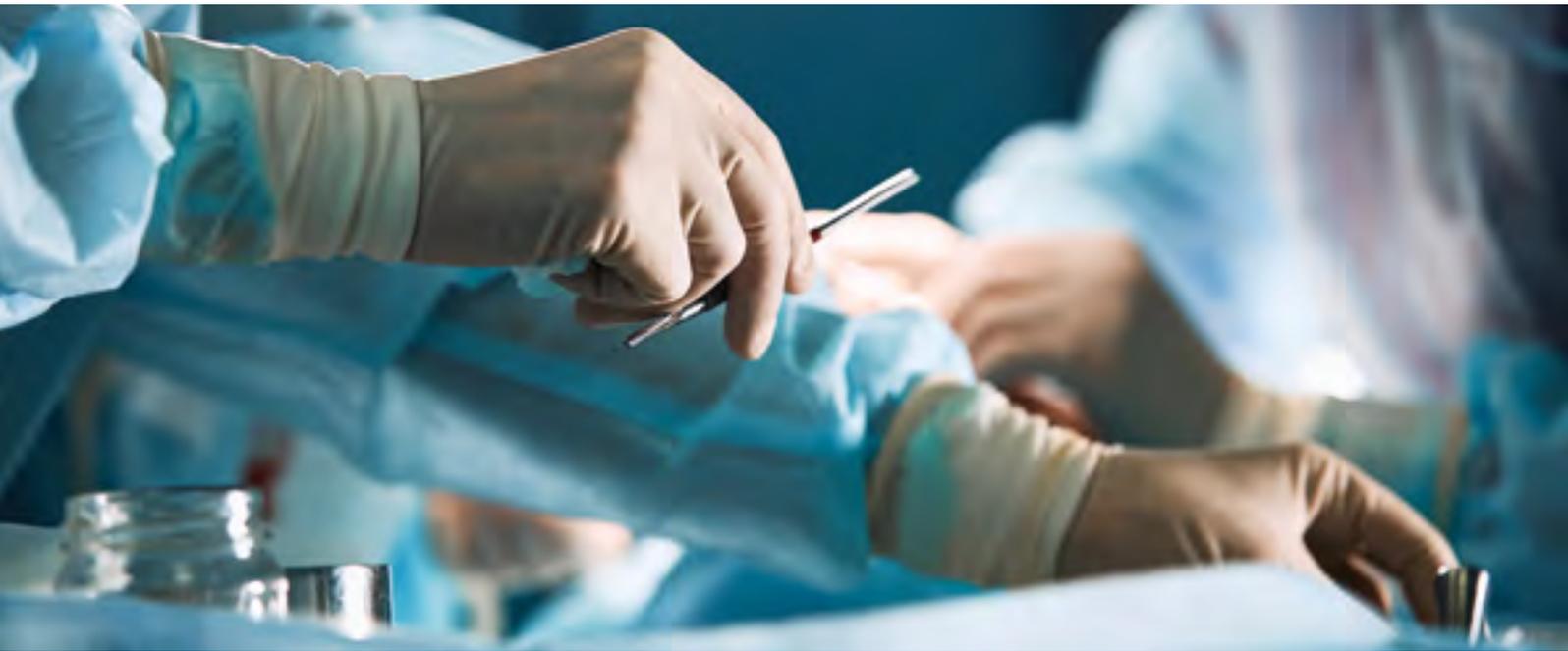
¹ Data at Align Technology, as of September 30, 2021

Align Technology Switzerland GmbH, Säurstoff 22, 6343 Rotkreuz, Switzerland

© 2021 Align Technology Switzerland GmbH. All Rights Reserved. Invisalign, ClinCheck and SmartTrack, among others, are trademarks and/or service marks of Align Technology, Inc. or one of its subsidiaries or affiliated companies and may be registered in the U.S. and/or other countries. MKT-0007400 Rev A

BAOMS ASM22

BAOMS's 'Facing the Future' 2022 meeting in London tackled education, recruitment and retention and safeguarding the NHS



The postponed 2020 British Association of Oral and Maxillofacial Surgeons (BAOMS) Annual Scientific Meeting (ASM), faced the future squarely with former Head of the Civil Service, Lord Kerslake, who made the opening presentation.

He called on the speciality to step forward, take on clinical leadership and engage widely in the debate to secure the future of the NHS.

His was one of several important sessions that followed and confronted some of the most challenging questions facing oral and maxillofacial surgery and the NHS today.

This came together with a cutting-edge research, scientific and academic programme over the three days, conceived by immediate past 59th President Rob Bentley, Consultant Craniofacial and Oral and Maxillofacial Surgeon at King's College Hospital.

Mr Bentley was finally able to host his 2020 conference at London's Southbank Centre – the first time the event has been held in the capital since 2012. It was a powerful event, brimming with energy and excitement. BAOMS had not been able to meet at full capacity since 2019. In the intervening years, oral and maxillofacial surgeons, together with oral surgeon colleagues, had pushed themselves to provide the best patient care they could during the pandemic. The risk of Covid infection for both specialities was clear.

Lord Kerslake challenges BAOMS to engage actively in the future of the NHS

In the ASM's opening President's Lecture, Sir Bob Kerslake, who had

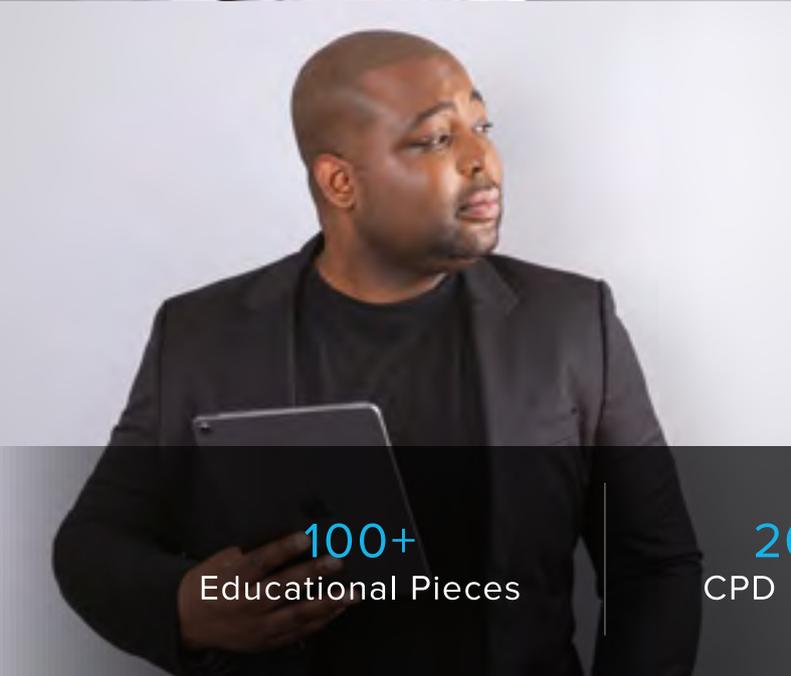


“

A CULTURE SHIFT IS NEEDED AMONG STAFF TO EMBRACE NEW DIGITAL MODELS OF CARE.”



ADVANCED LEARNING AND CLINICAL TRAINING FOR EVEN THE BUSIEST MEDICAL AESTHETICS PRACTITIONERS



100+
Educational Pieces

20+
CPD Points

24/7
Flexible Learning



MERZ AESTHETICS® ECADEMY 
FOR HEALTHCARE PROFESSIONALS ONLY

Find out for yourself why Dr Esho recommends Ecademy

EXPLORE TODAY AT [ECADEMY.CO.UK](https://ecademy.co.uk)



SCAN ME
to explore
today

also served as Chairman of King's, told the facial surgeons bluntly: "However brilliant you are in the work that you do in BAOMS – and I think you are brilliant – this can only be this can only be sustained if the NHS as a whole does well."

He listed what he believes are the six "big challenges... that are interrelated and mutually independent" that face the NHS. Service, workforce, finance, digital, organisation and public health need to be tackled together "if we are to succeed".

Lord Kerslake added: "Arguably, the single biggest cause of the service challenge is my second big challenge, the workforce challenge." In addition, he said, a culture shift is needed among staff to embrace new digital models of care. But he wondered if "we are even close to the scale of change that will be needed?"

He believes his six challenges are daunting and "easier to describe them than to describe clearly the way through them".

He said that the UK Government has denied the problem of funding for social care, and the £39 billion added to the NHS care budget over three years from 2021, together with the national insurance contributions increase, would not ensure the funding needed and "in my personal view... it will not happen".

Lord Kerslake threw out a challenge to the specialty at the end of his presentation, saying: "To survive and prosper will require a collective effort... you in this room will have to actively engage in the future of the NHS well beyond your specialisms."

Workforce issues

Workforce issues featured prominently throughout the BAOMS22 programme. The first of two sessions on recruitment and retention explored the realities of training and the pressures facing junior trainees. Symposium panel members described how BAOMS is working imaginatively to provide tangible support and a "caring ethos for junior staff".

David Drake, Chair of the Specialty Advisory Committee responsible for oral and maxillofacial surgery on the Joint Committee on Surgical Training, said there had to be an expansion in OMFS across the UK, and an expansion in training in hospitals. Health Education England has increased training numbers for all surgical specialties, he explained, but there hadn't "been much discussion with the specialty".

Develop the leaders of tomorrow, today

Another key session took a deep dive into learning from the pandemic and how that can be applied to protect and foster a prospering NHS into the future – and why developing the leaders of tomorrow is essential in that process.

Chairing the debate on the final day of the ASM, Mr Bentley said a strategic framework for the NHS and developing the right leadership and talent, coupled with equality for all of access, is essential. He added: "We need good teams that have solidarity, sociability and unity because of the fragmentation caused by the pandemic... it's all about developing partnerships in and through others."

Professor Kevin Fong, Consultant Anaesthetist at University College Hospital London and National Clinical Adviser in Emergency Preparedness Resilience and Response for Covid, threw out another challenge for colleagues: "It's your health service and you have a chance to influence it."

It is not about "the number of beds, but the wellbeing of the workforce", he said. He believes that if you don't sustain the wellbeing of the workforce at all levels you will not be able to fill the gaps in care.

Prof Fong said you need to retain your workforce and invest at scale in that workforce – this will improve patient care and save the NHS money. How could this be done? By using and preserving organisational memory and the new-found agility, he said.

Consent changes for mandibular third molar surgery

On the final day of BAOMS22, a stimulating symposium examined why the consent processes for mandibular surgery had changed, and the impact the new guidelines have had.

Consultant Oral and Maxillofacial Surgeon Geoff Chiu, based in the oral surgery services at East Lancashire NHS Trust, tackled the changes to the consent process for mandibular third molar surgery. He had represented BAOMS on the Royal College of Surgeons of England Faculty of Dental Surgery Working Group that updated the 20-year-old National Institute of Health and Clinical Excellence (NICE) guidelines.

Mr Chiu was joined by Simon Harvey, Consultant in Dental Maxillofacial Radiology at the Eastman Dental Hospital, and

Stephen Henderson, Dental Adviser for the Medical & Dental Defence Union of Scotland. Mr Harvey looked at the imaging lower third molars, while Mr Henderson interrogated how the 'Montgomery' principles apply to wisdom teeth.

Mr Chiu told delegates that the new guidelines for lower third molar surgery now include management of "high risk" third molars, the current status of patients' social wellbeing and their involvement in the decision-making.

Retaining third molars in some patients had a detrimental impact, adding: "This has led to patients developing latent caries or periodontal disease, which can often result in the loss of both the third and second molars." He went on to explain the principles of care in the new guidelines, which are now "patient-focused".

Posters and papers filled with ideas and innovations

Over the three-day conference, there were an astonishing 70 free paper presentations that tackled issues from TMJ and dental alveolar to head and neck cancer, audit, trauma and the experiences of second-degree trainees.

Alice Cameron from the Great Western Hospital posed the question, 'Are you happy with consent for dental alveolar surgery in your department?', while Consultant OMFS Bernard Speculand, with his expertise in medico-legal practice, tackled 'Clinical negligence in TMJ surgery'. Aimee Rowe, a Senior House Officer in the East Midlands, presented a paper that explored how the OMFS specialty supported second degree students.





SeptoAccessories
From now. Everyday. Septodont Accessories.



For further information on Septodont's new range of accessories go to:

www.septodont.ie





Upper arch rehabilitation using dental implants

Teeth in a day with New Life Teeth: a case study

Introduction

The literature on immediate loading with fixed full-arch prostheses in the maxilla shows that a successful outcome can be expected if adequate criteria are used to evaluate the patient, choose the implant and perform the surgical and prosthetic treatment¹.

New Life Teeth dental clinics (Belfast, Dublin, Edinburgh and Glasgow) have been providing teeth-in-a-day treatments for seven years, and have done more than 2,000 full arch surgeries and restorations.. Here, a recent case is presented to outline the workflow and protocols used in the clinics.

The patient

Fit and healthy 59-year-old. Non-smoker. High blood pressure, well controlled by medication.

WORDS
DR MARK TARPEY
(BDS (QUB)
DIPIMPDENT
(ADV CERT)
RCS (ENG)

Initial presentation

The patient presented with terminal upper dentition. There were multiple areas of apical pathology and she was wearing a removable denture. Oral hygiene was adequate. At the time of the initial consultation, she reported a loss of function and a lack of confidence in her teeth and in herself.

Treatment plan

Pre-operative planning
As part of the process both CBCT and intra-oral scans were taken. The CBCT allows for 3D bone imaging, volume assessment and the identification of vital structures. Intra-oral scans are accurate, reproducible and with no physical



Terminal upper dentition; multiple areas of apical pathology; removable denture; loss of function and confidence

models there is no need for physical storage of models and the risk of losing or breaking models is eliminated.



CBCT - 3D bone imaging; Bone volume assessment; Identification of vital structures

With these scans in the arsenal, Smile Design with Zirkonzahn is the next step.



Intra-Oral Scans - Accurate; reproducible; no storage; no risk of losing/breaking models



Smile Design with Zirkonzahn

Implant surgery

During surgery, all the remaining upper teeth were extracted, and six Southern Implants External Hex implants were placed using a partially guided protocol.



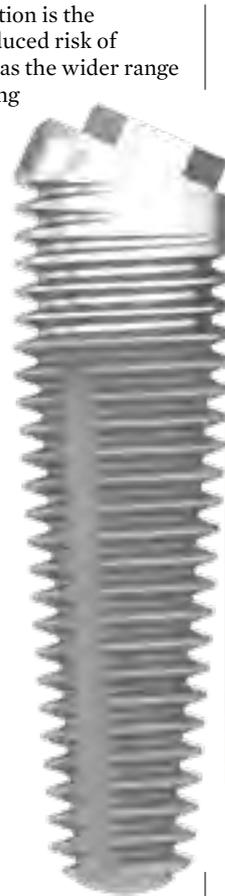
Extraction of all remaining upper teeth; Partially guided placement of six Southern Implants dental implants; 12-tooth immediately loaded milled acrylic bridge with welded bar

“

INTRA-ORAL SCANS ARE ACCURATE, REPRODUCIBLE AND WITH NO PHYSICAL MODELS THERE IS NO NEED FOR PHYSICAL STORAGE OF MODELS AND THE RISK OF LOSING OR BREAKING MODELS IS ELIMINATED.”

The external hex connection is the preference due to the reduced risk of implant fracture² as well as the wider range of co-axis angulation being available (12, 24 and 36 degrees). The MSc implant, which has a machined surface coronally to help reduce the risk of peri-implantitis³, was chosen for this case. Co-axis implants are excellent for reducing the required prosthetic space⁴, leading to reduced alveoplasty, and a higher torque of a straight multi-unit abutment compared with angled abutments⁵. In this case, two 24-degree co-axis implants were placed along with four straight implants.

External hex connection, reduced risk of implant fracture, machined surface collar, reduced risk of peri-implantitis, co-axis for tilted implants, reduction in required prosthetic space, reduced alveoplasty, higher torque of straight MUA compared with angled



iMetric and Intra-Oral Scans; Highest level of accuracy; Fewer restorative phases; Improved patient comfort

In this case, the soft tissue condition is excellent after 12 weeks' healing.



Soft tissue condition is excellent after 12 weeks' healing

The implants were loaded with a 12-tooth milled acrylic bridge with a welded bar. The post-surgery workflow is as follows:

- Week 1: Review
- Week 2: Suture Removal
- Week 6: Secondary review and OH check. A waterpik was prescribed.
- Week 12: Osseointegration check and restorative phase

Restorative phase

During the restoration phase, both iMetric and Intra-Oral Scans are taken, as this assures the highest level of accuracy, and also reduces the restorative phases. Improved patient comfort is also a consideration.



IMPLANTOLOGY

The milled PMMA trial bridge allows the assessment of occlusion, aesthetics, passivity of the fit and the patient's speech before the definitive CAD/CAM Prettau Zirconia Bridge is constructed by Teeth Forever Lab, NewLife Teeth's in-house laboratory.



Milled PMMA trial bridge: allows for assessment of occlusion, aesthetics, passivity, speech



CAD/CAM Prettau Zirconia Bridge is constructed by Teeth Forever Lab



Removal of pathology; fixed teeth; improved function; improved aesthetics; increased confidence

Conclusion

This case is a good example of the highly predictable teeth-in-a-day workflow from New Life Teeth. In this case the benefits to the patient are numerous; removal of pathology and the provision of fixed teeth. This life-changing surgery allows for improved function and aesthetics, resulting in an increased confidence.



REFERENCES:

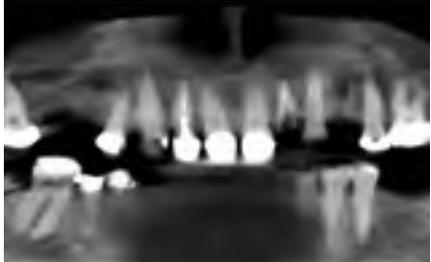
¹Peñarrocha-Oltra D, Covani U, Peñarrocha-Diago M, Peñarrocha-Diago M. Immediate loading with fixed full-arch prostheses in the maxilla: review of the literature. *Med Oral Patol Oral Cir Bucal*. 2014 Sep 1;19(5):e512-7. doi: 10.4317/medoral.19664. PMID: 24880445; PMCID: PMC4192577.

²Data on file: Southern Implants fatigue testing. info@southernimplants.com

³Wennerberg A, Albrektsson T, Chrcanovic B. Long-term clinical outcome of implants with different surface modifications. *Eur J oral Implantol* 2018; 11 (Suppl1):S123-136

⁴Malaguti, G, Esposito A, Nicolì G, Pellitteri G, Consolo U. Implant-supported restorations of edentulous arches with immediate loading and intra- and extraoral welding. Retrospective study with 3 years of follow up. *Eur J oral Implantol* 2013; 6 (Suppl): S9-s82.

⁵Van Weehaeghe M, De Bruyn H, Vandeweghe S. A prospective split-mouth study comparing tilted implants with angulated connections versus conventional implants angulated abutment. *Clin Implant Dent Relat Res* 2017; 1-8.



For more information or referrals:
 Southern Implants UK & Ireland: www.southernimplants.co.uk
 New Life Teeth: www.newlifeteeth.co.uk

NLT Mission Statement: Achieving dental excellence every day. We provide world-class dental and cosmetic care underpinned by 3 core elements: leading edge technology, professional expertise, and unrivalled skill.



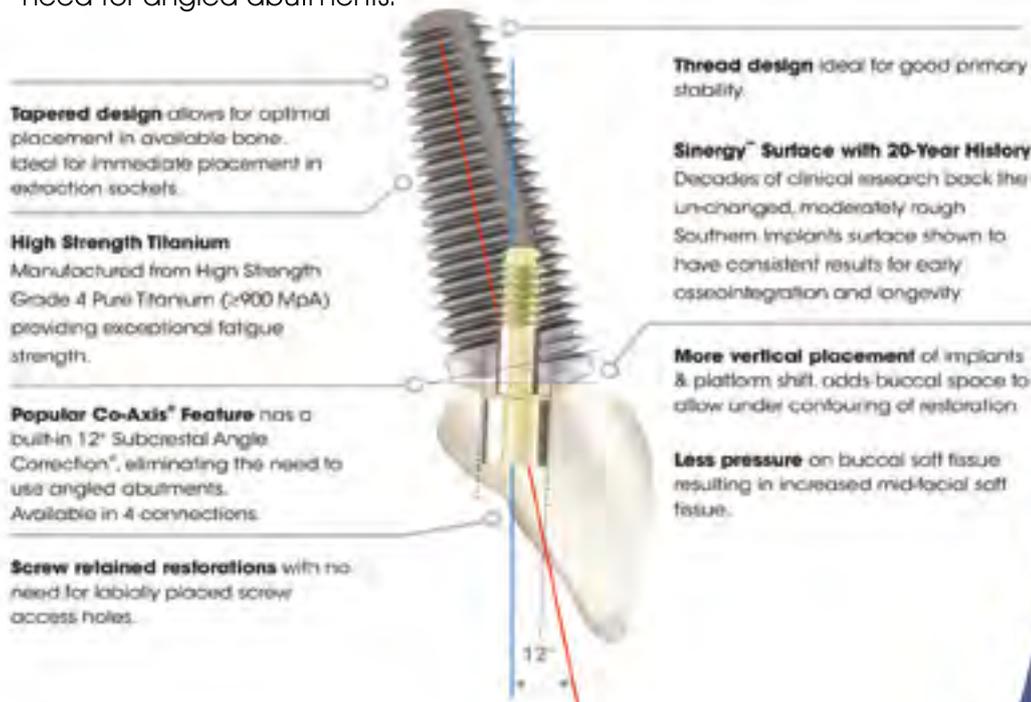
SOUTHERNIMPLANTS®

Innovative Treatment Solutions

Overcome anatomical constraints and simplify complex cases with Co-Axis

The co-axis implant is an innovative design with over 18 years of widespread clinical use.

- * **Surgeons:** Satisfy surgical principals by using available bone, minimising extensive grafting and facilitating ideal implant position for simple, screw-retained restorations.
- * **Prosthodontists:** Maximise prosthetic space and superior biomechanics whilst simultaneously achieving ideal screw-access for straightforward restorations.
- * **Laboratory technicians** have favourable angles to work with and gain extra prosthetic space for optimal prostheses (height-robbing angled MUA's not required)
- * **Referring dentists:** simple maintenance and reduced prosthetic complications such as screw-loosening due to superior biomechanics and removing the need for angled abutments.



Please get in touch at info@southernimplants.co.uk to learn more.

Representatives in your area:

England (Southeast): *David Cloke - 0797128950* | England (Southwest): *Andri Tucker - 07990073082*

| Midlands & Wales: *Patrick Briscoe - 07920040305* | Midlands: *Ketan Patel - 07760632207* |

Scotland (East): *Colin Hart - 07771435110* | Scotland (West): *Colin Hogg - 07586317506* |

Northern Ireland & the Republic of Ireland: *Stephen Wilson - 07799044830*

Strength. Range. Predictability.



PLATELET RICH FIBRIN

TWO DAY PRF COURSE

with Drs Joseph and Elisa Choukroun

Venue: MANDEC Centre, Manchester Dental Hospital
Date: Friday 20th and Saturday 21st January 2023

EARLY BIRD PRICE £799 INCLUDING VAT



CHOUKROUN QUATTRO PRF SYSTEM

A new concept in Smart Blood Generation, reduces the need for expensive xenografts and membranes.

THE CONCEPT

Centrifugation of whole blood without anticoagulants to produce materials which accelerate bone and soft tissue healing by

- the action of fibrin as a provisional extracellular matrix
- stimulating the release of growth factors into the site
- the presence of mesenchymal stem cells



PIEZOSURGERY TOUCH

Cutting edge technology



**CONTACT US
FOR LATEST
OFFERS**

PIEZOSURGERY WHITE

All of the benefits at a lower price



Putting PRF into practice

High-quality training in new technique is on offer during two-day course in Manchester



Joseph and
Elisa Choukroun

The course will be a mixture of lectures and practical sessions. On the theoretical side, PRF will be explained in full; what is it and why does it work so well?

The lectures will cover the biological factors affecting long term stability of soft and hard tissue grafts, techniques to increase keratinised tissue and reduce tension, preventing peri-implantitis and predictably accelerating wound and tissue healing by promoting new blood vessel formation.

Pain management and pharmacology will be covered, to minimise discomfort, infection and allergic reactions.

On the practical side, there will be a significant session given over to supervised phlebotomy techniques to ensure quick and easy blood collection. Delegates will see how to produce PRF membranes, plugs, sticky bone and liquid PRF, as well as practice on the soft brushing technique to extend flaps without tension using new suturing techniques.

As a special bonus, each delegate will be given free access to Dr Choukroun's online training courses covering his full eight-hour recorded training programme and his two-hour phlebotomy course.

The use of PRF (platelet-rich fibrin) in practice is becoming more common as the clinical benefits are recognised.

Similarly, PRF is now being successfully used in the aesthetic field as a natural alternative to fillers and for other indications, such as hair restoration.

Successfully introducing any new product or technique relies upon the best possible training and support. General Medical has announced that they are able to offer training with Dr Joseph Choukroun, developer of the

PRF system, and Dr Elisa Choukroun during a two-day course on 20-21 January 2023 at the MANDEC Centre, Manchester Dental Hospital.

“

ON THE PRACTICAL SIDE, THERE WILL BE A SIGNIFICANT SESSION GIVEN OVER TO SUPERVISED PHLEBOTOMY TECHNIQUES.”

For further details, call 01380 734990 or email info@generalmedical.co.uk



Doze & don'ts of breath

WORDS
PATRICK
MCKEOWN

Oral breathing in sleep is a problem for nearly 20 per cent of the population and can cause a range of health issues but expert advice can help patients combat it

Most dentists, regardless of experience, understand the dangers of oral breathing.

But there is currently no standardised procedure for dentists to identify it.

Patients with the condition are left frustrated as, despite careful brushing, they experience bad breath, tooth decay and malocclusion.

Toothbrush use is the most important measure for oral hygiene. But when breathing is through the mouth for part of the day or night, even the most meticulous brushing cannot prevent problems.

Moreover, a vital step is missing in the long-term treatment of nasal obstruction. It's time to join the dots and add simple breathing re-education techniques to the dental toolkit. This will help ensure better outcomes for oral and whole body health.

Figures suggest there is a significant

problem. One 2020 study reported that 17.2 per cent of patients aged three to 83 years primarily breathed through an open mouth. Previous research in children identified that about 55 per cent were mouth breathers.

A recent cross-sectional study of children aged between six and 12 years found that 51 per cent were "mixed breathers," meaning they breathed through the mouth at least some of the time.

There is increasing evidence that oral breathing contributes to dental conditions such as gum disease, halitosis, and cavities. There's a serious cost to overall wellbeing too.

When saliva dries up due to mouth breathing, the acidity of the mouth increases. Acid-producing bacteria thrive, and the buffering capacity of saliva is compromised.

This contributes to plaque and tartar buildup, oral thrush and mineral loss from the surface of the teeth, leading to dental caries. Studies in children have shown statistically

significant correlations between mouth breathing and halitosis. In adults, dry mouth is linked with obesity, arterial hypertension, and hyperglycemia.

Mouth breathing does not need to be constant for problems to occur and the effects of oral breathing go beyond dental health. It causes irreversible changes to facial growth and negatively affects the development of the nasal airway, potentially leading to a lifetime of breathing and associated health problems.

One of the problems facing dentists is that oral breathing can be difficult to diagnose, especially if the nose is not physically blocked.

So what steps can you take? With the patient seated, look for dark eye circles, postural changes such as a forward head thrust and a long face, often with a recessed chin and a bent nose.

With the patient standing, look for a high narrow palate, gingivitis in the maxillary incisors and an anterior open bite.

You can ask the patient if they snore, wake with a dry mouth or headache or drool on their pillow. Other telltale signs include being frequently tired during the day, having allergies or a blocked nose, struggling at work or school or

“

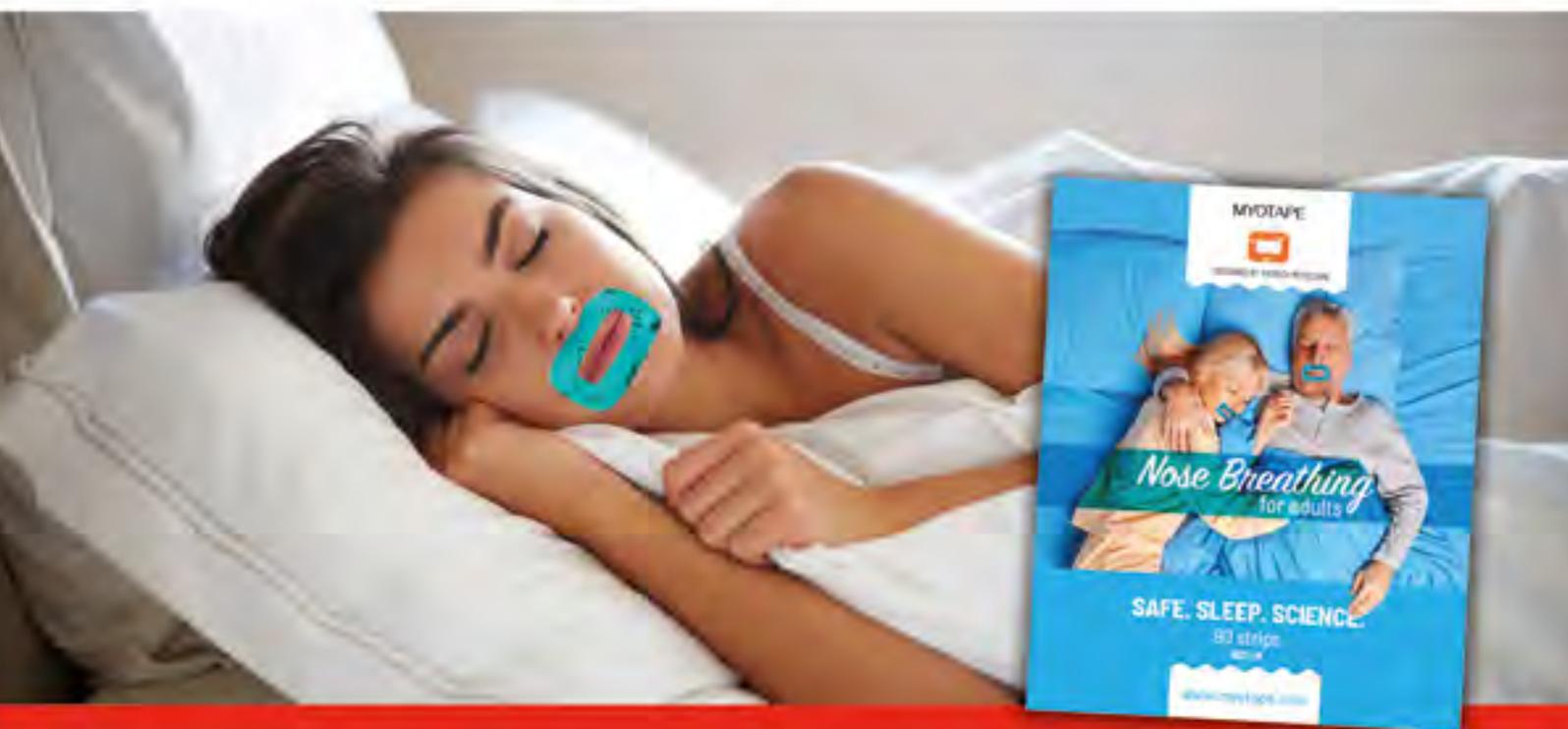
PATIENTS WITH THE CONDITION ARE LEFT FRUSTRATED AS, DESPITE CAREFUL BRUSHING, THEY EXPERIENCE BAD BREATH, TOOTH DECAY AND MALOCCLUSION.”



MyoTape is a specialist lip tape designed to restore full-time nasal breathing during wakefulness and sleep. Designed by internationally renowned breathing coach and author of *The Oxygen Advantage*, Patrick McKeown, MyoTape is more comfortable to wear than other mouth tapes as it is the only tape on the market that doesn't cover the mouth. Instead, its light elastic tension brings the lips together so the wearer can maintain a closed mouth, ensuring correct resting tongue position and nasal breathing. It is still possible to open your mouth and communicate easily and therefore, unlike other tapes, this eliminates risk and soothes any anxiety that may be associated with wearing a mouth tape.



Once in place, the tape stimulates the skin, triggering a neural response in the muscles of the face. This helps the brain to build the habit of nasal breathing.



BENEFITS FOR ADULTS:

- Prevents mouth snoring
- Reduces symptoms of sleep apnoea and support CPAP
- Better sleep quality, reducing fatigue
- Boosts focus
- Less asthma and airway irritation such as hay fever
- Improves dental health
- Reduces anxiety
- Enhances athletic performance and stamina
- Assists functional orthodontics and craniofacial development

BENEFITS FOR CHILDREN AND TEENS:

- Better sleep, less tiredness
- Helps grow healthy teeth
- Healthy development of the airway
- Supports functional orthodontics
- Lower risk of behavioural and learning disorders
- Better speech and listening skills
- Supports functional orthodontics

To learn more, go to www.oxygenadvantage.com/product/myotape/ or email nikki@oxygenadvantage.com

finding it hard to concentrate. Children may toss and turn during the night or wet the bed.

Atypical swallowing suggests poor tongue function and is related to oral breathing. When the mouth is open, the normal resting position of the tongue is compromised. Over time, this affects function and strength in the tongue muscles.

You can also perform breathing tests to identify mouth breathing in your patients. The lip seal test, in which the patient's mouth is sealed with medical tape for three minutes, has been proven to provide an objective screening tool.

It allows the orthodontist to identify whether mouth breathing is caused by physical nasal obstruction or habit. Around 93 per cent of people will be able to breathe through the nose. Even among habitual mouth breathers, more than 83 per cent can breathe nasally for three minutes.

Chronic mouth breathing often starts as the result of nasal obstruction that blocks the airway and makes nose breathing uncomfortable. During childhood, swollen adenoids, tonsils or other conditions that block the nose prompt oral breathing.

Mouth breathing may also be caused by a deviated nasal septum, cleft palate or a tongue or lip tie that makes breastfeeding difficult. Tongue tie may also cause abnormal swallowing – a risk factor for dental problems.

The initial cause of mouth breathing may be physical obstruction or anatomical predisposition. But it is not enough to simply decongest the nose, remove the adenoids or tonsils or perform turbinate reduction surgery. It is vital that mouth breathing behaviour is changed.

In most cases, this continues because it has become habitual. This can itself be the cause of nasal stuffiness, so it becomes a self-

perpetuating problem. It is essential, therefore, to retrain the breathing.

In 1994, I had turbinate reduction surgery to alleviate years of chronic nasal congestion. There was no instruction afterwards to breathe through my nose. I continued to have sleep disorders for several years until I read an article about the importance of nasal breathing.

My experience is far from unique. Persistence of mouth breathing after adenotonsillectomy contributes to progressive worsening of sleep apnea. This frequently occurs within three years of surgery.

Mouth breathing during sleep causes increased apneas and hypopneas, and – worse – oxygen desaturation. Without the vital step of the restoration of continuous nasal breathing during wakefulness and sleep, surgery is a short-term fix.

The nasal obstruction that causes oral breathing can be addressed using breathing exercises to reduce the speed and volume of the breath and restore full-time nasal breathing. But I am aware of very few ENT specialists who offer a nasal breathing program to support full recovery post-surgery.

Breathing re-education involves simple exercises designed to decongest the nose and restore normal patterns. By showing children and adults how to decongest the nose, the dentist can help remove the feeling of air hunger that accompanies nasal congestion.

Practice of specific patterns optimises breathing. This makes it comfortable and effortless for the child or adult to breathe through the nose.

To ensure nasal breathing during sleep, it is necessary to tape the mouth with a specialist lip tape or a medical paper tape such as Lip Seal, Micropore or MyoTape.

MyoTape is my own product. It is designed to be different from other lip tapes. The tape does not cover the mouth, meaning it is still possible

to open the mouth to breathe if necessary. This is essential if using lip tape with a child or a patient who is fearful of suffocation.

Children aged five years and older can be encouraged to wear MyoTape for 15 to 30 minutes a day during rest. This works well when the child is distracted – playing, watching TV, or using a tablet. MyoTape is elasticated and gently brings the lips together.

When the child opens the mouth to breathe, the tape gently reminds the child to breathe only through the nose. This helps change the mouth breathing behaviour.

Mouth breathing in children and adults is not innocuous. It has major implications for craniofacial development in children and it contributes to gum disease, dental cavities, and bad breath – all problems the dentist works to resolve.

To ensure a better service with the best long-term outcome for patients, it is imperative that dentists advise their patients to breathe through the nose during rest, sleep, and exercise.

Patrick McKeown was educated at Trinity College Dublin and provides functional breathing training for children and adults to decongest the nose and restore nasal breathing. He is fellow of the Royal Society of Biology in the UK, founder of Buteyko Clinic International, and creator of the Oxygen Advantage® method. Patrick is the founder of MyoTape™.

For more information, visit www.oxygenadvantage.com or www.buteykoclinic.com. Alternatively email nikki@oxygenadvantage.com

“

BREATHING RE-EDUCATION INVOLVES SIMPLE EXERCISES DESIGNED TO DECONGEST THE NOSE AND RESTORE NORMAL PATTERNS.”



A timely referral means a happy patient, out of pain

Dr Dhiraj Arora

BDS MJDF RCS(Eng) PGCert CE MSc(Endo)¹

Initial presentation and background

Visit 1:

The patient was a referral for root canal treatment (RCT) on LL6. She was triaged for COVID-19 over the telephone and also on entering the surgery. For the appointment, I wore the following PPE: respirator mask, gown, face shield, loupes and gloves.

The patient said she had been advised by her general dentist that she required RCT. She had been in continuous pain after she'd had a crown fitted and the GDP did try to find the nerves; however, this did not help. The patient told me that the tooth hadn't felt right since the crown was done and that she would like the pain to stop. She had been taking painkillers and was prescribed a course of antibiotics.

Results of examinations

Extraorally, no abnormality was detected. Intraoral exam on LL6 revealed a recent onlay had been carried

out and attempted extirpation, but only one canal had been located.

Mobility was grade 0. The tooth was slightly tender to percussion, also there was mild buccal tenderness to palpation. There was no endo-related pocketing when the probe was walked around the gingival crevice. No evidence of a sinus tract or intraoral swelling were found.

A pre-operative radiograph showed the onlay in close association to the pulp space, with no obvious pathosis (see Figure 1).

Diagnosis

A diagnosis was made for the LL6 of symptomatic apical periodontitis with previously initiated treatment.

The options regarding this tooth were:

- Do nothing. However, the patient was warned that, if left untreated, it could cause an acute flare up at any time and have a reduced prognosis due to persistent infection.
- Root canal treatment (RCT) with cuspal coverage.

• Extraction.

The patient was happy to proceed with RCT. Consent was discussed, with the risks and benefits explained, including the risk of re-infection and the complex anatomy. The consent form was duly signed, witnessed by the dental nurse and me.

Treatment pathway

Local anaesthesia was administered: 4.4 ml lidocaine hydrochloride, 2% 1:80,000 adrenaline via buccal infiltration and inferior dental block (IDB).

A rubber dam was placed over LL6, with a clamp and rubber dam liquid used to provide a tight seal. The tooth was accessed, with three orifices located and checks made for a potential second distal canal. No second distal canal was found, with a note made to check again at the next visit. The located distal canal was oval-shaped and centrally located.

A glidepath was created using K-Flex Files 06, 08, 10 and 15. Throughout the procedure, the canal was irrigated with an enhanced sodium hypochlorite solution applied from a syringe.

Working lengths were established using an apex locator: Mesio Buccal (MB), 18 mm (reference point, buccal cavity wall); Mesio Lingual (ML), 18 mm (reference point, mesiolingual cusp) and Distal (D), 19.5 mm (reference point, mesiolingual cusp).

Apical preparation was completed using COLTENE's HyFlex™ EDM files and CanalPro™ Jeni motor sequentially: the 10/.05 Glidepath file then the 25/- OneFile. These files definitely know their way around curves. Due to their controlled memory, the files follow the anatomy of the canal, thus significantly reducing the risk of ledging, transportation or perforation of a canal. Like stainless steel files, HyFlex™ files can be pre-bent. Used in combination with the CanalPro™ Jeni, which uses complex algorithms to control file movement at millisecond intervals, I am able to navigate the canal system to achieve safe, effective and



Figure 1



Universal submicron hybrid composite

BRILLIANT EverGlow®

Enduring gloss – made brilliant



Thanks to its sophisticated load composition, BRILLIANT EverGlow® immediately produces an exceptionally smooth, glossy and satin-finished surface as soon as the filling is put in place. Polishing is simplified and a very aesthetic restoration can be done in no time. In addition, the versatile Brilliant EverGlow® filling material excels in its enhanced gloss retention.

- Exceptional polishability and long-lasting brilliance
- Aesthetic single-shade restorations
- Versatile shade system with three translucency levels
- Excellent sculptability and smooth consistency
- Good wettability with minimal stickiness to the instrument



"Compared to other products on the market, nothing comes close to the BRILLIANT EverGlow's® surface polish and gloss retention – it's why I started working with it, and why I'll continue to use the material for the foreseeable future."

Dr Monik Vasant BChD MFGDP (UK) MSc

NOVEMBER OFFER

Ask about our COLTENE Promotion in November, exclusively available from your Territory Manager Nick O'Keeffe

WATCH THE VIDEO



Mob: +353 8641 35766 Email: nicholas.okeeffe@coltene.com



Call: +44(0)1444 235486
INFO.UK@COLTENE.COM WWW.COLTENE.COM

COLTENE



predictable mechanical preparations for our patients. The motor is smooth and efficient, and the audible signals provide the clinician with a regular reminder of the importance of constant irrigation. The Jeni has an integrated apex locator, useful as it provides information regarding the positioning of rotary files within the canals at all times, which could potentially reduce the incidence of overpreparation.

The canals were prepared to the above sizes, with continuous irrigation using the sodium hypochlorite solution. The canals were dried with paper points, a calcium hydroxide paste placed in them and a pledget was used in the pulp chamber space. The tooth was temporarily restored, with occlusion and contacts checked.

The patient was told to expect some post-op pain and tenderness and advised to take painkillers and avoid having anything hard on the tooth, due to the risk of fracture. She was also advised about the possibility of an acute flare-up and/or swelling in the area, alongside the possibility of tenderness from the jaw joint. If any of these scenarios were to occur, she was to use anti-inflammatories, cold compresses and contact the dental practice. The patient understood these instructions and left happy.



Figure 2

Visit 2:

For her next visit, the plan was to obturate and provide a coronal seal with a direct permanent restoration. Once again, the patient was triaged for Covid-19 over the telephone and on entering the surgery. I wore a respirator mask, gown, face shield, loupes and gloves.

The patient was able to report that

since the last visit, she'd experienced no pain or discomfort, so would like the treatment completed. She was made aware of the risks and confirmed consent, as before. I was then able to proceed with the continuation of the RCT on LL6. Once again, it was delivered under local anaesthesia: 4.4ml lidocaine hydrochloride,





Figure 3

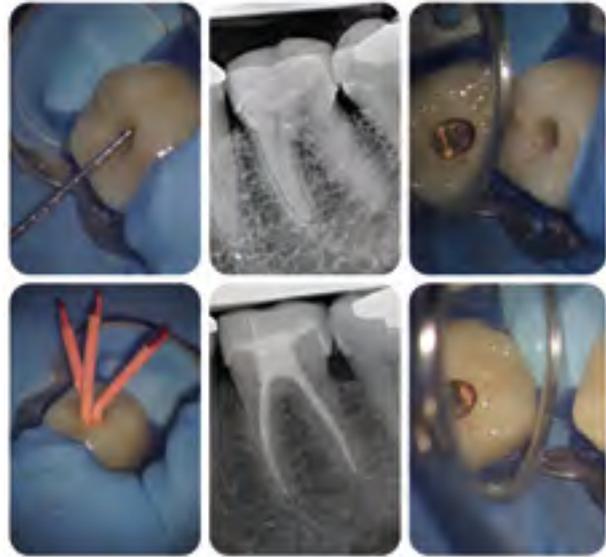


Figure 4

2 per cent 1:80,000 adrenaline via buccal infiltration and IDB.

A rubber dam was placed over LL6, with a clamp and rubber dam liquid used to provide a tight seal. The tooth was accessed, three orifices relocated and rechecked for the presence of a potential second distal canal, using a microscope and ultrasonics.

Working lengths in each canal were re-established and apical preparation completed using COLTENE's HyFlex™ EDM file system. Apical gauging was carried out to determine the size of the finishing files required: MB, binding file ISO size 25, finishing file 25/- OneFile; ML, binding file ISO size 25, finishing file 25/- OneFile and D, binding file ISO size 25, finishing file 25/- OneFile.

The canals were prepared to the above sizes, with continuous irrigation throughout with sodium hypochlorite solution applied from a syringe.

Matching Gutta-Percha points were placed in situ and a master cone long cone periapical radiograph (LCPA) of the LL6 was performed (see Figure 2), to assess the apical extent of the master gutta percha cones. Reporting showed a potential obturation to within 2 mm of radiographic apex.

I performed mechanical agitation of the irrigant, with well-fitting gutta percha cones using long vertical strokes. I then gave a penultimate rinse with EDTA 17% for one minute, followed by the sodium hypochlorite. The canals were dried with paper points.

The canals were obturated using a continuous wave of condensation

(warm vertical) technique: matching master cones with sealant to working length. A heat source was used to remove the coronal portion of the cones, to a binding point 5 mm short of the working length. The canals were backfilled with thermoplastic gutta percha.

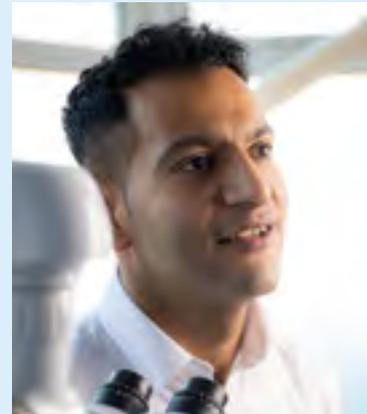
The tooth was etched, bonded and restored with SDR as an orifice seal/base and COLTENE's EverGlow™ universal composite. Occlusion and contacts were checked.

The patient was advised to take painkillers to relieve any discomfort and to expect some pain and possible tenderness of the tooth. As per visit one, she was also advised about the possibility of an acute flare-up and/or swelling in the area, or the possibility of tenderness of the jaw joint. If any of these scenarios occur, she was to use anti-inflammatories, cold compresses and contact the dental practice. The patient understood these instructions.

An LCPA radiograph was taken, justified for post-operative assessment of endodontic treatment and to check that a coronal seal was provided (see Figure 3). Reporting showed the RCT well condensed and within 2mm of the radiographic apex (see Figure 4). The patient was advised to see her GDP for review and left happy.

For more on COLTENE, visit: www.coltene.com, email info.uk@coltene.com or call 01444 235486. For endodontic courses, visit: www.evoendo.co.uk email enquiries@evoendo.co.uk

¹Honorary Lecturer in Endodontics, QMUL



Dr Dhiraj Arora qualified in 2007 from Kings College London and, after five years as an associate dentist, is now the owner of two practices.

Having completed his Masters in Endodontic Practice from QMUL, he now principally works as an endodontist across multiple practices in London. Dhiraj has been involved in the mentorship of newly qualified dentists and is an educational supervisor within the London Deanery. This, along with being an Honorary Lecturer in Endodontics (QMUL), allows him to combine his enthusiasm for endo and teaching.

He has recently set up Evo Endo to provide postgraduate endodontic courses to general dental practitioners.



ACTEON'S Restorative Workflow

moving forward



For clinical perfection during your restorative workflow, choose Acteon



DIAGNOSIS > PREPARATION & TREATMENT > PROSTHESIS PLACEMENT > PROTECTION



**Finding
Clinical
Perfection**

Diagnose with one of our imaging devices.
Create the perfect margin with Newtron ultrasonics.
Use Expasyl to create a perfectly detailed impression.
Ensure a biofilm free site for bonding, with Air n Go.

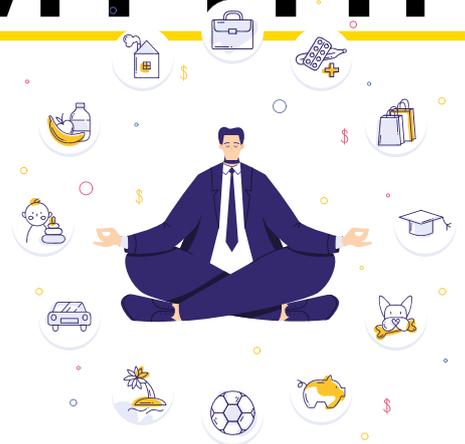
Call us for a no-obligatory consultation
on + 44 (0)800 038 9840
or email info.uk@acteongroup.com

ACTEON

WORK LIFE BALANCE - MYTH?

WORDS
ALUN K REES

It took me several years and many ups and downs to realise that work-life balance was not what I expected – and certainly not what I thought had been promised



THE REVELATION ARRIVED

in one of those moments where you discover something that you thought long lost but that has actually been hiding in plain sight.

The fact is that work-life balance is a myth. It does not and cannot exist – at least not in the way that most people seem to expect it. The very phrase suggests that work and life are two distinct and separate things.

What we are really experiencing is an equilibrium: a state in which opposing forces or influences are balanced. So, work-life balance can be defined as, “the equilibrium between personal life and career work”.

There is only life, but the myth is that we can totally compartmentalise our lives and have control of those compartments.

I started writing this at 6am on a beautiful sunny morning sitting at a desk in my workroom at the home I share with my wife, our dogs and cats.

The workroom is a former woodshed separate from the main house. We live in West Cork in Ireland, a mile from the sea and with a view as far as the Cork and Kerry mountains. It can sound and appear idyllic, and much of the time it is, because we have made it so.

But life was not always like this. During my early years, both as an associate and then a practice principal, I wrestled with what I felt were heavy responsibilities. I was a business owner, clinician, employer, husband, parent and so on.

I felt I had to be accountable to my patients for their clinical care, to team members for leadership, to the bank for their investment, to my family for

keeping them fed and housed, to the community in which I lived, and so on.

The list felt endless, yet one of the reasons that I had been encouraged into, and chosen, a career in dentistry was the freedom that it promised. I had become a principal in order to share my philosophy of practice.

The choice of area and site was mine. Yet the rules I lived under didn't feel as if they were my choice, my time didn't feel like my own and I started to question the wisdom of the choices I had made.

The turning point, when it eventually came, was not some sort of beautiful realisation. It was more like waking with a hangover from a long bad dream where I had been chasing something that was opaque while being followed by an unknown predator.

These words from Viktor Frankl, a Jewish psychiatrist who survived the Nazi death camps, from his book *Man's Search for Meaning* were a catalyst.

Frankl wrote: “Don't aim at success. The more you aim at it and make it a target, the more you are going to miss it. For success, like happiness, cannot be pursued; it must ensue... you have to let it happen by not caring about it.

“I want you to listen to what your conscience commands you to do and go on to carry it out to the best of your knowledge. Then you will live to see that in the long-run – in the long-run, I say! – success will follow you precisely because you had forgotten to think about it.”

I consciously started to relax into what I was doing, examined the reasons for the decisions I had made and started to be rather than struggling to become.

The more that I focused on the now the

more that I enjoyed my life and the more I realised that I was already a success – on my own terms.

So, what are the messages that I want to share? That work-life balance is a phrase more at home on the lifestyle (that phrase itself is an advertiser's construct) pages of the weekend press.

Don't let anyone, including me, tell you what you should want or when you ought to have it.

Our identities are made up of many distinct parts. They are all-important and should be valued – but only you can decide what is right for you.

A successful life has to be just that, a state in which opposing forces and influences are balanced and equilibrium is sought.

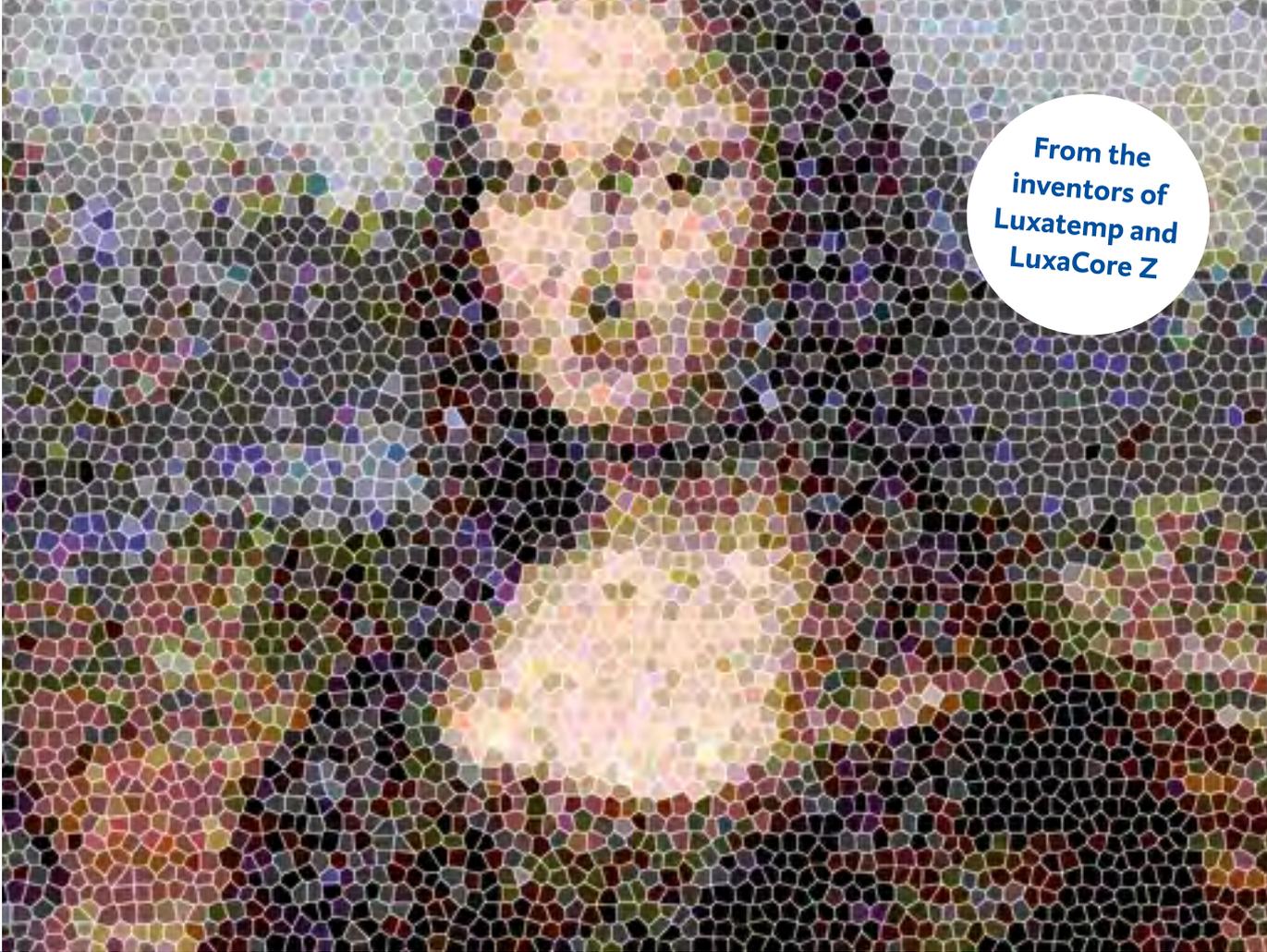
The times in which we live are making ever larger demands on our limited resources. The greater our awareness of the need to be self-reliant, the better equipped we are to resist those demands.

Like riding a bike, once that balance is learned it can be occasionally lost and a tumble may follow, but the memory never entirely disappears, and we can get back to continue our ride through life on our chosen path.

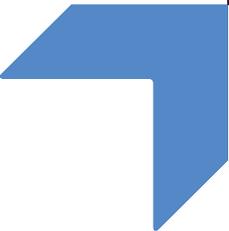
Alun K Rees BDS is The Dental Business Coach. An experienced dental practice owner who changed career, he now works as a coach, consultant, trouble-shooter, analyst, speaker, writer and broadcaster. He brings the wisdom gained from his and others' successes to help his clients achieve the rewards their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

www.thedentalbusinesscoach.com





From the
inventors of
Luxatemp and
LuxaCore Z



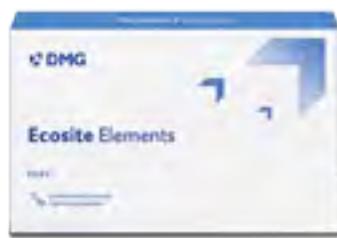
Masterfully simplified.

Ecosite Elements – The Modern Art of Composite.

Discover the modern art of composite with Ecosite Elements. With an innovative NC1 material structure, intelligent shade combinations and exceptional handling. Intuitive, aesthetic and reliable. Precision engineering and absolutely practical. For masterful results. Every day. Ecosite Elements – a composite designed with minimum components for maximum aesthetics.

-  98% of all typical treatments with only one material
-  Intuitive and easy shade selection
-  Exceptional handling for maximum safety and precision

For more information and the chance to discover the new Ecosite Elements first hand:
www.dmg-dental.com/elements



> GC DENTAL

SIMPLE AND EFFICIENT SOLUTIONS FOR POSTERIOR RESTORATIONS

For every patient that requires restorative treatment, the treatment plan needs to be optimised to offer the best solutions while enabling clinicians to work with confidence and efficiency. GC has introduced different proven products to facilitate the creation of direct restorations, regardless of the starting situation, to offer simple solutions to even the most complex challenges.

everX Flow: short-fibre reinforced flowable composite for dentine replacement



Most restorations are made using a direct treatment approach, while indirect restorations are considered preferable for larger defects. However, the tipping point between direct and indirect is not always clear.

everX Flow reinforces restorations and displays an exceptionally high fracture toughness due to its short fibre technology, giving peace of mind when restoring large cavities directly.

EQUIA Forte HT: cost-effective, long-term restorative alternative



Cavities that are difficult to isolate, patients with limited capabilities to cooperate or require a more cost effective approach are just some of the challenges that can make placement of a composite especially difficult.

The proven glass hybrid technology of EQUIA Forte HT is the smart and cost-effective solution. Ideal for patients of all ages including paediatric, geriatric and special care patients, placement can be done quickly and without absolute isolation.

For more information, contact GC UK on 01908 218999, email info.uk@gc.dental or visit <https://campaigns-gceurope.com/direct-restoratives/>

> SDI

THE ONE SHADE, ONE FILL BULK FILL YOU CAN RELY ON



SDI Aura Bulk Fill is the nano hybrid universal composite that drives reliable results and a superior finish in a variety of clinical applications.

Posterior restorations require a tried and tested solution that delivers a smooth workflow and stands the test of time. With a 5mm depth of cure and one universal shade, SDI Aura Bulk Fill simplifies procedures, filling teeth with a single layer and achieving a brilliant, chameleon-like finish.

An Ultra High Density glass filler, Aura Bulk Fill stands up to the high compressive strengths needed for posterior restorations. This creamy, ultra-fine texture also allows for fast, easy polishing, reducing chair time and heightening the aesthetic result. Non-sticky and waxy in consistency, Aura Bulk Fill can be placed within seconds, is easy to pack, doesn't stick to instruments, and provides an optimum handling experience.

Dr Jatinder Heer says: "I would definitely recommend Aura Bulk Fill to colleagues, especially to fellow GDPs who deal with posterior restorations daily – simply because it's so reliable. I was told some time ago that Aura Bulk Fill would prove to be a good alternative to amalgam and that's how I see it – a highly durable material that goes the distance."

To find out more about Aura Bulk Fill visit <https://sdirestoratives.co.uk/aura-bulk-fill/>

> SDI

SDI CELEBRATES 50 YEARS OF GLOBAL DENTISTRY INNOVATION



Throughout 2022, SDI celebrates 50 years of global dentistry innovations. To mark this semicentennial year, SDI are launching a collection of new products, including Luna 2 and Pola for Aligners.

Staying at the forefront of dental material development and technology over the past five decades, 2022 marks a landmark date for the brand. From SDI's beginnings in Australia in 1972, SDI has grown into a market leader in the global dentistry landscape. Listed on the Australian Stock Exchange in 1985 and with a footprint across over 100 countries, SDI is a trailblazer in dental materials, research and development and manufacturing.

Now offering market leading products across teeth whitening, composites, glass ionomers, SDF treatments, and adhesives, SDI continues to work to their mission: Your Smile, Our Vision, innovating dentistry for better health through pioneering the science behind materials.

The new Luna 2 exemplifies this vision with its extremely high radiopacity, handling capabilities and strength, while Pola for Aligners offers the first ever teeth whitening treatment specifically for use with clear aligners during orthodontic treatment.

For more information about SDI Luna 2 visit sdirestoratives.co.uk/luna-2/ and for Pola for Aligners visit sdipola.co.uk/products/pola-for-aligners/

Great

The fully-digital dental lab.

www.trygreat.com

Get A FREE Scanner with Great Lab

Scan
here



- ✓ No Cancellation Fees
- ✓ No Long-term Commitments



What do we offer?



Clear
Aligners



Crowns
& Bridges



Retainers



Mouth
Guards



Prosthetic



Surgery
Products

Elevate your dental practice.

Unlock the power of Dentally and raise the performance of your business with Elevate, our new customer success programme.

dentally
elevate



We'll bring a fresh perspective, backed by our experience and data on your practice, to help you grow your practice in ways you never imagined.

Happier patients - Automate patient communication and deliver exceptional experiences to build loyalty.

Increased efficiency - Identify key areas where you can make practice management simpler and more efficient.

Higher revenue - Keep your appointment book full and use data to drive growth.

Smarter finances - Improve all areas of financial management across your practice.

With a dedicated one-to-one consultant on hand to support you, Elevate will help you unlock more than the power of Dentally. It will raise your game across your practice.

Visit [dentally.ie](https://www.dentally.ie) or contact Patrick Bolger 086-4680033 patrickj.bolger@henryschein.com

dentally The future in practice.

MERZ AESTHETICS®

**FEEL
GOOD
LOOK
GOOD**

**BOCOUTURE®
(Botulinum Toxin Type A)
Observational Masterclass.**

Join us at a half-day course, designed to kickstart your journey with BOCOUTURE®.

Our experienced aesthetic practitioners will guide you through the scientific and clinical aspects BOCOUTURE®, and demonstrate a treatment in all three upper facial line indications.

FEEL GOOD

LOOK GOOD



For information about dates and locations and to reserve your place, scan the QR code.

Prescribing information:

UK: Bocouture® (botulinum toxin type A (150 kD), free from complexing proteins) 50/100 unit vials*. Prescribing information: M-BOC-UK-0432. Please refer to the Summary of Product Characteristics (SmPC) before prescribing. **Presentation:** 50/100 units of Clostridium Botulinum Neurotoxin type A, free from complexing proteins as a powder for solution for injection. **Indications:** Temporary improvement in the appearance of moderate to severe upper facial lines (glabellar frown lines, crow's feet lines, horizontal forehead lines) in adults ≥18 and <65 years when the severity of these lines has an important psychological impact for the patient. **Dosage and administration:** For intramuscular use only. Unit doses recommended for Bocouture are not interchangeable with those for other preparations of botulinum toxin. **BOCOUTURE** should only be administered by an appropriately qualified healthcare practitioner with expertise in the treatment of the relevant indication and the use of the required equipment, in accordance with national guidelines. The intervals between treatments should not be shorter than 3 months. Reconstitute with 0.9% sodium chloride. **Glabellar Frown Lines:** Total recommended standard dose is 20 units, 4 units into 5 injection sites (2 injections in each corrugator muscle and 1 injection in the procerus muscle). May be increased to up to 30 units, injections near the levator palpebrae superioris and into the cranial portion of the orbicularis oculi should be avoided. **Crow's Feet lines:** Total recommended standard dosing is 12 units per side (overall total dose: 24 units); 4 units injected bilaterally into each of the 3 injection sites. Injections too close to the Zygomaticus major muscle should be avoided to prevent lip ptosis. **Horizontal Forehead Lines:** The recommended total dose range is 10 to 20 units; a total injection volume of 10 units to 20 units is injected into the frontalis muscle in five horizontally aligned injection sites at least 2 cm above the orbital rim. An injection volume of 2 units, 3 units or 4 units is applied per injection point, respectively. **Contraindications:** Hypersensitivity to the active substance or to any of the excipients. Generalised disorders of muscle activity (e.g. myasthenia gravis, Lambert-Eaton syndrome). Infection or inflammation at the proposed injection site. **Special warnings and precautions:** It should be taken into consideration that horizontal forehead lines may not only be dynamic, but may also result from the loss of dermal elasticity (e.g. associated with ageing or photo damage). In this case, patients may not respond to botulinum toxin products. Should not be injected into a blood vessel. Not recommended for patients with a history of dysphagia and aspiration. Caution in patients with botulinum toxin hypersensitivity, amyotrophic lateral sclerosis, peripheral neuromuscular dysfunction, or in targeted muscles displaying pronounced weakness or atrophy. Bocouture should be used with caution in patients receiving therapy that could have an anticoagulant effect, or if bleeding disorders of any type occur. Too frequent or too high dosing of botulinum toxin type A may increase the risk of antibodies forming. Should not be used during pregnancy unless clearly necessary. Should not be used during breastfeeding. **Interactions:** Concomitant use with aminoglycosides or spectinomycin requires special care. Peripheral muscle relaxants should be used with caution. 4-aminquinolines may reduce the effect. **Undesirable effects:** Usually, undesirable effects are observed within the first week after treatment and are temporary in nature. Undesirable effects independent of indication include: application related undesirable effects (localised pain, inflammation, swelling), class related undesirable effects (localised muscle weakness, blepharoptosis), and toxin spread (very rare - exaggerated muscle weakness, dysphagia, aspiration pneumonia). Hypersensitivity reactions have been reported with botulinum toxin products. **Glabellar Frown Lines:** Common: headache, muscle disorders (elevation of eyebrow). **Crow's Feet Lines:** Common: eyelid oedema, dry eye, injection site haematoma. **Upper Facial Lines:** Very common: headache. Common: hypoaesthesia, injection site haematoma, application site pain, application site erythema, discomfort (heavy feeling of frontal area), eyelid ptosis, dry eye, facial asymmetry, nausea. For a full list of adverse reactions, please consult the SmPC. **Overdose:** May result in pronounced neuromuscular paralysis distant from the injection site. Symptoms are not immediately apparent post-injection. **Legal Category:** POM. **List Price:** 50 U/vial £72.00; 50 U twin pack £144.00; 100 U/vial £229.90; 100 U twin pack £459.80. **Product Licence Number:** PL 29978/0002; PL 29978/0005. **Marketing Authorisation Holder:** Merz Pharmaceuticals GmbH, Eckenheimer Landstraße 100, 60318 Frankfurt/Main, Germany. **Date of Preparation:** August 2021. **Further information available from:** Ground Floor Suite B, Breakspear Park, Breakspear Way, Hemel Hempstead, Hertfordshire, HP2 4TZ. Tel: +44 (0) 333 200 4143.

Adverse events should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard for the UK. Adverse events should also be reported to Merz Pharma UK Ltd at the address above or by email to UKdrugssafety@merz.com or on +44 (0) 333 200 4143.

Ireland: Bocouture® (botulinum toxin type A (150 kD), free from complexing proteins) 50/100 unit vials*. Prescribing information: Please refer to the Summary of Product Characteristics (SmPC) before prescribing. **Presentation:** 50/100 units of Clostridium Botulinum Neurotoxin type A, free from complexing proteins as a powder for solution for injection. **Indications:** for the temporary improvement in the appearance of upper facial lines in adults below 65 years when the severity of these lines has an important psychological impact for the patient: moderate to severe vertical lines between the eyebrows seen at maximum frown (glabellar frown lines) and/or moderate to severe lateral periorbital lines seen at maximum smile (crow's feet lines) and/or moderate to severe horizontal forehead lines seen at maximum contraction. **Dosage and administration:** Intended for intramuscular injection. Unit doses for BOCOUTURE are not interchangeable with those for other preparations of Botulinum toxin type A. Bocouture may only be administered by physicians with suitable qualifications and the requisite experience in the application of Botulinum toxin type A. The intervals between treatments should not be shorter than 3 months. Reconstitute with 0.9% sodium chloride. **Glabellar Frown Lines:** Total recommended standard dose is 20 units, 4 units into 5 injection sites (2 injections in each corrugator muscle and 1 injection in the procerus muscle). May be increased to up to 30 units,

injections near the levator palpebrae superioris and into the cranial portion of the orbicularis oculi should be avoided. **Crow's Feet lines:** Total recommended standard dosing is 12 units per side (overall total dose: 24 units); 4 units injected bilaterally into each of the 3 injection sites. Injections too close to the Zygomaticus major muscle should be avoided to prevent lip ptosis. **Horizontal Forehead Lines:** The recommended total dose range is 10 to 20 units; a total injection volume of 10 units to 20 units is injected into the frontalis muscle in five horizontally aligned injection sites at least 2 cm above the orbital rim. An injection volume of 2 units, 3 units or 4 units is applied per injection point, respectively. Paralyzing of lower muscle fibers by injecting BOCOUTURE near the orbital rim should be avoided to reduce the risk of brow ptosis. **Contraindications:** Hypersensitivity to the active substance or to human albumin or sucrose. Generalised disorders of muscle activity (e.g. myasthenia gravis, Lambert-Eaton syndrome). Infection or inflammation at the proposed injection site. **Special warnings and precautions:** If bleeding disorders of any type exist, in patients receiving anticoagulant therapy or other substances that could have an anticoagulant effect. Not recommended for patients with a history of aspiration or dysphagia. **Bocouture should be used with caution:** in patients suffering from amyotrophic lateral sclerosis, in patients with other diseases which result in peripheral neuromuscular dysfunction, in targeted muscles which display pronounced weakness or atrophy. Patients or caregivers should be advised to seek immediate medical care if swallowing, speech or respiratory disorders occur. Hypersensitivity reactions have been reported with Botulinum neurotoxin type A products. If serious (e.g. anaphylactic reactions) and/or immediate hypersensitivity reactions occur, appropriate medical therapy should be instituted. Too frequent doses may increase the risk of antibody formation, which can result in treatment failure. The potential for antibody formation may be minimised by injecting with the lowest effective dose given at the indicated minimum intervals between injections. Bocouture should not be used during pregnancy unless clearly necessary and unless the potential benefit justifies the risk. Bocouture should not be used during breastfeeding. **Undesirable effects:** Usually, undesirable effects are observed within the first week after treatment and are temporary in nature. Undesirable effects may be related to the active substance, the injection procedure, or both. Usually, undesirable effects are observed within the first week after treatment and are temporary in nature. Application related undesirable effects include localised pain, inflammation, paraesthesia, hypoaesthesia, tenderness, swelling, oedema, erythema, itching, localised infection, haematoma, bleeding and/or bruising may be associated with the injection. Needle related pain and/or anxiety may result in vasovagal responses, including transient symptomatic hypotension, nausea, tinnitus and syncope. Undesirable effects of the substance class: Botulinum toxin type A include localised muscle weakness is one expected pharmacological effect of Botulinum toxin type A. Blepharoptosis, which can be caused by injection technique, is associated with the pharmacological effect of Bocouture. **Toxin spread:** when treating other indications with Botulinum toxins; undesirable effects related to spread of toxin distant from the site of administration have been reported very rarely to produce symptoms consistent with Botulinum toxin type A effects (excessive muscle weakness, dysphagia and aspiration pneumonia with a fatal outcome in some cases). Undesirable effects such as these cannot be completely ruled out with the use of Bocouture. **Hypersensitivity reactions:** serious and/or immediate hypersensitivity reactions including anaphylaxis, serum sickness, urticaria, soft tissue oedema, and dyspnoea have been rarely reported. Some of these reactions have been reported following the use of conventional Botulinum toxin type A complex either alone or in combination with other agents known to cause similar reactions. **Glabellar Frown Lines:** Common: headache, muscle disorders (elevation of eyebrow). **Crow's Feet Lines:** Common: eyelid oedema, dry eye, injection site haematoma. **Upper Facial Lines:** Very common: headache. Common: hypoaesthesia, injection site haematoma, application site pain, application site erythema, discomfort (heavy feeling of frontal area), eyelid ptosis, dry eye, facial asymmetry, nausea. For a full list of adverse reactions, please consult the SmPC. **Overdose:** Symptoms of overdose (increased doses of Botulinum neurotoxin type A) may result in pronounced neuromuscular paralysis distant from the injection site with a variety of symptoms. Symptoms may include general weakness, ptosis, diplopia, breathing difficulties, speech difficulties, paralysis of the respiratory muscles or swallowing difficulties which may result in aspiration pneumonia. In the event of overdose, the patient should be medically monitored for symptoms of excessive muscle weakness or muscle paralysis. Symptomatic treatment may be necessary. Respiratory support may be required if paralysis of the respiratory muscles occurs. Chemical and physical in-use stability has been demonstrated for 24 hours at 2 °C to 8 °C. From a microbiological point of view, the product should be used immediately; if not used immediately, in-use storage times and conditions prior to use are the responsibility of the user and would normally not be longer than 24 hours at 2 °C to 8 °C, unless reconstitution has taken place in controlled and validated aseptic conditions. **Legal Category:** POM. **List Price:** Ireland: 50 U/vial €61.00; 50 U twin pack €162.00; 100 U/vial €162; 100 U twin pack €317.00. **Market Authorisation Number:** RA 1907/005/001, RA 1907/003/002. **Marketing Authorisation Holder:** Merz Pharmaceuticals GmbH, Eckenheimer Landstrasse 100, 60318 Frankfurt/Main, Germany. **Further information available from:** Merz Pharma UK Ltd, Ground Floor Suite B, Breakspear Park, Breakspear Way, Hemel Hempstead, Hertfordshire, HP2 4TZ. Tel: +44 (0) 333 200 4143.

Adverse events should be reported. Reporting forms and information can be found at www.hpra.ie for Ireland. Adverse events should also be reported to Merz Pharma UK Ltd at the address above or by email to UKdrugssafety@merz.com or on +44 (0) 333 200 4143.

*Botulinum toxin type A, purified from cultures of Clostridium Botulinum (Hall strain)

M-BOC-UKI-0209 Date of Preparation: June 2022

BOCOUTURE®
(Botulinum toxin type A)

Free from complexing proteins

the Wand[®]



SINGLE TOOTH ANAESTHESIA

- » PAINLESS AND IMMEDIATE ONSET
- » IMMEDIATE SMILE LINE ASSESSMENT
- » BI-LATERAL DENTISTRY
- » SAVES CHAIR TIME

CALL NOW TO ARRANGE A FREE DEMO

EXCLUSIVELY AVAILABLE AT DENTAL SKY | 0800 294 4700 | www.dentalsky.com

