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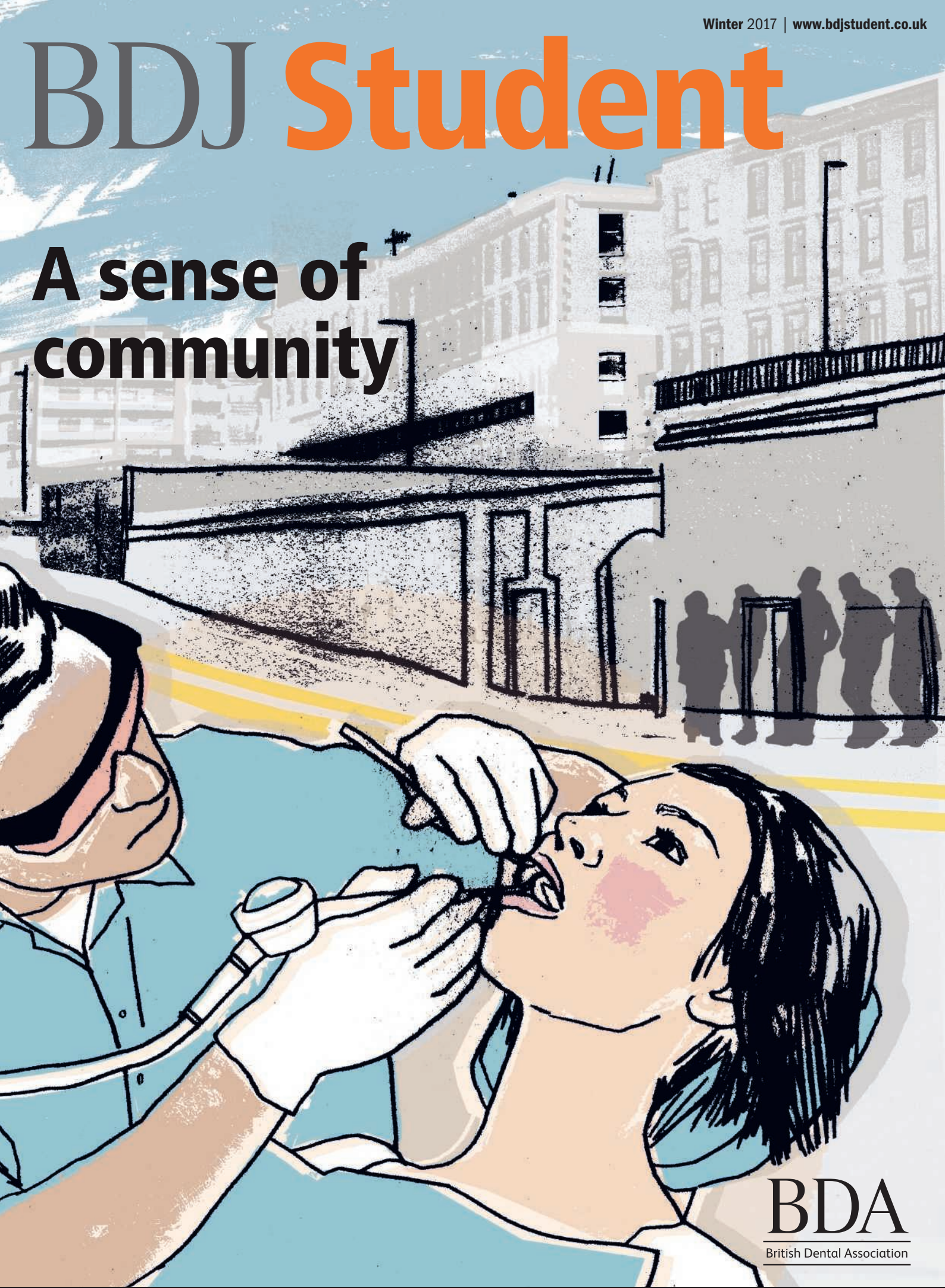

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BDJ Student

the British Dental Association's official magazine for students and first year graduates

WINTER 2017

UPFRONT

03 **Editorial** – David and Anish on the year ahead

04 **News** – What's going on in your world

12 **Staff vs Student** – Dundee Dental School

14 **Interview** – Presidents we can be proud of

PROFESSIONAL

16 **Cover feature** – Community dentistry and me

19 **Ethical dilemma** – Handling a difficult situation

20 **Career interview** – Jessica Hulme on life after university

22 **Life as** – Our regulars pass on their tips

26 **Students overseas** – Examples of how to make the most of your elective

PORTFOLIO NEWS

29 **From the portfolio** – Read about the latest from *BDJ*, *BDJ In Practice*, *BDJ Team* and *EBD*

CLINICAL INSIGHT

33 **Test** – Test your knowledge, and get the answers a few pages later!

34 **Question corner** – Paul Blaylock answers your questions

38 **From school to practice** – How to survive the transition

40 **Clinical** – A guide to diagnosing odontogenic pain

12

16

34

Cover image: Danny Allison **Editor** David Westgarth **Editor-in-Chief** Stephen Hancocks OBE **Art Editor** Melissa Cassem **Production Editor** Sandra Murrell **Team Leader** Felicity Agyemang **Publisher** James Sleigh **European Team Leader – Academic Journals** Andy May **Production Controller** Natalie Smith. Published three times a year for the **British Dental Association** by: **Springer Nature**, The Campus, 4 Crinan Street, London N1 9XW. Tel: 020 7843 4724. To contact the editorial office: **British Dental Association**, 64 Wimpole Street, London W1G 8YS. Tel: 020 7935 0875. E-mail: bdjstudent@bda.org. Web: www.bdjstudent.co.uk. ***BDJ Student*** is the student and first year graduate journal of the **British Dental Association**. ISSN 2056-4805 EISSN 2056-4813.

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EDITORIAL

David Westgarth, Editor, *BDJ Student*

Anish Patel, Student editor, *BDJ Student*

Hello and welcome to 2017! I trust you enjoyed the festive break and well-earned rest. Belated wishes for the year ahead from all at the BDA.

The turn of the year always gives us the chance to reflect on what has gone before us and the challenges we anticipate we'll meet ahead. These may take different forms for different people and different year groups, but the constant throughout 2017 will be our continued support to ensure you are getting a fair deal.

For some areas of the student profession, 2017 will signal the end of bursaries. At a time when healthcare faces a rocky future, a point made by the President of the BDA last year, a professional association takes on greater significance. We will continue to work tirelessly to ensure the quality of clinical training needs are protected, the process for ensuring adequate foundation places is robust and the contract for hospital dentists is a fair deal for members. A shortage of DFT places is nothing short of a disgrace. The Health Secretary's contract for junior doctors continues to ire the entire profession it expects to deliver it. Even the recent climb down from Jeremy Hunt that the contract will not be imposed, was never going to be imposed and did not mean to suggest it would be imposed highlights his gross incompetence. Rest assured, we will work to ensure our members do not suffer.

To the issue at hand (quite literally), and to mark the University of Dundee's Dental School's centenary year, we speak to Dean of the School Mark Hector and Dental Society President Conor McCloskey. Speaking of presidents, Katie McDonald Meyer and Luka Banjšak tell us about what it's like being President of the BDSA and EDSA respectively.

We've also got an interview with Philips Professional Relations Manager, Jessica Hulme, on the hot topic of careers and life after graduating. That's not forgetting your usual mix of news, views and student stories either, with news from the Philippines, how to set up your own company and the small matter of transitioning from dental school to dental practice.

Enjoy the issue and we'll see you in the Spring.

David Westgarth

Happy New Year Everyone! I hope you all had a lovely Christmas break in which you were able to enjoy the holidays, overindulge in lots of food and catch up with friends and family!

The topic of holidays actually leads on to an important message we wanted to relay as part of this editorial. It's well accepted that undergraduate dentistry is a challenging degree in relation to its contact time, teaching and overall commitment. It is considerably more demanding and taxing compared to the majority of other degrees. With regular exams and deadlines, it is easy to become stressed and potentially experience burnout.

Taking a well-deserved break from dentistry and achieving an important work-life balance can be very useful here. Whether it is continuing with a regular hobby, playing sport or involving yourself in something different to your daily routine, refreshing your thoughts and widening your perspective with these activities is extremely valuable.

Taking time to recharge will help in refocusing and concentrating on whatever lies ahead, so be sure to try and consider exploring something you may have not otherwise.

I hope the national recruitment day in November went as well as it possibly could have for all those in 5th year. All the best with the remainder of the process with regards to selecting schemes and placements.

In the second week of February the BDA are hosting their annual BDA Careers Day. I was fortunate to be able to attend last year, and while I wasn't committed to any sort of career following university, the event was very useful in gaining an understanding of the different opportunities available. There was something for everyone. If you're able to attend on 24 February, you should definitely try and do so.

Anish Patel

CONFERENCE

CONFERENCES THROUGH STUDENT EYES

BDIA 2016 Dental Showcase

This year ExCeL London was home to the annual British Dental Industry Association (BDIA) Dental Showcase. It was an opportunity for dental manufactures and innovators to connect with the many thousands of dental professionals that attended.

As 4th year dental students, Showcase provided a novel opportunity to see the latest and greatest in dentistry. On approaching we were immediately awestruck; it was difficult to turn a blind eye to the immense dental presence including dental professionals, industry, and allied health care. All lights were on Oral B with large banners strung up high showcasing their newest gadget laden line of toothbrushes.

The floor was a mix of networking suites, seminar theatres and 300+ exhibitors ranging from accountancy firms to industry leaders. We were impressed! It was a great chance to try before you buy, and for us, to see what was available outside of dental school. Companies such as NSK were busy showing off their shiny new handpieces and 'Belmont' had some outstanding dental chairs that delegates understandably drooled over! But of particular interest was the range of oral care foam by SPLAT which comprised of natural ingredients.

Seminars ran throughout the day and covered a multitude of topics, not limited to clinical dentistry. They were hosted by enthusiastic professionals at the cutting edge of their respected fields. Although many were targeted at established practitioners the insight was invaluable. We enjoyed listening to a particular talk about PerioChip, which reflected the content being taught at our dental school, making us appreciate the high standard teaching we have received.

Understandably the event was geared towards practice owners and qualified dental professionals – of which we were neither. However, we would recommend the experience to any budding dental student as it offers the opportunity to get a good idea about the changing face of dentistry. Also if you are in the market for loupes, you'll have the chance to talk to numerous providers, conveniently under one roof. And if that's not incentive enough the endless freebies should be!

See you at Dental Showcase 2017 Birmingham NEC!

Akash Maru and Shyam Karia

BDA/BDJ Winter Lecture

On 19 October, the British Dental Association hosted their traditional Winter Lecture.

The theme for the winter lecture given by Professor Mike Curtis of Barts and the London School of Medicine and Dentistry was *'Symbiosis and dysbiosis: how the oral microbiome interacts with the host'*.

The lecture discussed the importance of balance between micro-organisms in the oral cavity and the host – symbiosis. This crucial balance plays an important role in our biological processes and is fundamental to health. Unfavourable alteration of this balance causes dysbiosis which impacts human health and plays a key role in disease progression.

The study of the oral microbiome is well documented and is one of the most understood microbial communities in the body. Comparing the oral cavity in health to diseases such as periodontal disease can provide vital information about disease progression and potentially treatment strategies.

The talk highlighted the importance of the natural micro-organisms that colonise the oral cavity and how these can be impacted both by disease and antibiotic therapy. Professor Curtis outlined the current research in the field which aims to increase our understanding of the phenomenon and ultimately aim to increase our control of oral diseases caused by dysbiosis.

The lecture finished with an evening of canapes and drinks giving the opportunity to connect with fellow students, dentists and researchers and recap on what the year has brought. For those who missed the lecture, it will be available as a webcast shortly through the BDA and all members will receive an email containing complimentary access.

Alessandra Booth

INSPIRE Undergraduate Research Conference at Leeds Dental Institute

On 7 December 2016, the Leeds Dental Institute hosted its second INSPIRE undergraduate research conference, supported by the Academy of Medical Sciences and the Wellcome Trust.

Following a rousing keynote speech from Professor Jennifer Kirkham, students were given a welcome to the world of research; an afternoon of rotating around stations hosted by some of the brightest research minds within the dental school. At these stations attendees were able to take part in small, informal student-led group discussions.

Topics included oral surgery and oral medicine research, intercalation opportunities, paediatric dentistry research and dental public health research. Students learnt about cutting edge research underway at Leeds University, such as the genetics of Amelogenesis Imperfecta, self-assembling peptides to promote remineralisation of teeth and bones, the FICTION trial, big data and its use in dentistry (ADVOCATE), the design and evaluation of complex interventions to improve children's oral health.

Professor Helen Whelton, Dean of Leeds Dental Institute, said: 'The energy at the INSPIRE event was palpable. It was very rewarding to see the students display such a keen interest in research. Many of the students had that spirit of enquiry that is essential for good researcher.'

Dr. Helen Petersen, one of the first NIHR-funded ACFs in the country and involved with the organisation of the first INSPIRE event at KCL in 2015, was impressed with the organisation of the event and the breath of speakers. Dr Day said: 'The event had a real buzz and it was fantastic to see the interest and engagement from the undergraduate students.'

The student feedback from the event was overwhelmingly positive; students loved the informal, interactive atmosphere of the event as opposed to having lectures. They described the event as 'an engaging experience to explore the world of research through discussion with truly passionate and enthusiastic academics'. Attendees felt the event would take them 'one step further' towards achieving their career aspirations in research, leaving them feeling 'INSPIRED'.

The event was organised by Rachael Harlow, a 5th year undergraduate dental student, with the help of Dr Peter Day, Dr Martin Ramsdale, Dr Rachael Jablonski, and Katherine Kaczmarczyk (4th year intercalation undergraduate). Katherine will be taking over the responsibility of organising the 2017 event. **Rachael Harlow & Katherine Kaczmarczyk** ■

GET ON YER BIKE!

Interested in challenging yourself mentally and physically and pushing yourself outside your comfort zone? Want to help an amazing charity and take part in a trip of a lifetime?

Help support the charity Smilestar by cycling from London to Paris over four days and aim to fundraise £1530 for charity.

The London to Paris Bike Ride is an awesome cycling challenge and is by far one of the best fundraising events in Europe attracting hundreds of riders each year and raising thousands for charities nationwide. Whether you're a regular cyclist or new to cycling, looking to participate as part of a group or a solo cyclist – this is the perfect charity cycle event for you.

You will spend four days in the saddle from 16-20 August, cycling 299 miles from capital to capital. The journey begins in London with the route taking participants through glorious English countryside from Kent to Dover before crossing the Channel to Dunkirk.

Once across the water the route will push on through quiet French country lanes and traditional market towns with views of the rolling green hills of northern France, passing the war memorials and cemeteries of the Somme.

A spectacular finish awaits as the home stretch will take you along the Champs Elysees to the Arc de Triomphe, before reaching the piece de resistance, the Eiffel Tower, which marks the finish line.

If you would like to take part in the bike ride of a lifetime, add yourself to the group on Facebook 'Smilestar London To Paris Bike Ride' or contact Josie Smith by email at N.J.Muirhead-Smith@student.liverpool.ac.uk.

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If you have any news, views or issues you'd like to see covered, tell the team at *BDJ Student* all about it.

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FOCUS ON FOURTH YEARS

BDA careers lecture and guide book

Everything you need to know to start a successful and rewarding career in dentistry

To help with your career choices we are touring all UK dental schools with a helpful lecture outlining the different career paths open to you as a dentist, what you need to do to get there, plus top tips for succeeding in your chosen dental career.

The lecture is open to fourth year students and the BDA *Career Guide* will be distributed to members in the lecture. You can preview the guide at www.bda.org/careerguide and you can find out when we are visiting your dental school at www.bda.org/careerslecture

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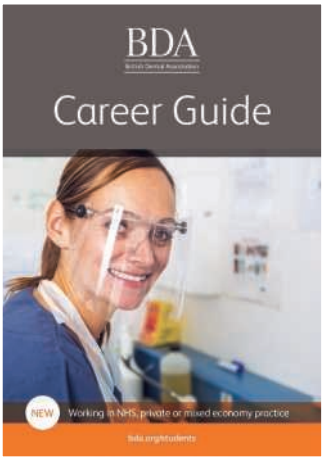

Revision packs

Exam time is looming, so to help with your revision, we have developed some helpful study topic collections. These cover a range of topics including restorative dentistry, endodontics and minor oral surgery and include:

- Medline search articles
- Cochrane reviews
- Clinical guidelines
- Policy documents
- Recent *BDJ articles*
- Links to relevant eJournal articles

Find out more at **www.bda.org/student-library**

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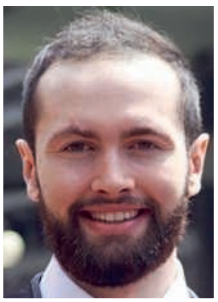


PAYING YOUR WAY THROUGHOUT UNI

It's no secret that university life is particularly stressful. Balancing work and study is incredibly difficult, but for one dental student, there's an additional item to factor in. **William Holmes**, a fourth year dental student at King's College London, is also the founder of the Student Loupes Company, and here he shares his experiences of starting a company during his studies

Why start a company?

All students could do with a little extra cash, myself included. However, long hours at university and an active social and sporting life left me little time for a job. Were there any alternatives to this? Of course – starting my own company!

At the beginning of 2015, I established the Student Loupes Company as the first business to sell quality loupes at prices affordable to the student market.

The good

Starting a business is quite unlike any other job. You can say goodbye to those six-hour slogs at the 'newsagents' and hello to a profitable adventure. Self-employment offers flexibility, independence, autonomy, and more. I can work where I want, when I want, and how I want. Admittedly the initial work such as website creation and stock arrangements can be time-consuming. Once you've got everything up and running, however, day to day management is relatively straightforward.

The advent of the Internet has been a great stepping stone in the development of start-up companies. It is now possible to implement online website-builders, which are immensely complex and yet incredibly simple to use. I didn't need to know one single line of code. Additionally, trade websites are available for market research. Here I could find exactly what I wanted for the price I wanted. Finally, I can't forget to mention the breadth of online advice out there that gave me the know-how with regards to many marketing tips and tricks.

Thanks to my company, I have become more financially independent, which is a hugely rewarding position to be in as a student. Furthermore, there is something truly satisfying behind delivering a good product at a fair price, allowing for students of all backgrounds to be able to benefit from dental loupes.

> 'The skills you can develop during this process will prove themselves invaluable in the business-led world of dentistry, especially if you're looking to buy your own practice.'

The bad

Of course, there are downsides to everything; and running your own company is no exception to this. For me, the biggest risk was losing my initial investment. What if my stock never arrived? What if the products I'd bought were part of a scam? What if, after all that time designing it, nobody clicked on my website?

Furthermore, tedious minutiae such as tax returns and far too many trips to the local Post Office can be distracting from university work. It can at times be difficult to segregate the constant stream of calls and emails from other parts of my life too.

My advice

I would strongly recommend every dental student to involve themselves in the creation of some form of business, be it a simple eBay shop, or a multinational company. The skills you can develop during this process will prove themselves invaluable in the business-led world of dentistry, especially if you're looking to buy your own practice. Had I not begun the Student Loupes Company, I would never have learnt about stock management, contract negotiation, client communication and the legalities of setting up a company. Luckily, I have found most of the answers to my questions for free on the Internet, but you won't know what to look for until you start something up for yourself.

Number one tip?

I would say that my number one tip for establishing your own company is to ask yourself the question: 'What niches am I exposed to? What am I good at? Is there a demand for something that isn't being supplied?'

William Holmes

You can explore the range of loupes and lights at **www.studentloupescompany.co.uk**. Feel free to drop William a message if you'd like some advice on starting your own business.

DATES FOR THE DIARY

What? The Digital Symposium
When? 5-6 May, 2017
Where? Grange St Pauls, London

The details The Digital Symposium is designed for dental professionals who want to learn state-of-the art digital solutions for the treatment of restorative patients. Clinicians who want to lead the future of dental care delivery systems are encouraged to attend, so what better opportunity to get ahead in the early phase of your career.

To book a place between 1 February and 31 March, visit http://hsddigitalsymposium.co.uk and quote:

StudentSP – Down to £135 for both days

StudentSPDP – Down to £66 for a Day Pass.

What? The Association of Dental Implantology (ADI) Congress
When? 2-4 March, 2017
Where? ExCeL, London
The details As part of the ADI Congress, there is a programme on Friday 3 March dedicated to students. The student programme includes a morning of lectures and an afternoon of hands-on implant surgery on pig's heads, with 160 spaces for student delegates!

To receive the discounted rate of £75 for the day visit http://www.adi.org.uk/events/congress17/fees.html before **Friday 10 February** and quote BDJS17.

What? BDA career lecture
When? 10 February, 2017
Where? Kings College London
The details: To help with your future career choices, the BDA is visiting fourth year dental students to deliver an in depth careers lecture.

STUDENT EDITOR WANTED!

If you're a budding writer and you're interested in working closely with *BDJ Student*, we have just the role for you.

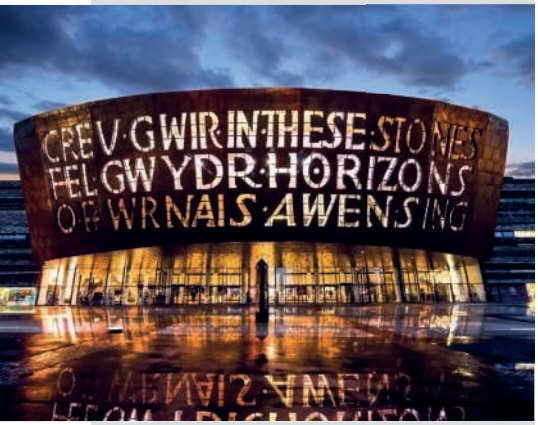
From Autumn 2017, BDJ Student will require a new student editor. The current incumbent, Anish Patel, steps down after his last editorial in the Spring 2017 edition.

So what are we looking for? Someone with a passion for dentistry (obviously). Someone who knows the political landscape would be a plus, but above all we're looking for someone who can really bring together the voice of students.

All you need to do is submit a 500 word article on what you think is the biggest issue in dentistry today before **Friday 31 March** to david.westgarth@bda.org.

The successful applicant will be revealed at BDA Conference & Exhibition. Good luck!

Students, unite!



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The European Dental Students Association (EDSA) represents over 65,000 dental students within Europe and works to inform students about politics in relation to dentistry, promote exchange programmes and create possibilities to encourage students to meet each other on an individual level.

Twice a year all delegates from EDSA come together to discuss dental politics, social and domestic affairs and in April 2017 Cardiff are proud to be hosting the 59th EDSA meeting. After winning the bid to host this event we are busy planning what we hope to be an incredible meeting, taking place from 9-13 April 2017. With a lecture series presented by Cardiff's very own world leading clinicians and academics, a trade fair with stalls from dental industry leaders and a tour of our brand new state of the art £2.2million Phantom Head Suite.

Not forgetting a fantastic social aspect including nights out in Cardiff, Wales' capital city and finishing the week with what is set to be an unforgettable Gala Dinner at the world renowned Principality Stadium.

To find out more about EDSA Cardiff 2017 go to www.bda.org/edsa

EDSA CARDIFF 2017

BDSA BRISTOL 2017

FINDING THE PATH TO YOUR FUTURE: A HOLISTIC APPROACH

Ahead of the BDSA Conference in Bristol on 23-26 March, *BDJ Student* caught up with conference organiser **Mansi Patel** to find out what attendees can expect.

The journey that students travel to reach their end goal is an arduous one. This challenging five-year course gives us an extraordinary opportunity to change the lives of others one smile at a time. We began to shape ourselves into the perfect candidate from the age of 16 when choosing our A-levels. We continue the effort to mould ourselves into the ideal dentist by succeeding in academic exams, practical aspects of dentistry and considerable amount of administrative work. Despite these obstacles, patients help us recognise that we are truly fortunate to be at the forefront of a highly specialised area of medicine.

As we know, dentistry is a forever-evolving field of science and technology. In a rapidly developing world, finding our niche within dentistry is another hurdle to overcome. Whether we choose to focus on preventing peri-implant disease, or innovate apps in an effort to digitalise the future of dentistry, or discover the forthcoming dental health needs of our population, we expect to improve the health care of our patients. The upcoming conference offers a vast variety of lectures on the specialties within dentistry and its underlying theme will highlight the importance of a holistic approach towards dentistry. This concept originates from the early works of Florence Nightingale, yet is still embedded within routine medical practice today. As the future generation of dental health care we must advocate and promote a view of 'no care without holistic care' as stated by Lisa Crooks at the RCN Congress 2016. It is important for students to build a relationship with patients beyond their symptoms and appreciate them as unique individuals.

Regardless of the path we decide to follow beyond graduation, I strongly believe it is vital for us as students to understand that it is not only the welfare of our patients we must protect but also our own. By accepting a lifestyle with a holistic approach ensures our physical, emotional, and social wellbeing, which in turn will provide us with a positive outlook towards our patients. This conference is set to offer some interesting viewpoints and expert opinions on the matter.

'The upcoming conference offers a vast variety of lectures on the specialties within dentistry and its underlying theme will highlight the importance of a holistic approach towards dentistry.'

The conference provides a platform to unite dental students across the UK, networking via a multitude of activities including a trade fair on the final day and planned social evenings throughout the conference. BDSA proudly promotes the bridging of students from all UK dental schools via two events annually only, which is a luxury we should endeavour to attend. The biggest dental student event of 2017 is not one to be missed on the 23rd March - 26th March 2017.

Mansi Patel

For further information visit **http://bdsabristol.co.uk/** and like the Facebook page for updates at **https://www.facebook.com/bdsabristol2017/?fref=ts**.

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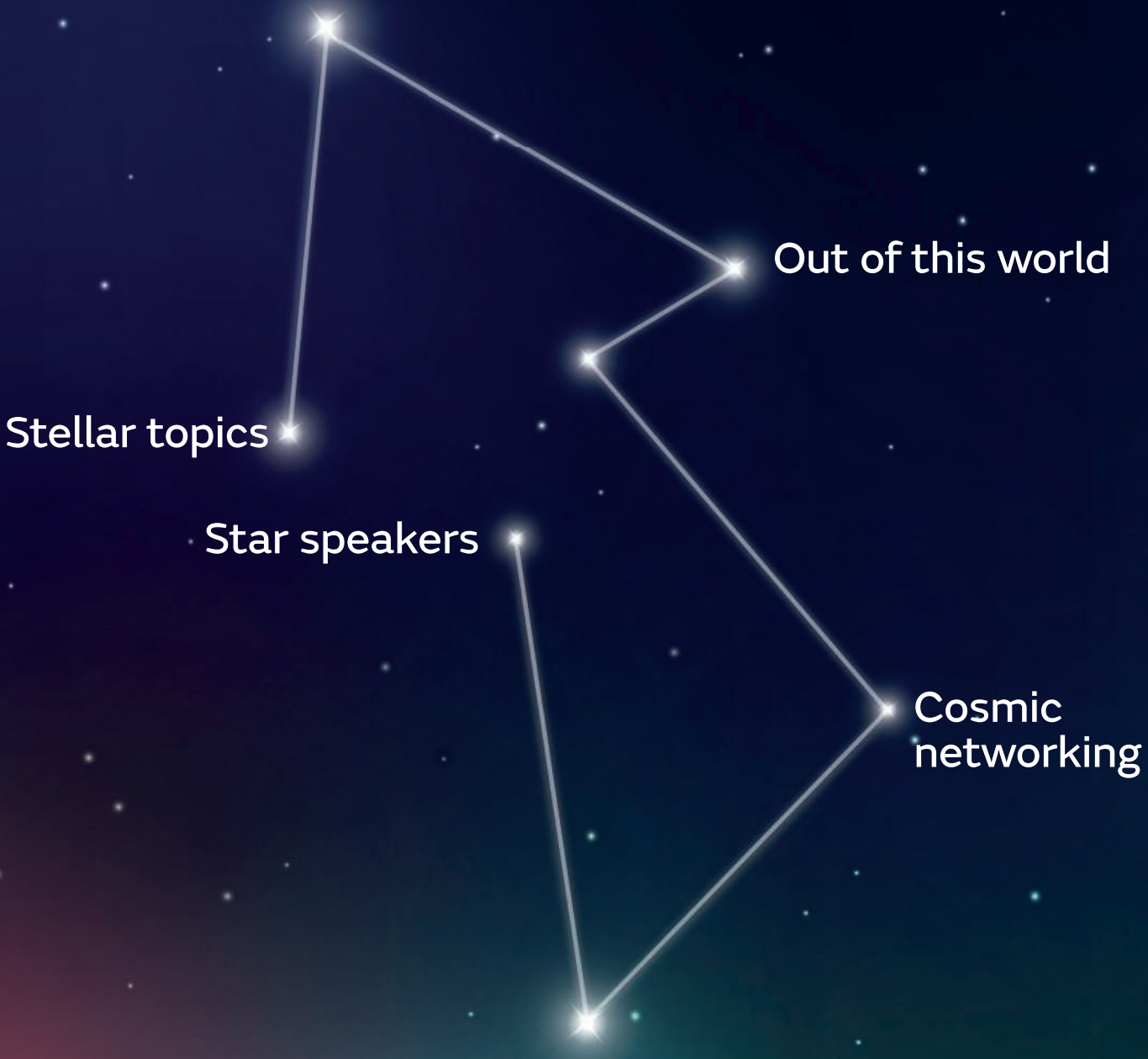

Free passes for student members

Claim your free passes now

0844 3819 769 **bda.org/conference**

STUDENT

➤ Conor McCloskey, *Student President*

STUDENT VS STAFF

DUNDEE CENTENARY SPECIAL

Celebrating 100 is a big deal. Think about your great grandparents, a century in cricket or even 100 hours on placement. Whatever way you look at it, that number is a milestone. To mark Dundee Dental School's centenary celebrations, *BDJ Student* spoke to Dean of the Dental School Mark Hector and student president Conor McCloskey.

'The great thing about our centenary year is that the dental hospital celebrated theirs two years ago', Mark said. 'It was decided that instead of marking both occasions separately, we would hold a series of events across the two years. We all felt it would be appropriate to mark their importance not just to the university but for the local community.

'We know there are a number of Dundee's alumni in senior positions across the UK, so after a bit of digging we discovered there are nine heads of dental schools who are Dundee graduates, which is quite extraordinary. We invited them all up to deliver centenary lectures and had a bit of a celebration after the last one. It was very special.'

So no pressure for the current student president then?

'You could say that!' Conor laughed. 'It's amazing to think there are so many students leaving here to go onto roles like this. We're so focused on getting our clinical skills down to a tee that it seems so far away, but it's comforting to know. It certainly helps to get student engagement, and as Mark says, the last event was really fun.'

I pressed Mark and Conor for their thoughts on why Dundee is so successful.

'We've always punched above our weight', Mark said. 'We're a relatively small school in terms of numbers, and I think the staff to student ratio allows us to develop students in a more rounded way. All the feedback I get is that particularly years one and two have an enhanced clinical experience due to the ratio. It also allows students to become inspired by their mentor or tutor. I can certainly relate to that. Back in the 60s and 70s we had some truly inspirational people here who really left their mark. There was also a less formal process you went through after you graduated which allowed for career-related decisions to be a flowing process. Although it is wise to have a plan!'

'I totally agree that clinical time is great here' Conor said. 'In a way it's beneficial that Dundee is a smaller school compared to some other Scottish and English counterparts. There's a really good atmosphere here and it's a bit of a community within itself. Everyone knows everyone and there's a good student/staff relationship. For me this really helps because I know if there's anything I need to brush up on I can ask. That's translated when we're in clinic too. We always seem to have plenty of time to get our skills right. People outside of the dental school often comment on how much of a close-knitted bunch we are, which speaks volumes.'

A lot can change over the course of a century, so what's the biggest transformation Mark and Conor have seen?

'As you probably noticed, the city is changing a lot', Conor said. 'I've been here three years and I've seen the waterfront area really change. I remember when I first arrived I thought it reminded me of Derry, my home town. It's a warm and welcoming place, and I think that translates into the university too.

'Any student attending MMI's can testify to how terrifying they can be. You're more than likely going to a new place for the first time, and that's stressful. I didn't get that when I came here. I had my fingers crossed this was the one I'd get in to!'

'It isn't just the town that has gone through major restructuring' Mark added. 'The university has too. When I started in 2011 dental was part of a college of medicine, dentistry and nursing, and dentistry tended to play second

fiddle. There was a significant re-organisation of the campus that came into effect last August. Now I'm part of a team of eight deans all with equal voice and authority within the structure.

'The change really helped the dental school. It allowed us to become better integrated into the university. We've also worked incredibly hard to change the age profile of the staff here. We have some inexperienced but talented and high-quality staff here now who remember what it was like to be a student. I think that has helped to foster the atmosphere Conor discussed. We have a number of local practitioners across all disciplines come in too, and that provides an excellent balance between theory and practical learning.'

Combining the school's recent transformations with its past successes means many observers look upon Dundee Dental School favourably. A recent table in the Guardian listed the school as the 4th best in the UK and the best in Scotland. So does Mark think the school lives off its reputation?

'I don't think so. Reputation is hard won but easily lost and can be lost overnight. I believe it is testament to us, and by us I mean students and staff alike. Having good people and hanging onto them is very important to develop continuity and keep standards high. I think that is reflected in the quality of dental students we bring through our system.'

With Dr Sara Hurley, the CDO for England, calling for 'the mouth to be put back into the body', I asked Conor about the importance of learning from medical colleagues.

'I think it's of great importance. Dental, medical and nursing often come together and we're put in scenarios. It's a really good way to test your communication skills with other healthcare professionals, because that's what we're going to be doing when we graduate. Yes, dentists work in their own teams, but we need to have that link and knowledge. We're expected to have general awareness, not to mention a duty of care to the patient.'

Mark added: 'We try to ensure inter-professional learning takes place early. It encourages students from different disciplines to speak to each other. For example, students from across the university – not just the medical department – come together to work on the Global Health Initiative project. We felt bringing fresh minds to big, long-standing problems would bring innovative ideas to the table. We had input from students from the arts, humanities and even mathematicians. It was very successful.'

Does the strategy prepare the students for life after university?

STAFF

➤ Mark Hector, *Dean of the Dental School*

'I think we're prepared well', Conor said. 'Communication is huge in our profession, and we have a number of lectures and workshops that include role play to prepare us. We're expected to chime in and improve what we're seeing. I feel like we're constantly learning as we go along. We're taught medical jargon every single day, but you can't use that with patients.

'As student president as being involved with the BDA I've found out a lot more about the dento-political landscape. It gives me a flavour of what is going on, and I can pass that on to students here. We're all so focused on getting our clinical skills right that it can be difficult to fully get your head around what's going on.'

'The BDA has always been very good for students', Mark added. 'When I was a student the BDA was there, but there has been a significant change in the last few years in really bringing student issues to the fore. The first BDJ Student editor was one of our students!'

With so much going on at Dundee, how do Mark and Conor measure success in their respective roles?

'For me it has to be about getting students qualified at the same time', Mark said. 'I firmly believe that we go through an incredibly formal process for finals, but in my mind students are ready to leave. Unfortunately they need that final exam, which I tried to get thrown out! Linked to that it's great to know students who go through the programme enjoy it. That's fundamental to them succeeding. It's all about the student experience.'

'For me as student president it's about making sure you are good representation for the student body, both within the university and externally. I like to think I'm approachable for students and staff. Like Mark I want to ensure they have fun on the course. It makes such a difference if you're happy.'

And that, I believe, is the secret to their success.

PRESIDENTS TO BE PROUD OF

Given the events of recent months, it's pertinent to ask what makes a good president. Is it good values, a good manifesto, good relationship skills? Dental societies across the UK – and indeed Europe – spend time voting their peers into positions they entrust them with.

Katie McDonald-Meyer, a 4th year student at Leeds University and Luka Banjšak, a 6th year student at the University of Zagreb, are the current BDSA and EDSA Presidents respectively. To find out what makes them tick, *BDJ Student* caught up with them both.

***BDJ Student**: How long have you been in post and what does your role entail?*

Katie McDonald-Meyer: Having been elected in March 2016 I have been in my post just over six months. There are two sides to this role – firstly, the work we do for the BDSA itself as our national association and then the more political aspect with my role as BDA Student Committee Vice Chair. As BDSA President I oversee the annual Sports Weekend and Conference, both these events to our delight, have flourished tremendously over the last couple of years and play a vital role in positive student participation and integration across the Dental Schools. Chairing monthly BDSA Exec committee meetings ensures we're all kept up to date and in the loop, especially with the latest Douglas Jackson Grant applications. I'm delighted to have also been able to introduce a new initiative for 2016/2017 the BDSA Charity Week- a competition between all the UK schools to raise as much money as possible for our annually chosen BDSA charity, with the winning school receiving £300 towards their BDSA event travel costs!

In terms of the politics we recognise the importance of lobbying and ensuring student members views are represented as proactively and clearly as possible. Current hot topics include the proposed cuts to the NHS bursary for our allied health care professionals, the national recruitment process, dental foundation training and the genuine concern over lack of places – we firmly believe every UK graduate who wishes to undertake DF training should be able to!

'Patient safety is a real concern. We don't want to face a prospect of patients not visiting the dentist because they're not sure about the level of service they will get'

Luka Banjšak: I'm in my second term having been re-elected. Like Katie my role is split between one of unifying the student voices and representing their views. I'm also President of my local association in Zagreb, so it's a tremendous workload! It's almost like a full-time job!

The political landscape is one that students often overlook to concentrate on their studies, which is understandable, but you have to know what is happening in the industry you're training to work in. My role is to facilitate that understanding where possible and to keep student views firmly on the table.

***BDJ Student**: Sounds like you've both got plenty on your plate! How do you keep the work/university/personal life balance right?*

LB: It might sound like a cliché but I firmly believe the more things you have on your schedule, the more you will achieve. Free time is the enemy of progress. An understanding family is a necessity. There's no way I could have achieved everything I have to this point without them. Of course you will find yourself feeling demotivated at certain times throughout your course – we're all human – but family keeps you grounded.

KMM: Luka is absolutely right. It can be a demanding balance at times but having a fantastic exec committee and group of BDA representatives that are so motivated

makes it much easier, as we are all aiming for the same best outcomes. I strongly believe if you enjoy what you do then you thrive on the challenge and achieve positive results. Like Luka, I find the busier I am, the more productive I am. This year I am actually finding it easier to strike that work/life balance compared to last where I was juggling BDSA Sports Weekend Organiser, Secretary, EDSA rep and Leeds University DentSoc President! It goes without saying I am incredibly lucky to have a fantastic network of amazing, supportive and understanding friends and family!

***BDJ Student**: Stress is something affecting the profession. What issues do you feel student dentists face – other than stress – during their education?*

KMM: The National Recruitment system is currently one of the biggest issues. It is extremely disheartening to see those graduates wanting to undertake DFT not gaining a place. The BDA Student Committee work hard to put pressure on organisations such as COPDEND and the NHS to ensure a fair system with enough places available for all our graduates!

Another worrying issue is the rising level of student debt. The increasing cost of a dental degree combined with maintenance loan debt is just a small part of the financial burden students face. Potential NHS bursary cuts, having to try and make loans last longer due to longer term dates (in comparison to many other students) and the difficulty many final year students face due to receiving their last loan in April yet first pay cheque September, combined with the high GDC registration fees and indemnity costs required to be paid prior to this first pay, makes the transition into the work environment harder.

LB: It may be a utopian idea but I think we should look to unify education across Europe. Patient safety is a real concern. We don't want to face a prospect of patients not visiting the dentist because they're not sure about the level of service they will get. If there are elements of the course that are unified, we can look to quality control as a marker.

It's also about getting students heard at a national and global level. Organisations like FDI, BDA and the CED are key to ensuring students get the best possible deal.

***BDJ Student**: And now for the million dollar question – why dentistry?*

KMM: I always knew I wanted to work hands on with people but the real catalyst for me was when my active, normally confident, determined Grandma lost her teeth. I saw first hand even at a young age the huge negative impact this had on her confidence and lifestyle – it genuinely shocked me. To see the positive change in her back to her active, headstrong self again, flourishing as a confident denture wearer was amazing. This really sparked an interest leading me to investigate further. I got some excellent work experience and the rest is history.

LB: I'm similar to Katie. I've always had a great interest in the medical profession. I did go into language, which was a weird choice, but I can speak a few languages which is really useful for communicating across the board.

It was my Maths professor who suggested going into dentistry, so I looked into it. I'm really interested in something connected to the public health sector – a developing area in Croatia – and working with people.

***BDJ Student**: What does the future hold for you?*

LB: I have a great passion for dentistry. There are endless doors and possibilities opening up all the time. For the moment I want to keep expanding my horizons. I love Zagreb and Croatia, plus I'm really close to my family, so something in the public health sector there would be a dream.

KMM: I know it holds many exciting times ahead! The dental world is constantly evolving, dentistry is so dynamic and a really great profession to be in with lots of exciting opportunities. I haven't yet made any set decisions about specialising but like Luka would like to carry on expanding my horizons and focus initially on (hopefully) gaining a DF place and further experience upon graduation.

I absolutely love Edinburgh so it would be fantastic to go back up there, although discovering a new city really appeals to me too! Having grown up abroad in Brunei and lived in several other countries, I am really open to most opportunities particularly while I'm still young and commitment free. Working abroad, travelling and seeing more of the world is definitely something that appeals to me!

BREAKING BARRIERS: A GUIDE TO DELIVERING AN ORAL HEALTH MESSAGE TO YOUR LOCAL COMMUNITY

In the CQC's State of Care Report, community dental services were found to be delivering the highest level of care within dentistry. Here, **Melissa Loh** and **Jaspreet Virdee** discuss how best to implement care in the community

Special care dentistry has always been associated with patients vulnerable to dental disease and barriers to accessing treatment. With these concepts in mind, we decided to gain an insight into the dental experiences of this sector of society and widen our understanding of their perspectives of dental treatment. Specifically, we were concerned with promoting the importance of oral health and well-being in order to provide these individuals with more positive attitudes to dental care. We were fortunate enough to self-organise experience in this environment at a local community group, who work to promote social inclusion for individuals with learning disabilities, mental health issues and acquired brain injury. The following describes our experience and how we went about this cause. We have included tips on how to find an appropriate audience and deliver a positive oral health outlook in the hope to inspire similar students to undertake a similar journey in the future.

Finding an audience

Prior to contacting any organisations, ensure that you have a clear target audience in mind. In our case, special care dentistry was our target group and hence, our research focused on organisations dealing with individuals with disabilities that would qualify as 'special care'. Through independent research and approaching several local groups, we eventually established a relationship with a local partnership who enabled us to deliver oral hygiene instruction and advice to an appropriate audience.

Flexibility in methods of delivery of this information was a priority as often organisations lacked appropriate facilities, such as a room suitable for a group discussion. Our experience revealed that the majority of these organisations did not place an emphasis on oral health care and as a result, were unwilling to provide time for us to deliver our health care message. Do not be disheartened if rejection comes your way – ensure that you provide a clear outline of your aims and objectives to the establishment and explain how you propose to deliver your presentation.

Special considerations for special care

Ensure that you are familiar with the details of

your audience. It is vital to know the age range of the individuals attending the group and the extent of their disabilities. This will enable you to tailor your preventative advice and address relevant areas. Being of high dental risk, these patients would commonly have a history of tooth loss from dental caries and periodontal disease and it would be expected that many would have dentures. Hence, it was important for us to highlight the importance of preventing further tooth loss whilst providing information on caring for dentures.

'Do not be disheartened if rejection comes your way – ensure that you provide a clear outline of your aims and objectives to the establishment and explain how you propose to deliver your presentation.'

Powering prevention

'Yer teeth are a part of ya aren't they, you need them for life'. This acknowledgement of the importance of retaining teeth by a member of the group was surprising given their learning impairments and limited dental exposure; we did not anticipate such a level of awareness. However, this provided a platform to expand the group's knowledge of maintaining good oral health whilst allowing us to supplement this idea with workable prevention messages based upon guidelines from the Department of Health.

We decided an informal approach would provide the greatest benefit when talking to the group considering our main objective was breaking barriers to oral health. Several key messages conveyed included highlighting the equal importance of periodontal wellbeing alongside optimal health of the dentition. A brief explanation of potential indicators of oral malignancies was of particular importance as

several members of the group were heavy smokers and consumed alcohol.

It was particularly challenging to attempt to rectify ingrained routines to which the group had been accustomed. For example, during the discussion, sugary snacks were distributed on multiple occasions, which proved contradictory to the diet advice we were conveying.

For these individuals, we felt a systematic approach to brushing would prove more effective than focusing on the Modified-Bass toothbrushing technique. It became evident the frequency of tooth-brushing was inadequate throughout. An individual mentioned that although he brushed twice a day, he was not aware of any time intervals; he brushed twice in a row every morning with two different toothpastes, rinsing with water on the first occasion. Denture care advice was provided although many neglected to wear their dentures, expressing difficulty with habituation.

Most dental experience was limited to emergency dental care due to pain and infection. In fact for many, the prevention advice we provided had been their first encounter with regards to maintaining good oral health. A key message we relayed was that support is always accessible for those who seek it.

Audience engagement

Several behavioural management techniques were employed to engage the audience's attention and participation. From the beginning, the group were encouraged to get involved in discussion using the incentive of a toothbrush as a prize. This was effective in encouraging the group to retain the preventative information being provided. A conscious effort was taken to avoid any dental jargon. We utilised the tell-show-do technique when showing the group how to achieve effective tooth-brushing. Positive reinforcement was emphasised throughout the presentation to aspire to a good long term dental prognosis as well as encourage optimistic attitudes towards visiting the dentist.

Visual aids and positive reinforcement were demonstrated throughout. 'You brushed once a day? Great! Do you think you could get one more tooth-brushing session in?'

One participant shared an ideal personal experience whereby he underwent systematic desensitisation having been a previous dental phobic. Over time, he was able to conquer this phobia and undergo a dental check-up. This followed gradual exposure to the dental surgery and team members. His experience provided an exemplar success story of how non-pharmcological behavioural management techniques can significantly impact a patient's attitude to dental healthcare.

A success story?

Following this enlightening experience and opportunity to interact with a diverse array of individuals, we were able to reflect upon aspects which could be improved on in the future. Although the majority of the group played an active role in the discussion, others were a little more reserved. If time was less of a restraint, we would have ideally liked to have built a more personal rapport with these individuals before the group discussion enabling a more universal participation. In retrospect, we felt that providing patient information leaflets or a summary leaflet of all the prevention advice discussed could prove useful to reiterate the messages we hoped to convey.

Dentistry and diversity have often been closely linked; engaging with a community we had little personal experience with allowed us to appreciate this in all its depth and colour.

We would like to give *Moving On With Life & Learning* a special thanks for allowing this opportunity to be possible.

If you are apprehensive about approaching a particular community to educate on good oral hygiene, such as those with special care needs, please grab the opportunity by the reigns. In addition to attempting to break patient misconceptions and barriers to dental care, you as a future dentist can enhance your skills in managing these patients – these components are vital to a successful patient-dentist relationship!

So consider which communities may benefit most from dental advice in a non-clinical environment…there are many interesting individuals out there right on your doorstep!

Melissa Loh & Jaspreet Virdee ■

ETHICAL DILEMMA

Do you have concerns about the behaviour of a colleague? The Dental Defence Union (DDU) advises how to handle the situation

I recently completed my Foundation training year and have just started work as a dental associate. I have taken over a full list of patients from a colleague who retired after working at the practice for 20 years. A patient came to see me for the first time recently, but she was apprehensive about my skills and experience. She asked me how I could be experienced enough to undertake the treatment we were discussing, given how young I looked. I felt embarrassed and a little offended. What should I say if another patient asks me a similar question?

A patient questioning your competency can really shake your confidence when you are just starting out in a dental practice. Trying to answer questions like 'you look so young, how much experience do you have?' or being told 'my usual dentist wouldn't do it this way' can be disheartening, but it is important to handle the situation with professionalism. Stay calm and don't take it personally.

It might help to remember that this is a common position for a relatively newly qualified dentist to find themselves in and even when you are more experienced, you may inherit a list of patients who have become used to the way their previous dentists did things. So learning how to professionally and confidentially handle such a situation early on should benefit you for the rest of your career.

Effective dialogue helps to ensure you are on the same page as your patient or their carer, which should help to reduce the chance of the situation escalating to a complaint. An important part of effective communication is being honest and upfront about your qualifications and experience. You should never try to put the patient at ease by making yourself sound more experienced or qualified than you are. It can sometimes help to explain that the training to become a dentist involves treating patients from an early stage

In its guidance *Standards for the dental team*, the GDC states that you must 'work within your knowledge, skills, professional competence and abilities' and you should 'refer patients on if the treatment required is outside your scope of practice or competence. You should be clear about the procedure for doing this'.

You can politely inform the patient that different dentists can approach things in different ways, perfectly legitimately. And if you think a procedure is within your expertise, explain to the patient why you think it is the best course of treatment for them taking into consideration their presenting condition.

It is good to confirm that they are happy for you to proceed. You can always ask the patient if they would like a second opinion from a more experienced colleague in the practice. This may help reassure patients that you have the confidence to decide how best to treat them and the back-up of experienced dentists if needed.

If you think the procedure is beyond your expertise, explain this to the patient and offer to make an appropriate referral either internally within the practice or externally.

If your patient has expressed concerns or questioned your experience, it is important to keep a note in the clinical records of the discussions as these will help to demonstrate a valid consent process if you do go ahead with the treatment.

As with many aspects of working in a dental practice, the key to managing this situation successfully is good communication. When it comes to communicating with patients, there are a few tips which are always worth bearing in mind:

1. Good communication starts from your first consultation. Dental professionals should introduce themselves to patients and explain their role in providing care.
2. Be an active listener. Make eye contact, nod or say 'I understand' occasionally to acknowledge the patient but try not to interrupt or put words into their mouth.
3. Ask questions to check the patient's understanding, especially when advising them about complex treatment plans.
4. Avoid using jargon such as technical terms and large amounts of clinical information when explaining treatment options. Instead, use the same language as the patient e.g. 'tingling' sensation rather than paraesthesia.
5. Look out for signs that a patient might be anxious or confused about treatment. Offer them reassurance or a further explanation.
6. If patients have particular communication needs, for example they do not speak fluent English, take reasonable steps to help, such as suggesting they bring someone who can interpret for them.
7. If a patient is clearly unhappy with an aspect of their treatment, be polite and professional and try not to act defensively. Be prepared to apologise if things have gone wrong.
8. Be clear about the possible costs when explaining the different treatment options and whether treatment will be provided under the NHS or privately. Many complaints about fees are the result of a breakdown in communication.
9. The GDC expects dental professionals to tell patients if treatment is guaranteed, under what circumstances and for how long. However, we would advise against offering a guarantee or warranty, which have specific legal meanings. It is acceptable to give an undertaking to refund fees or to repeat treatment free of charge if the treatment fails within a specified period.
10. Finally, remember your dental defence organisation will be happy to help and talk you through the situation if you find yourself in a difficult position with a patient.

DDU dento-legal adviser David Lauder ■

CAREER JOURNEY

If I had a dollar for every time a student asked me about careers advice or an article, well I wouldn't be rich because I'm not American (or Cambodian), but I'd have plenty of spending money should I go visiting.

Quite often whatever path you think you'll walk along happens to be the diametric opposite to the one you eventually find yourself on. And that can be no bad thing. Just ask Jessica Hulme, Professional Relations Manager (Oral Healthcare) at Philips UK & Ireland, as I did.

'I started off as dental nurse when I finished my A Levels', Jess explained. 'Although I didn't know what I wanted to do at university, I knew dentistry was something I wanted to explore, so I got a job as a dental nurse trainee at local dental practice. I was very fortunate to have worked alongside a hygienist who become a bit of a role model for me. It was in a very pro hygienist practice, and after that I decided that was the direction I wanted to go in. I successfully applied to join the University of Birmingham's BSc Hygiene and Therapy course the following year, and that was really the start of my journey.'

Given Jess' relatively early interest in a career in oral health, I wanted to know where that originated. 'When I was at school I wanted to be in the medical field. I really wanted to be a doctor when growing up. I had a friend who was a dental nurse, and she really enjoyed it. She found it a great career choice with plenty of room for progression, helping the public, influencing habits and being able to gain numerous qualifications. It suited what I wanted right down to the ground.'

With the constant shift towards prevention in the pilots and in every day practice, was being part of a pro hygienist practice important?

'Yes, absolutely', Jess exclaimed resoundingly. 'They were totally respected for the work they did, and this practice viewed hygienists on a level playing field with dentists. That was really important for me to see. Looking back it was an early indication of how skill mix could work successfully in the practice. Even the patients knew how important a visit to the hygienist was, even six years ago! We had a really strong focus on prevention. Patients who waned restorative work had to see a hygienist first and get their oral health up to scratch. That definitely set me on the right path.'

After graduating from Birmingham Jess decided to embark on a Therapy Foundation Training Scheme in Oxfordshire. The 12-month course provided

Jessica Hulme CV

2010–2011	Trainee Dental Nurse
2011–2014	Student BSc Dental Hygiene and Therapy University of Birmingham
2014–2015	Therapy Foundation Trainee Oxfordshire Deanery
2014–2016	Dental Hygienist
March 2016	Present Professional Relations Manager Oral Healthcare – Philips UKI

therapists the equivalent to the Foundation year for dentists. It was a move designated to improving her therapy skills and opening up the possibility of a qualification. Having worked part time as a hygienist, the therapy course would stand her in good stead for the future. But why dually qualified?

'With the changing nature of the workforce, there is a long way to go but dually qualified is a great skillset to have. You have a better understanding of perio challenges, the hygiene aspect, the prevention work and the link to the restorative side of dentistry. Therapists have great experience working with children, and that comes in very handy.

'It was only really during my foundation training year that I thought about the future. We were encouraged to put a plan in place. I had an interest in the dental public health route, and always had a feeling that after university I wouldn't stop learning and wanted to push on a bit further. I got some great help at Oxfordshire deanery, and decided going back to uni wasn't the best step for me. I really wanted to do more and give more back than just working in clinic.'

In order to successfully manage the transition, Jess explained how her first step was recognising what her skills were. 'After clinical work you lose sight of what else you can do', she said. As a profession we have so many other skills we utilise on a daily basis, and it's about recognising they can be transferred. I spent some time looking at other options – different companies, the various dental associations, and during that period Philips recruitment team got in touch to discuss an opportunity there.'

So what advice would Jess give to anyone thinking of making the same career leap? Simple. Research.

'The best advice would be do a lot of research', she said. 'Talk to as many people as possible. There isn't a huge number of hygienists and/or therapists working outside of clinic, so I found myself in a pretty unique position. You have to be brave – there is nothing wrong with wanting to help but thinking that clinic is not the right way of doing that. There is so much pressure on students to graduate and get into practice, so that's all they focus on. After five years of university that's all they think they should do, but there is so much more out there working within the profession. Look into options but be certain that it is what you want to do.'

The insight into Jess' career path is fascinating. Are dental students truly ingrained to go into clinical practice? Are they solely focused on that without seeing the bigger picture? During our conversation it becomes clear that a large majority of students do want to head into clinic, which is absolutely fine as long as they remember one thing; that it really is what they want to be doing.

'You want to end up where you want to be. It's a fairly simplistic view but it's so important to take stock. You don't want to look back on your career in 20 or 30 years' time and think I 'could have done so much more'. Progress in the way you want to. It's easy to graduate, find yourself on a set path and stay on that track. As long as you recognise that and ask 'is that what I want to do', then you'll continue to be the best professional you can. It opens up the possibilities of further qualifications, specialising and so much more.'

'You want to end up where you want to be. It's a fairly simplistic view but it's so important to take stock. You don't want to look back on your career in 20 or 30 years' time and think I 'could have done so much more'

One aspect I wanted to press Jess on is how much university prepares students for real life. You can gain all the skills and qualifications in the world, but if you can't stand the heat then are you in the wrong kitchen?

'There's definitely more pressure to strike a good, healthy work/life balance at university than once you've graduated. I'm sure everyone reading this will agree with me! There is possibly too much stress on young dentists and students at an early age, but they wouldn't choose dentistry if they didn't think they could handle it. You have to remember your end goal; that you will be helping people. It gets you through tough times. Dentistry is a great profession. You might not get an outcome straight away. We're all subjected to increasingly high standards that are expected throughout your career. There is an expectation to go above and beyond for patients.'

Fast forward to now, and I ask Jess about a typical working week. It's here that I realise she was probably never destined to the confines of a dental practice.

'Every day is different for me, and I absolutely love it. My very basic tasks include keeping up with industry developments, touching base with key opinion leaders who help and who have helped to shape dentistry. I have so many meetings with the various associations, planning events, attending events, forging partnerships, and keeping eye on the product portfolio here at Philips. Now I've thought about it there's quite a lot for a day!

'I sit in between sales and marketing teams, which gives good insight into how both operate. I have variety in bucket loads. Every day completely different, and that is one reason I chose to move out of clinical work. I'm the type of character who needed that and have it in abundance.'

But does she have any regrets about her chosen path? 'Not really! Perhaps I'd have liked to have made my decisions quicker, but taking time is good. Think of things from different perspectives – it certainly helps you to become a more rounded individual and clinician. I have skills picked up from my time on reception, assisting, doing fillings and treating children.'

And now for the golden question; where does Jess see herself in five or ten years' time?

'For me that's a really difficult question to answer because I have no idea! That's such an exciting thought and I love it. Knowing there is so much I can do is truly empowering. If was in clinic, I would probably have stayed in clinic. Philips is an amazing company to work for. Dentistry faces some uncertain times ahead, and I believe that creates opportunity.

'Through everything, don't forget why you started in the first place. It's easy to forget when you're under pressure. Remember that once upon a time you were in an interview dying to be on the course. Whatever you choose to do, you will be helping patients no matter what. That for me is what it's all about.'

David Westgarth

LIFE AS...

In our regular feature, we talk to students past and present about what it's like to spend a day in their shoes.

DCT INTERVIEW PROCESS

By **N. Prado, L. Rose, J. Patel**. In their final column, the trio talk about preparing for the interview process

DCT interviews can be a daunting prospect. There are less DCT posts than there are DF1 posts and so the application is more competitive. This means you need to be prepared and ready to wow on the day, to ensure you secure the post you want. The final part of the series will give you an overview of the interview process and some hints and tips to help you along the way.

First of all, usual interview etiquette applies – look smart but also be comfortable! If you are wearing something that you don't feel right in then it will show. Avoid overly bright colours or patterns; you want the interviewers to focus on you, not your clothes!

Girls, keep make up simple and subtle. Guys, clean-shaven is best but if you have facial hair make sure it is trimmed and neat. Designer stubble is a no-no.

BE ON TIME. This cannot be stressed enough. If you are even a few minutes late you may not be allowed to interview and even if you are allowed you will be stressed and not performing at your best. Better than being on time would be to be early – this way you will have breathing space to settle yourself before the process begins.

Smile! Yes it is daunting and smiling may be the last thing you feel like doing, but first impressions count and a smile can make a world of difference.

The interview process varies within each region and each deanery will have a slightly different set-up. It is a good idea to consult the website of each deanery prior to the interview in order to ensure you are prepared for the specific format of the day. Similarly always read the person specification for each job as it will give you a clue as to what will be tested in the interview and what they are looking for.

Once you have submitted your application the selection process is typically as follows:

Longlisting: This is done based on essential eligibility criteria (BDS, completion of DF1 and eligibility to work).

Shortlisting: This is where your application form is assessed and marked against an agreed framework, which is largely based on the Person Specification.

The Interviews

Interviews typically take a form similar to DF1 national recruitment.

There are usually a number of timed 'stations' to complete, where your performance is marked against set criteria. There may be 2–4 interviewers in a panel, with each station centered on assessing a particular area. Topics include: Professionalism, Management and Leadership, Communication & Teamworking, Clinical Governance and Academic Achievements.

It is common for there to be a medical/dental emergencies station with a requirement to demonstrate practical and theoretical knowledge on management of an acute situation.

Actors are commonly used in order to assess communication and knowledge, by setting up clinical scenarios relevant to the job applied for. Remember, these stations are predominantly testing communication skills and your interaction with the 'patient', so don't focus too much on the knowledge side of it.

Academic achievements such as presentations and publications are assessed via your portfolio and it is advised to ensure this is well organised and concise. It is important to use a paper portfolio that is easy to read. The interviewers may only have around 10minutes to look through this so it is essential that they can easily find everything they need. Excessively large folders are not necessarily better; you need to be able to refer to specific examples of evidence when asked.

Some deaneries like to incorporate a practical skills test, which in the past have included suturing on a pad or placing a composite restoration on model teeth. These are timed and you only get one chance at them so practice simple practical elements in your spare time so that you're not thrown on the day.

Offers

Following your performance at interview, candidates are ranked and offers are made based on your interview score. If you rank highly enough then you will be offered a job.

Our top tip is to practice, practice, practice! One of the best ways of practicing is to do it with colleagues or friends. This way you can pick up on the good and bad things that each of you are doing/saying and you can give each other points to improve on. There are a number of useful books available which give further advice on medical interviews, plus sample questions and scenarios. Have answers ready for the most commonly discussed themes (as outlined above) so that if they come up in the interview, you are prepared.

If you do come across a question in the interview that you become stuck on then take your time. Ask for a minute to think about your answer and if you need to, ask the interviewer for further clarification on what exactly they are asking you.

We hope this 3-part series has helped you to better understand what DCT posts involve and how to get into them. We have all thoroughly enjoyed our core training and would highly recommend it as something to consider doing.

Naomi Prado, Louisa Rose and Jaina Patel ■

CRANIOFACAL ROTATION AT GREAT ORMOND STREET CHILDREN'S HOSPITAL

Shivana Anand and **Aleeza Cheema** on insider's reflection upon what there is to learn from the year.

Rotating within the Dental and Maxillofacial department at the biggest children's hospital in the world was one of the most fantastic experiences. The department treats many children with complex medical conditions and craniofacial syndromes requiring multidisciplinary management. The team consists of oral and maxillofacial surgeons, paediatric dentists, orthodontists, a restorative dentist, and experienced dental nurses. There is a great deal of organisation that goes into the care of the patients, many whom have been attending the department since infancy.

The support team are brilliant, and really go above and beyond for all of their patients. All members of staff are excellent at developing rapport, communicating and really engaging with the children. The department has a real atmosphere of family and belonging, and patients and their families are treated with the utmost compassion and respect. The waiting room has activities, toys and a fish tank to keep children entertained.

Several clinics run throughout the week which include:

- Joint clinics which are usually split into specific sub-specialities, for example: cleft, lip & palate, a clinic for 1st and 2nd Branchial Arch Syndromes such as Treacher Collins and Pierre-Robin syndrome, and other rare congenital syndromes. These consultations involve arranging investigations, reviewing results, and multidisciplinary input to plan treatment
- Pre-assessment clinic in which we assess patients in preparation for surgery, including discussing the upcoming procedure, the risks and benefits of their surgery, and answering any questions the patients and their families may have
- Follow up clinic reviewing patients several weeks after their surgeries. It is particularly rewarding to see the children at this stage
- Outpatient joint clinics at different hospitals to aid and advise in multi-disciplinary management after the patients have passed adolescence. These are at The Eastman Dental Hospital and The Royal London Hospital. Here patients are followed up to see where intervention may be appropriate.

The surgeons operate two days a week at GOSH. This day involved final pre-operative preparation; seeing the patients and confirming consent, as well as marking them prior to surgery. We then scrub in and assist in theatre. Over our time at GOSH we have been privileged to see many amazing and interesting procedures to treat the symptoms of facial deformities including alveolar bone grafting, orthognathic procedures, distraction osteogenesis of the jaws, exploration under anaesthesia for oncology patients, rhinoplasties, and Coleman Fat Transfers*. Following on from their surgeries, the patients recover on the wards, going home the same day or remaining in hospital overnight. We ensure the patients are safe for discharge, their post-operative medications are prescribed and prepared, and we give post-operative instructions.

*What is a Coleman Fat Transfer?

A Coleman Fat Transfer is an autologous graft where fat is taken from one part of the patient's body – usually the abdomen or the inner thigh – and injected into the head/neck defect. In the OMFS department, fat transfers are used to correct facial asymmetry, and to plump areas of scar tissue, improving patient's appearance and their confidence.

Shivana Anand and Aleeza Cheema ■

WHEN DO YOU NEED TO COMPLETE A TAX RETURN?

Sophie Kwiatkowski, an accountant with PFM Dental Accountancy, discusses the important when and what of tax returns

As student dentists, you may hear colleagues talking about 31 January as the deadline for submitting their tax return fast approaching, and having to pay their taxes to HMRC within the next couple of months. You may be wondering if there is anything you need to do before this date or if this is just something you will have to consider in future years.

What goes on your tax return?

Until you complete your VT year, you will be classified by HMRC as being employed, and will not be required to submit a tax return. The tax year runs from 6 April each year to the following 5 April. As tradition stands, most self-employed associate positions commence in September each year – so you will need to complete your first tax return for the year ending the 5 April after you begin your self-employed role.

This first tax return will include six months of self-employment income as well as the six months' employment income from your VT year. You will have already been taxed monthly on your employment income so you may be concerned that you will be taxed twice by including this information on your tax return. The simple answer to this question is – no, you won't be! HMRC need to see a full year's worth of income, so the P45 information is included to inform the revenue of both the income that you have received and the tax that you have already paid in the year.

Your self-employment section will include all the income received from your associate position less any business expenditure that you have incurred during the year. The list of business expenditure that can be claimed is quite comprehensive. Common expenses that can be claimed include costs of courses/training (including travel and subsistence), professional subscription costs, mobile telephone expenses and protective clothing. If you have to buy any dental materials or equipment, such as loupes, these are also allowable expenses. HMRC also provides thorough guidance on motor expenses, use of home as office and laundry costs.

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It is worth mentioning that you can also claim prior years' expenses such as your GDC ARF and professional indemnity premium. If you haven't had tax relief on these costs, by simply completing a form online with HMRC, you can apply for it!

Your tax return will also need to include any other income or expenses that you might have. This can include things such as rental income, bank interest, dividends from any investments you hold, as well as any charitable donations that you have made. You will also begin to pay back your Student Loan through your tax return.

> 'The list of business expenditure that can be claimed is quite comprehensive'

When is the tax due?

When to make the actual payment of your taxes is another important concept to understand. The payments are due the 31 January and 31 July following the 5 April that your tax return is completed up to. So, for example, if your tax return is completed to the 5 April 2016, the payments will be due 31 January and 31 July 2017. The January payment is made up of the balance due for the previous year, as well as a payment on account as an advance towards the current tax year. The July payment due is the second payment on account. Payments on account are calculated as half of the previous year's recurring tax due.

This is just a summary of the tax return and what you can expect in the future. I am sure there will be lots of questions – and that is what us dental specialist accountants are here for. PFM Dental Accountancy, for whom I work, is part of the PFM Dental group which has experts in financial planning, legal work and pensions.

Sophie Kwiatkowski ■

Sophie Kwiatkowski is an accountant with PFM Dental Accountancy which provides a chartered accountancy service exclusively for dentists. The PFM Dental group is one of the leading specialist providers to dentists within the UK. **www.pfmdental.co.uk**

STUDENTS OVERSEAS

Here at *BDJ Student* towers we love reading about what you guys get up to over the summer. Whether it's an elective or something you've arranged independently, gaining knowledge of different cultures and ways of working will one day prove to be invaluable.

A group of four girls from University of Manchester dental school endeavoured on a two-week elective placement to the city of Iloilo, Philippines, where a reported 92.4% of Filipinos experienced dental caries in 2015. Here are their thoughts…

Kiran Singh

Iloilo City Community College was a small medical centre; the dental consultation room was equipped with a fully functioning electrical chair, running water and air conditioning (all somewhat of a luxury in the Philippines!). On a typical day, I would tour the school in the morning, informing the pupils to come to the medical centre if they needed any teeth out.

The students did not have to pay for the anaesthesia and all treatment was completely free. I would typically carry out five-ten extractions in the morning and after each extraction, the socket was immediately packed with amoxicillin granules and cotton wool soaked in iodine.

Antibiotics were always prescribed, usually amoxicillin, with instructions given to the pupil on how to take it. The antibiotics were used as prophylaxis due to the poor sterilisation of instruments, which can often need more oral health prevention.

The orally fit child would be entered into numerous prize draws and be rewarded for their great efforts. I was honoured to be asked by the head of year in one school to award one student a prize during my fieldwork. This highlighted how significant of an impact it had on other students by giving them an incentive to look after their teeth. On examination, whilst screening for decayed teeth, I would also apply fluoride varnish. On another occasion, I applied fissure sealants to six-seven year olds with only cotton wool rolls as moisture control, no dental chairs, no clinical light and a portable light cure. Although challenging at times, this was an incredible experience.

Paras Alizadeh

I was based in City Health Office, with my supervising dentist and dental aid. My morning consisted of curative treatment, similar to my colleagues, involving mostly extractions of grossly decayed teeth. Ideally, one cartridge of anaesthetic would be used (costing the patient around £1.60), and ID blocks were rarely administered. I would do fifteen-twenty extractions in the mornings on a variety of age groups.

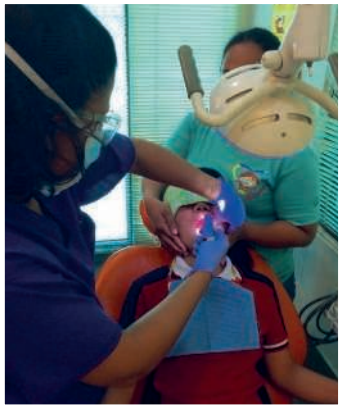
In the afternoons, my team and I would commute to different schools to educate on oral health, distribute free toothbrushes and search for the '*orally fit*' student (free of decay). The data collected helps City Health Office assist the government of Iloilo City allocate funding and decide on target age groups that

lead to post-operative complications.

Needles were re-sheathed and dipped in a solution of alcohol and forceps were simply rinsed under the tap after each use and cleaned with a toothbrush. It was not uncommon for my supervisor to use her bare hands when examining the patients, adopting a 'non-touch technique'.

Local anaesthetic was commissioned to ICCC dental clinic on a monthly basis by the City Health Department. Towards the end of my time at ICCC, LA ran out, therefore my time was spent scaling the student's teeth with a supra-gingival ultrasonic scaler. There was no aspiration tip, so every few seconds the patients would spit out the excess water into the basin.

ICCC was an up-to-date and efficient health centre to work at, with staff and pupils who were a pleasure to work with.



Pav Chana

I travelled for about an hour to a local village. Upon my arrival, I was led through the village to a small hut which appeared to be the village nursery. My work station consisted of a plastic table and chair – both made for children – and my dental instruments were four different types of forceps, two elevators and one dental mirror. I constantly had four local village children around me, fascinated not only by me but also by what was going on. A far cry from oral surgery at Manchester University!

My supervisor assessed the patient very briefly and then simply stated the tooth to be extracted. I was limited to one cartridge of anaesthetic per patient; not that this was a problem as I soon realised that even the youngest children in the village had a very high pain threshold. Due to the lack of dental light, my supervisor would often use her smart phone camera to shine into the patient's mouth to assist me.

I completed twenty extractions in the hardest conditions I have ever had to do dentistry in, which involved thirty-five degree heat in the absence of air conditioning and the constant battle of operator – patient positioning.

This village experience is something that will always be a highlight of my dental career. An elective is so much more than gaining experience for yourself, it is a great way of using your skills to benefit poverty-stricken communities. This is definitely something I would be interested in doing again in the future (but next time I will pack a headlamp!).

Manisha Punj

The journey began on local transport (Jeepney) to the clinic in the barangay Jaro, Iloilo city. The clinic consisted of one surgery that had a basic dental chair, a sink, a bench and a desk. Each patient that came into the surgery had a vague medical history taken and blood pressure measured. I would administer local anaesthetic to numerous patients consecutively within the same surgery. Whilst waiting for the anaesthesia to take effect, I would begin treatment on the previous patient.

If a tooth was tender to percussion, local anaesthetic was administered and it was immediately extracted. The use of pre-operative radiographs to assist in carrying out an extraction was extremely unusual, if not non-existent. The only instruments available to use were luxators, three forceps and a chisel. Unfortunately, restorative dentistry was a rarity due to lack of resources, economic constraints and restricted access to private clinics.

I had the opportunity to take part in a medical missionary camp in San Isidro village with a charity group, Gawad Kalinga. Queues of patients of all ages had formed outside a school hall, which was our 'surgery' for the day. Equipped with only a plastic chair and table, an IPhone torch for visibility, local anesthesia and a few forceps, we saw around one hundred patients collectively. This day in itself was an exceptionally fulfilling and eye-opening experience.

To conclude, our two weeks spent practising dentistry in the Philippines was an extremely informative, enjoyable and humbling experience. We would highly recommend completing an elective, as it truly pushes you out of your comfort zone and teaches you invaluable lessons about the ways in which dentistry is practiced worldwide. Not only do you enhance your clinical dexterities, work ethic and communication skills, you also make memories and friends that will last a lifetime!

Paras Alizadeh, Kiran Singh, Manisha Punj and Pav Chana ■

EXPERIENCE

Not Another Dental Charity

By Yolande Mbappe

Thinking back to my first session volunteering in a cramped dental van in the slums of Mumbai, struggling to work in sweltering heat, I never thought that years later I would be the founder of a dental charity. Surely there are enough of them already out there, awash with do-gooder dentists and eager dental students. Well, not exactly.

This year our first trip was to two United Nations refugee camps in Malawi with a collective population of approximately 29,000. Despite this number of people, we started here because it was brought to our attention that in 24 years, there had been no dental services in these camps.

We all learn fairly early on in our careers that decay is the world's most prevalent non-contiguous disease, with disparities in dental health within the UK alone having enough shock factor for prime time tv material (thanks Jamie Oliver for that sugar expo, we've been trying to tell everyone for ages). However as a developed nation with approximately 41,000 registered dentists, our concerns pale in comparison to developing countries worldwide.

There are already a team of wonderful charities out there, fighting in the frontline against both the common and uncommon oro-facial conditions. Among the most well-known are Dentaid, Bridge2Aid and Mercy Ships. These organisations have established long-term commitments to providing dental relief to disadvantaged communities worldwide and continue to do so.

> **'the great news is that simple things can have tremendous impact.'**

Nevertheless the reality is that it takes more than a few skirmishes to win a war, and every soldier is valuable. Oral Health Africa (OHA) was founded in January 2015 with a vision of not only joining this timeless battle against tooth decay, but of inspiring a younger generation of soldiers to 'enlist' in the army. Our vision is to three-fold; to firstly treat, secondly prevent and most importantly to support the local dental professionals of the communities we visit.

While the general public may question our motives for choosing a career in dentistry, those of us within it know that the work involved pales in comparison to the financial remuneration we actually receive. Three UDAs hardly begins to touch the work involved in transforming a long term phobic patient with gross caries into a dentally fit regular attender. This is a form of compassion and social care rarely recognised. The great opportunity behind OHA is the possibility to extend the care and consideration we provide daily to our patients to those without professionals to do the same for them.

In our week in Malawi we extracted over 200 teeth, provided basic oral health education and donated necessary equipment to the severely under supplied dental department of the local hospital.

It was both shocking and encouraging to learn that despite having 10 dental chairs, the hospital had only one functioning fast handpiece.

There is so much to be done but the great news is that simple things can have tremendous impact. One single handpiece will double the output of the hospital. And that is why we are here, another dental charity, fighting to make a difference.

Yolande Mbappe ■

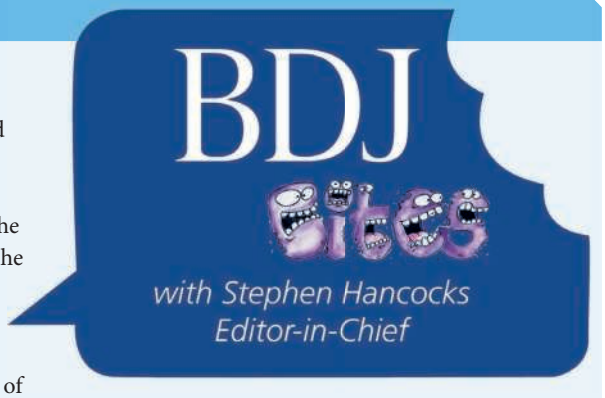
To find out more about Oral Health Africa visit **www.oralhealthafrica.org.uk** or find them on social media **www.facebook.com/oralhealthafrica** or @oralhealthafrica on Instagram.

BDJ UPDATE

Stephen Hancocks OBE, Editor-in-Chief of the *BDJ*, chooses his article highlights from recent issues of this highly respected journal.

Published twice a month, the *BDJ* is the leading dental journal in the UK and is, in addition, widely read internationally. It is available in hard copy with 20,000 readers an issue (included in BDA Student Membership for 3rd, 4th and 5th year students) and online at **www.bdj.co.uk** (available to all BDA Student members) where it receives in excess of 100,000 unique visitors a month. It includes news, opinion, research, articles on dental practice and education.

BDJ Bites



The *BDJ* has continued its role in covering the latest news, developments and research and has itself been in the news for a redesign. This includes some new features to help it stay as the number one dental journal in the world, as calculated by the Altmetrics scale. Research Insights with in the *BDJ* now provides a monthly digest of some of the papers published in the journal and in its sister online-only, open-access counterpart *BDJ Open*. Insights aim to expand on the information in the papers with additional background, author interviews, infographics and expert commentary to help put the findings into perspective. Additionally, we have launched our own YouTube channel which includes the new *BDJ Bites* (go.nature.com/bdjyoutube) with short audio summaries highlighting recent research for the time-strapped reader. The channel also includes information on the launch of the new *BDJ Jobs* site, an essential stopping place for job opportunities across the spectrum of dentistry in the UK and abroad.

In a research paper on musculoskeletal problems suffered by dental students the authors aimed to determine the prevalence of these disorders.[1] In a single centre, cross-sectional study in a UK Dental School, students completed a pain questionnaire to allow examination of the main outcome measures of self-reported frequency and severity of pain, fitness and coping strategies. Of the 390 respondents 63% were female and 75% aged under 23; 79% experienced pain with 42% experiencing pain for 30 or more days in the previous year. Lower back pain was most common (54%) and was most frequently the worst area of pain (48%);

> 'The study concluded that musculoskeletal pain is a problem for dental students.'

36% reported pain lasting at least four hours. The mean 'average pain intensity' VAS score was 3.81/10 and mean 'worst pain intensity' was 5.56. More females reported neck pain (58% *vs* 37%,) and higher 'average pain intensity' (mean 4.02, *vs* 3.43). Daily stretching was used by 55.7% of respondents, and this positively correlated with 'average' and 'worst pain intensity' scores. Eighteen percent sought professional help to manage pain. The study concluded that musculoskeletal pain is a problem for dental students. Education in self-care may be helpful; however, assessments of possible interventions are needed.

Does dental floss have a futute?

Many readers will have seen that dental flossing hit the mainstream news headlines last summer following news that the United States health department had removed daily flossing from its list of dental recommendations. Despite American dentists having recommended the use of floss to patients since the 1800s, an investigation by Associated Press (AP) said 'there's little proof that flossing works' (http://apne.ws/2aN6zoC).

The *BDJ* ran a feature on this in its Upfront (news and features section) which included the BDA's scientific adviser, Professor Damien Walmsley's view that floss can be 'of little value', and that small interdental brushes are preferable for cleaning the area in between the teeth, where there is space to do so. The NHS is now set to review its own guidance on flossing the teeth, which is currently to floss once a day.

For the *BDJ* feature contributors were asked their views on flossing, bearing in mind the following questions: is flossing essential to good oral health? do you floss yourself and if so, how often? do you recommend that all patients floss? And do you think toothpicks/ interdental brushes/ other can be used as an alternative to floss?

Unsurprisingly, not everyone agrees with Professor Walmsley – check out the article and see where your opinion fits.

Evidence Based Dentistry

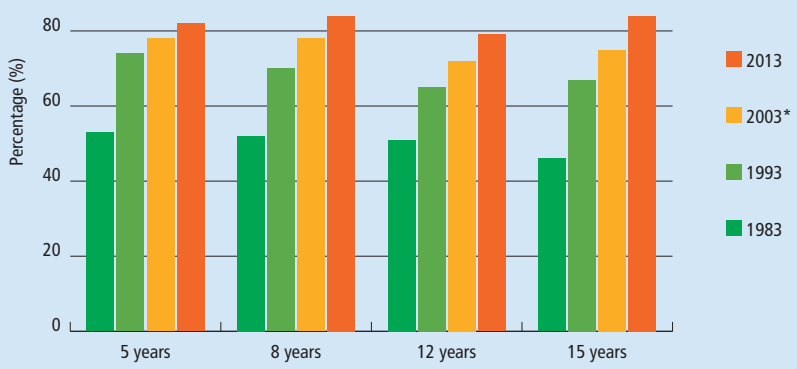
Evidence Based Dentistry (*EBD*) is an important publication in the BDJ Portfolio as it aims to alert clinicians to important advances in the practice of dentistry and specialist areas. It does this by selecting original and review articles whose results are most likely to be true and useful, summarising them in value-added abstracts with comments by experts. *EBD* is published four times a year and is included in the *BDJ* itself.

Recent issues have covered a range of research subjects pertinent to oral health. One found that there is a strong dose-dependent association between cigarette smoking and the risk of tooth loss. The risk declines after cessation of cigarette smoking; however, the risk may remain elevated for up to 20 years compared with never smokers. Efforts to improve the oral health of the population should include the prevention of smoking as well the promotion of smoking cessation. In the *EBD* comment section the expert concluded that overall the study had provided some evidence of an association between smoking and eventual tooth loss in addition to previous evidence linking smoking to periodontal disease. The primary clinical benefit which could be drawn from this study was the re-assertion of the importance of smoking cessation and the prevention of periodontal disease within the adult general population. In the UK the prevalence of smoking is estimated to be 19% with higher rates in deprived populations. It is important that dental teams remain conscious of discussing tobacco use and its implications for both general and dental health with their patients.

In a review of another study the conclusion reached was that the psychology of behaviour change is the key to oral health promotion, and greater emphasis on teaching oral health professionals about health psychology would make oral health promotion in the dental surgery more effective. One of the practice points emerging from this was that if practitioners truly believe in the efficacy and effectiveness of the advice they give to patients, they strengthen the potential for success of their oral health promotion activities.

Children's Dental Health Survey

The Children's Dental Health Survey is conducted nationally every ten years and the fifth was held in 2013. The *BDJ* has run a series of articles analysing the results and pointing to trends.[2] One aspect of this is oral health behaviours in children and adolescents. A representative sample of children (aged 5, 8 12 and 15 years) in England, Wales and Northern Ireland were invited to participate in dental examinations. Children and parents were also invited to complete a questionnaire about oral health behaviours. Overall, the majority of children and young people reported good oral health behaviours. For example, more than three quarters of the 12- and 15-year-olds reported brushing their teeth twice a day or more often. However, a sizeable proportion of the sample reported less positive behaviours. Nearly 30% of 5-year-olds first started to brush their teeth after the age of one year. Among 15-year-olds, 11% were current smokers and 37% reported that they currently drank alcohol. Sixteen percent of 12-year-olds reported consuming drinks containing sugar four or more times a day. Of particular concern was the marked differences that existed by level of deprivation. Children living in lower income households (eligible for free school meals) were less likely to brush their teeth twice a day, more likely to start brushing after six months, more likely to be a smoker and more likely to consume frequent amounts of sugary drinks. Despite some encouraging overall patterns of good oral health behaviours, a sizeable proportion of children and young people reported behaviours that may lead to poorer oral and general health. Preventive support should be delivered in clinical dental settings to encourage positive oral health behaviours. Public health strategies are also needed to reduce inequalities in oral health behaviours among children and young people.



*Includes Scotland

Fig.1 Percentage of children reported by parents to brush their teeth twice a day (England, Wales and Northern Ireland 1983-2013)

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2. J. Porter *et al.* Oral health behaviours of children in England, Wales and Northern Ireland 2013. *Br Dent J* 2016; **221:** 263-268.
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Stephen Hancocks

BDJ IN PRACTICE UPDATE

Selected by **David Westgarth**, *BDJ In Practice* editor

BDJ In Practice is the BDA's membership magazine and covers a range of business-focused topics. The articles below featured in a recent issue of *BDJ In Practice*. While they are aimed at established dentists, they are also relevant to young dentists preparing for their future careers.

Social media sickness

Illness befalls everyone at some point. I'd go as far as saying you could add it to life's certainties. It comes in all shapes and sizes, and there isn't a one size fits all approach to how employers should handle it.

Step forward social media, which, like in many other facets of daily life, has been a bit of a game changer. It has changed the way we communicate all the way up to changing our own aesthetic values – i.e the 'selfie' generation. Just look at any lecture or student meeting – out are the good old pencil and paper, in come laptops, tablets and mobile devices.

The same rings true of how employers approach staff sickness. Once upon a time it was face value. At school it was a note from your mum. Now there's every chance employers and colleagues alike will get full insight into the days spent recovering. Chicken soup? Check. Netflix? Check. Photo of you doing the walrus? Check.

So what happens if you're tagged in a tweet on safari in Kenya, or perhaps mentioned having a picnic in the park with friends? What happens then?

September's *BDJ In Practice* asks these very questions. It's something perhaps more of an issue for students than a dentist nearing retirement, and Dental Online Marketing Expert Mark Oborn offered some words of advice.

'People need to be aware that what they say in the public domain is public and can be seen by anyone. People also need to be aware that other people will make value judgements based upon those social media posts.'

To read the full article turn to pages 17-18 of September's BDJ In Practice.

Checklist for new associates

The rise of the dental foot soldier – the associate – has taken us all by surprise. Corporates are a significant player in the profession, which brings about its own unique set of advantages and disadvantages.

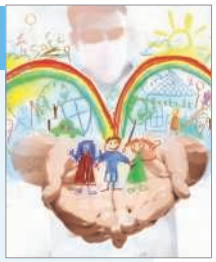
When looking for an associate position you have to judge the practice, its owner and what they are offering to you. Whether you are a new associate or have been qualified for a while, an important thing to get right is who you work with and the facilities they provide.

August's *BDJ In Practice* put forward a 10 point checklist for new associates to follow before signing on the dotted line.

1. Be mindful of the location
2. Talk to other associates
3. Make sure the practice is on a sound financial footing
4. Find out your fee
5. Check out the facilities
6. Do they have a friendly team?
7. What are their patient numbers like?
8. Are they compliant?
9. Get it in writing
10. Think about your expectations.

To view the full article, visit pages 12-13 of August's BDJ In Practice.

CPDT



Once upon a time Child Protection and the Dental Team wasn't an integral part of your curriculum. It wasn't a document practitioners and colleagues alike could refer to.

In October's *BDJ In Practice*, Jenny Harris, Consultant in Paediatric Dentistry, discusses the value of CPDT and just how far we as a profession have come.

'Not everyone in dentistry was receiving child protection training at the time', Jenny told *BDJ In Practice*. 'But in our community dental service we had a session arranged for us. It was becoming clear the guidance and expectations outside of dentistry were greater than what we were doing in our own profession. We were getting left behind. It seemed to be accepted practice not to do anything if we had concerns about children. We didn't want to refer children to social services unless we were absolutely sure we had the diagnosis right. So generally we crossed our fingers and hoped nothing was wrong, thinking there would be another explanation.

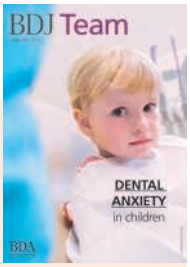
'However, we began to see things from a different perspective. It wasn't about assigning blame, it was usually about giving families the right support. Often they were doing their best in challenging circumstances yet if we let them continue on the same path they would not receive advice and support that would help them to improve their oral health. That change in attitude and outlook was a key part of modernising the profession's input into safeguarding.'

To read the full article turn to pages 7-10 of October's BDJ In Practice.

David Westgarth

BDJ TEAM UPDATE

By **Kate Quinlan**, *BDJ Team* editor



BDJ Team is aimed at dental care professionals (DCPs) and is published online only. In 2015, it will be published every month except August and December. To fulfil its goal of informing, educating and entertaining DCPs, BDJ Team provides one hour of verifiable continuing professional development (CPD) in each issue.

Dental hygienist trailblazer

In the September issue of *BDJ Team*, editor Kate Quinlan interviewed dental hygienist Jo Kennedy, 38, also known as The Sparkle Fairy. Jo has taken advantage of the recent change in rules over direct access to patients and launched her own mobile dental hygiene service.

KQ: Did direct access inspire your decision to start your own business?

JK: I've always wanted to do this. Fourteen years ago I knew of nail technicians and beauticians who went into people's homes and carried out different services and I felt like there must be a place for mobile dental hygiene. Not every patient can get to a dental surgery so there must be a whole raft of patients walking around dentally unfit because no one is getting to them. I spoke to my husband Andrew about it and he thought it was a great idea but he couldn't see how it would work having looked at the legalities behind it. Then when it was announced that the rules around direct access had been changed in 2013, I said to Andrew, 'This is it, this is what I've been waiting for'.

KQ: Has it been very difficult to set up The Sparkle Fairy?

JK: Yes, it has taken two years to get The Sparkle Fairy up and running, almost one of those years spent getting CQC clearance. It's not a quick process and there is an immense amount of work involved in setting up a dental practice.

Andrew spent months and months researching what we needed to buy and then once we got through all of that we went into the brainstorming phase, lots of trying to work out the logistics of how are we going to do this, how are we going to provide this service in a mobile surgery and it took a very, very long time.

You really have to work it out for yourself and even if I look at what I'm doing now compared to six months ago, I do things differently. I'm a lot more streamlined and a lot more compact because I know what I need for each appointment and how to get it all back in the van in the quickest way possible to move onto the next appointment.

Read the whole interview with the trailblazing dental hygienist at http://www.nature.com/articles/bdjteam2016143.

Social media for dental professionals

By Reena Wadia, associate dentist and clinical tutor

DO:

- Connect with friends and colleagues
- Use social media to keep up to date with the latest in dentistry
- Check out the latest events
- Join groups

DON'T:

- Publish patient identifiable information
- Post anything that could affect the public's confidence in you as a dental professional
- Troll or cyber-bully
- Forget to check your security/privacy settings.

To read the finer details of Reena's essential reading on conducting yourself online since the social media revolution, visit http://www.nature.com/articles/bdjteam2016142.

'Orthodontic therapy is a wonderful career'

Orthodontic therapy is the newest grade of dental care professional (DCP) in the UK. The first cohort of students started their one-year course on the Yorkshire Orthodontic Therapy Course in Leeds in 2007. It is estimated there are now more than 400 registered orthodontic therapists in UK.

This article, published in the October issue of *BDJ Team*, provides a brief background to the introduction of orthodontic therapists, as well as the real-life experiences of a qualified orthodontic therapist, an orthodontic therapist in training and a workplace trainer.

Workplace trainer Matthew Clare

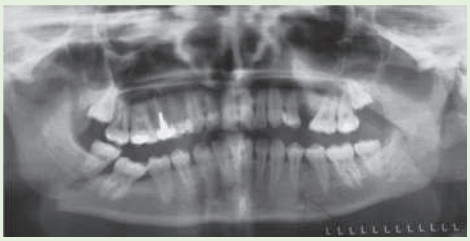
Matthew Clare is a specialist orthodontist and a practice owner. He is also currently training Kerryl, an orthodontic therapist trainee, at his practice:

''Training is great. You get to know your student better, spend longer with patients and expand your techniques. Everything you do, you try to do it at an exemplary standard so that you are a great example to your trainee so it not only benefits them but me as well. And it's great in the long run; patients absolutely love getting that extra time spent on them. Your overall communicated message is that you are investing in patient care. So it's a fantastic opportunity for everybody – practice, patients and therapists. I would recommend trainers to go for it because it's worked so well for me in the long run.'

Read the rest of the article and the other real-life experiences at http://www.nature.com/articles/bdjteam2016154.

Kate Quinlan

Question 1



This radiograph shows:

A. a unilateral fractured left condyle

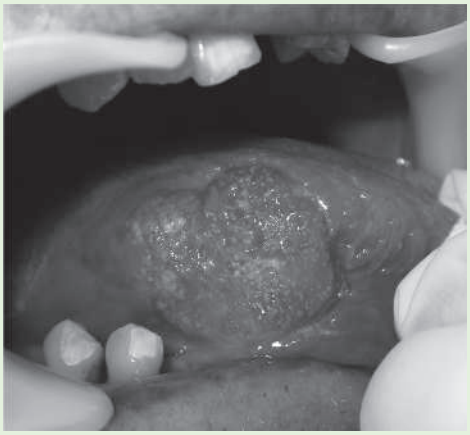
B. a "guardsman" type fracture

C. a bilateral fractured mandible

D. a left mandibular body fracture

E. a left mandibular angle fracture

Question 2



The lesion in the figure below is ulcerated with a firm raised edge; it is likely to be:

A. Erythema migrans

B. Median rhomboid glossitis

C. Basal cell carcinoma

D. Squamous cell carcinoma

E. Traumatic ulcer

Question 3

What is the correct mechanism of action of the following drugs?

A. Amoxycillin acts by blocking cross-linking of the bacterial cell wall

B. Metronidazole inhibits nucleic acid synthesis

C. Clindamycin acts by blocking cross-linking of the bacterial cell wall

D. Doxycycline inhibits protein synthesis by binding to bacterial ribosomes

E. Clindamycin inhibits protein synthesis by binding to bacterial ribosomes

Pastest+

REVISION

Test your knowledge with the following questions from **PasTest**

Answers are on page 37

Question 4

Clinical records for adults should be kept for:

A. 3 years

B. 5 years

C. 7 years

D. 11 years

E. 15 years

QUESTION CLINIC

Chair of the BDA Student Committee **Paul Blaylock** answers your questions on everything from the NHS to finances

Question: *What common issues do students overlook when thinking about choosing a speciality?*

It is very early in your career to be thinking about an area in which to specialise, but some people do have clear plans. That's fine, and it is also not a problem if you aren't yet sure what you want to do and whether you want to specialise. Your plans are likely to become a lot clearer during Dental Foundation Training (DFT), and in the months or years after that. Make sure you find time to speak to an existing specialist or consultant in the speciality which you are considering, and arrange some shadowing now or in your DFT year.

You may not yet have been introduced sufficiently to the area in which you may ultimately specialise. After DFT you can consider Dental Core Training working within a range of specialties to gain further experience and to help you plan your future. A two year longitudinal DFT scheme, such as the GPT Scheme which I run in the North East of England, offers opportunities to experience many specialties alongside your time in practice during DFT.

It is worth bearing in mind that things are changing in the NHS, and more work is going to be done in primary care rather than secondary care in future. Don't forget that you could be a specialist in practice in future, or develop additional skills in a specialised area without becoming a specialist. Many people think of specialising in orthodontics, although this is very competitive. The path to become a consultant maxillo-facial surgeon is very long indeed, obviously including medical school and then many years of postgraduate surgical training.

Question: *Associates are different to salaried staff – do we have the same protection?*

A self-employed associate does not benefit from some of the protections which apply to salaried staff, although they are still protected against clear discrimination. In NHS general dental practice they also still benefit from some aspects normally only available to employed staff, such as the NHS Pension Scheme, maternity/paternity

pay, and relatively generous sickness pay. There are well-recognised tax and National Insurance benefits to being self-employed.

To qualify to be self-employed you must accept some down sides, such as the risk of being paid less or making a loss if you do not meet productivity targets, accepting responsibility for any mistakes, the lack of most employment rights, and the need to provide a locum dentist to work in your place if you can not work yourself. Your role at the practice is less secure than if you were employed. There are some employed dentist roles in general dental practice, which do appeal to some dentists looking for secure posts with reduced risk, especially in the early years after DFT.

Question: *I need financial advice – where can I get this from?*
As Chair of the BDA Student Committee, I know that dental students typically have significant debts. A recent BDA survey found that dental students can expect to graduate with over £60k of debt. Help is available if you are struggling with debt, including Hardship Loans from universities in some cases. It is always worth obtaining good financial advice at all stages of your career, whether to deal with debt, to plan for your future, for making investments, when taking out a mortgage, for protection against life events, or for investment in a dental practice.

The BDA works with Lloyd & Whyte, which provides financial advice tailored for dentists. Find out more at www.lloydwhyte.com/dentists/british-dental-association

Question: *Should I be worried about the current state of the NHS?*
It is certainly true that there is a lot of change underway in the NHS at the minute, and dentistry is not as well remunerated as it once was. The BDA has recently highlighted a 35% fall in primary care dentists' earnings in real terms over the last decade. Prototypes are testing future potential contractual arrangements in primary care based around a preventative approach, and they have recently run into some difficulties, but the underlying concept is popular with dentists and patients.

The junior doctors' and dentists' contract which appears set to be imposed makes significant changes to terms and conditions for dentists in hospital training posts, and this presents a further challenge to dentists at this time.

However, there are many dentists out there delivering excellent care to their patients on the NHS. There are still plenty of opportunities for you within the NHS, and you will probably want to consider how you can deliver more private treatment over the coming years too. The BDA is campaigning through its relevant craft committees to ensure the best possible deal for dentists in whatever field of dentistry they chose to practise.

'Don't forget that you could be a specialist in practice in future, or develop additional skills in a specialised area without becoming a specialist'

Question: *What if the equipment I use is different to the equipment I've trained with throughout my undergrad life?*
You will undoubtedly find that the equipment, materials, laboratories, protocols and many other things are different in your DFT practice from your time as an undergraduate. However, the principles which you have learned are as relevant as ever, and the differences are generally fairly minor. The transition to practice is made every year by around 1,000 new graduates, and it seems to work out for them, so you will probably be fine too. You will be supported by your Educational Supervisor (ES) in DFT, and of course your own dental nurse, a luxury not normally experienced to any significant extent at dental school.

Question: *I've read a lot about stress. How much of a problem is it in the profession?*
The BDA acknowledges that this is a problem within dentistry, partly due to the pressure of delivering dentistry under the current NHS system including UDAs in primary care, and also due to concerns about making mistakes. In recent years there has been a significant increase in dental litigation and in cases referred to the GDC, although thankfully this now appears to have plateaued. Recent graduates are less likely than average to face a GDC investigation.

The BDA has been putting pressure on the GDC to improve their fitness to practise system and general approach, to ensure the fear felt by many dentists can be reduced. This should contribute to reducing stress levels as positive signs start to emerge from the GDC.

The BDA is also currently undertaking some detailed research on dentists' stress levels, and the reasons behind this stress. This research should lead to further improvements in the near future. We are working with partner organisations to ensure that where necessary dentists have access to the help they need.

Question: *Who can help me check a contract?*
When it comes to accepting your first associate job, make sure that you remain a BDA member. There is plenty of helpful advice available to you at that stage, and throughout your career. All BDA members, including at *Essential* level, have access to a contract checking service. Our advisers will undertake a detailed review of any individual contract and provide you with feedback about any areas which need to be further explored with the potential practice owner, and potentially altered, before signing the contract and starting to work in the practice.

Question: *What if I make a mistake on my first day in practice treating a patient?*
These things can happen, and of course it can be upsetting if a mistake is made at so early a stage. Any mistakes you make on that day have most likely been made hundreds of times before by others during the early stages of DFT, and they are unlikely to be serious. The close support of your ES at that stage tends to prevent most mistakes, and if something goes wrong they can normally find a way to fix things for you, either through providing guidance or intervening themselves where necessary. You will have a detailed induction and a gradual start to seeing patients in practice. Make sure you work within your level of competence at all times.

If something does go seriously wrong, then you will be supported by your ES, and

where necessary by the Training Programme Director (TPD) for your scheme. As a TPD I would certainly arrange to meet you to discuss how to resolve any issues, and to help your ES devise a detailed action plan if a significant training need has been identified. It is highly unlikely that such an issue would turn into litigation or a referral to the GDC.

Question: *If there was one thing you would do differently during your time at university, what would it be and why?*
I'm not sure I can think of much I would have wanted to do differently during university which was under my control, but I wish that our curriculum at that time had included some of the more recent developments. The increased focus on professionalism, communication skills, and a range of soft skills are very valuable to assist with the transition from undergraduate to DFT. These skills improve patient experience and patient satisfaction, and help to minimise complaints and therefore stress for dentists. We did not have any outreach teaching either, which is also particularly helpful in helping you understand to some extent what it is like to work in primary care.

Question: *There are so many associates out there. What if I don't find a job?*
The latest BDA data on dental recruitment is showing signs of increasing difficulty in recruiting associates in several areas of the UK. This would suggest that you should be able to find a job as an associate after DFT, although admittedly not always where you would most like to work, and not always earning the amount which you might aspire to earn. Some of the more remote and more deprived areas tend to have more vacancies for dentists.

'There have been suggestions that there will be an oversupply of dentists in the medium term, which has already resulted in a reduction in the number of new dental students nationally'

When applying for associate jobs in the early stage of your career, remember that practice owners will be looking for someone who presents themselves well in a CV or application form, and in person. Strong communication skills will once again be very helpful in this respect. Networking with local dentists, including through participation in your BDA Branch events and your Local Dental Committee, will help you to become aware of any vacancies which do exist in your area before they are advertised widely. An increasing number of young dentists enjoy working part-time in more than one practice to achieve the overall volume of work which they desire, rather than having to find one full-time position.

The dental workforce is in a state of flux at present, and there have been suggestions that there will be an oversupply of dentists in the medium term, which has already resulted in a reduction in the number of new dental students nationally of around 10% annually. Taking into account the increasing use of skill mix involving the whole dental team, the changing pattern of dental disease, the ageing population, and different expectations of dentist work-life balance, it is very difficult to predict the future, but at present there does not appear to be an excess of dentists. To keep yourself ahead of others in line for associate jobs, it is worth considering additional training in due course, but perhaps not the week after you start in a DFT post. ■

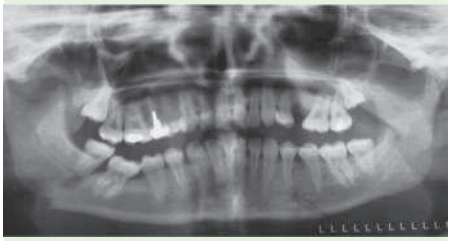
REVISION

Answers for revision questions from PasTest

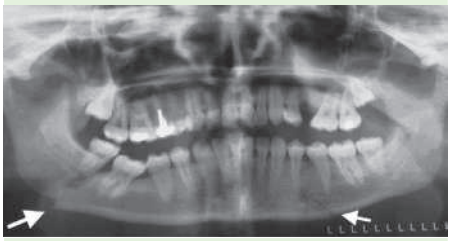
Questions are on page 33

Question 1

This radiograph shows:



A. a unilateral fractured left condyle
B. a "guardsman" type fracture
C. a bilateral fractured mandible
D. a left mandibular body fracture
E. a left mandibular angle fracture



ANSWER

This is a dental panoramic radiograph showing a bilateral fractured mandible. One fracture is through the right angle and the other through the left body of the mandible. The condyles appear intact with this view. A "guardsman's" fracture involves bilateral fractured condyles with a symphyseal fracture. It is essential to use two images.

Question 4

Clinical records for adults should be kept for:

A. 3 years
B. 5 years
C. 7 years
D. 11 years
E. 15 years

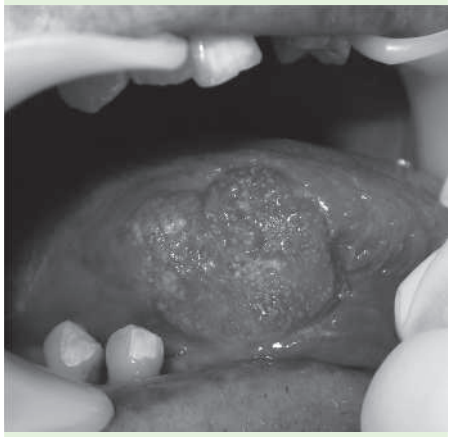
ANSWER

All clinical records should be kept for 11 years for adults. For children, clinical records should be kept until the individual is 25 years old or for 11 years, whichever is longer.

Pastest

Question 2

The lesion in the figure below is ulcerated with a firm raised edge; it is likely to be:



A. Erythema migrans
B. Median rhomboid glossitis
C. Basal cell carcinoma
D. Squamous cell carcinoma
E. Traumatic ulcer

ANSWER

This picture shows an ulcerated area on the lateral border of the tongue. The ulcer is raised with rolled margins. Squamous cell carcinomas of the tongue may present as an ulcer with raised rolled edges. The ulcers are firm to the touch and fixed to surrounding tissue. Erythema migrans (geographical tongue) is seen as smooth red areas on the dorsum of the tongue. Medial rhomboid glossitis is as the name suggests in the mid line of the dorsum of the tongue. Basal cell carcinomas are skin lesions. Traumatic ulcers do not have a raised rolled edge and are often covered in a yellowish slough.

Question 3

What is the correct mechanism of action of the following drugs?

A. Amoxycillin acts by blocking cross-linking of the bacterial cell wall
B. Metronidazole inhibits nucleic acid synthesis
C. Clindamycin acts by blocking cross-linking of the bacterial cell wall
D. Doxycycline inhibits protein synthesis by binding to bacterial ribosomes
E. Clindamycin inhibits protein synthesis by binding to bacterial ribosomes

ANSWER

Penicillins inhibit bacterial cell wall synthesis by blocking cross-linking. All b-lactam antibiotics have a similar mode of action. Macrolides (e.g. erythromycin), lincosamides (e.g. clindamycin) and doxycycline inhibit bacterial synthesis by binding to bacterial ribosomes.

FROM CLASSROOM TO PRACTICE

Top tips for starting and making the most of your foundation training year

For those of you just starting your dental foundation training year, it can be an exciting, if not a little bit nervy time. You're about to start a new job, with a new team and potentially be in a new area also. **Ollie Jones** has just finished his foundation training, and here are his pearls of wisdom to help you make the most of your upcoming year.

1 Make an effort with your Scheme

We were really lucky on the Portsmouth Scheme in that we had a really sociable group of young dentists. There are a lot of opportunities to get to know your scheme that are organised by your deanery. For us that included a residential in the first few weeks of our training, 40 study days throughout the year and the highlight of it all, the BDA Conference. Don't just rely on deanery organised days to meet up with your scheme, organise your own events at the weekend too!

2 Use your free time wisely

The importance of putting time into your own personal development has only become apparent now that I've been applying for jobs after foundation training. If you take the time now to develop your CV, you won't have to worry as much when it comes to applying for jobs in the not too distant future.

Ways of developing and adding to your CV can include:

- Shadowing local specialists to gain an insight into more specialised areas of dentistry
- Attending non-deanery organised courses to help develop your clinical skills further
- Document interesting cases that you have encountered in practice
- Writing articles to be published in dental magazines.

Invest your free time now to help you in the future!

3 Familiarise yourself with the practice

It can be a little bit daunting starting work in a new practice with a new team, so make sure you take your time getting acquainted with all of the various members. You want to be comfortable working in the


©sturti/E+/Getty Images Plus

team, and the best way to do this is by getting to know everyone.

Make sure that you take time getting used to new equipment also, chances are you will not be using the same equipment and materials as you did at dental school. Try to be open minded to using new techniques that your trainer may use – there's more than one way to do most things in dentistry.

4 If you're not sure, ask

Your trainer is there to help you through the year in clinical and non-clinical problems. I've learned a huge amount clinically from my trainer and we still regularly discuss cases that we both have. There's no such thing as a stupid question.

Throughout the year you will start to realise that there is more to dentistry than the clinical aspect. Areas such as finance, pensions, contracts and complaints will all become apparent through the year. I don't believe these areas were taught particularly well at dental school. You will have study days on these areas, but take time to ask people at your practice about them as they're just as important as the clinical aspects of dentistry.

'Remember that you will likely have to pay more in rent now and you will have a second lot of GDC fees to be paying in December.'

5 Practice on extracted teeth

Patients tend to think you're a little weird when you ask them 'Oh can I keep this tooth to practice on?' But whether it be for your access cavities, familiarising yourself with new equipment or materials or practicing your indirect preparations, it is really helpful.

6 Get to know your lab

You can learn a lot by communicating with your lab, and even by going to visit them. They are able to give you hints and tips on how to take better impressions (I'm sure we would all find that useful), indications for the use of certain materials and even the best way to cement or bond different materials. The technicians really are a wealth of knowledge and it can be useful just to pick up the phone and speak to them about a difficult case you may be having.

To some extent, you have free reign on materials that you ask the lab to use as you are not the one footing the bill. But please ask your principle first before requesting an expensive material, you don't want to surprise them with a huge lab bill!

7 Don't get disheartened if something doesn't go to plan

Practice is not the same as dental school, things don't always go to plan and I found this the steepest learning curve this year. Not everything you do in practice will be perfect, often the situation won't allow for perfection, but as long as you've done the best you can, that's all anyone can ask for. You need to develop a thick skin in our career, and the sooner you are able to do this, the easier your career will be.

8 Take the opportunities presented to you

Most societies offer cheaper memberships to young dentists, so take advantage of online webinars and conferences that they offer at a fraction of the price.

Your study days will often be held by renowned lecturers and clinicians in their field, so glean as much knowledge as you possibly can from these people, usually their study days cost a lot of money!

Again, specialist practitioners in your local area are usually very accommodating allowing you to visit and see how their specialist practice works, this is a great opportunity to take when you are still trying to forge your own path in the dental world.

9 Explore the area if you're somewhere new

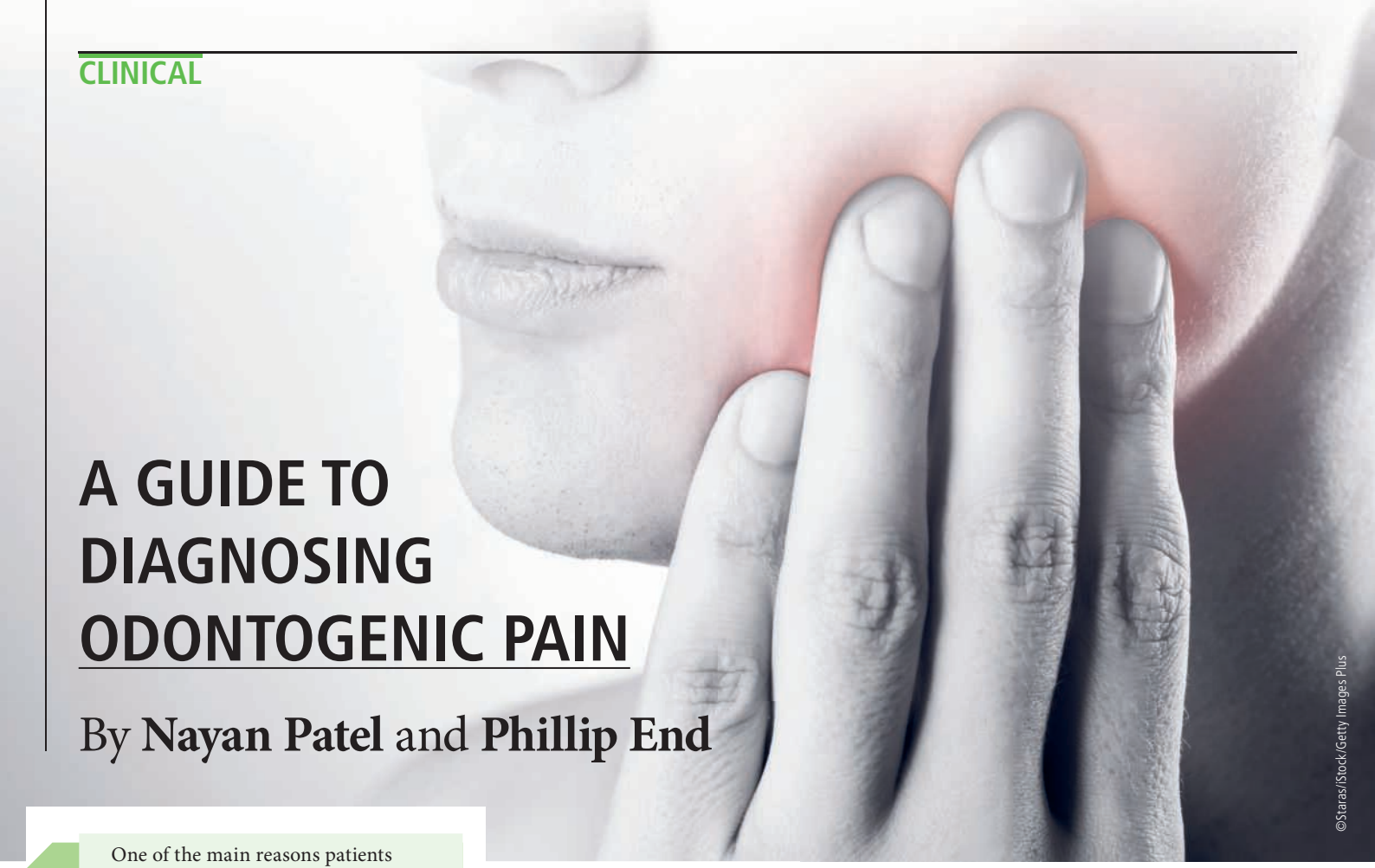
Life is not all about dentistry – you need to make the most of your time off and your weekends. Make sure you take regular holidays, visit your friends if they're in different parts of the country. Try and do something new every couple of weeks. I moved down to the coast after university and have loved every minute of being able to take a 5-minute walk from my flat out to the beach.

10 Be aware financially!

Enjoy finally getting paid by treating yourself every so often, you've worked for five hard years to get here so you do deserve a treat! A lot of colleagues treated themselves to a set of loupes in their foundation year!

But try not to squander all of your money in your first 12 months. Remember that you will likely have to pay more in rent now and you will have a second lot of GDC fees to be paying in December. Try and actually amount some savings this year. I know it sounds boring but when you come to the end of the year, you will really appreciate them.

Your foundation year is the perfect chance to learn and develop in practice before heading out into the real world of dentistry. Take the opportunities presented to you throughout the year and try to enjoy it as much as possible. It really is a great fun year and can be ever so rewarding!



A GUIDE TO DIAGNOSING ODONTOGENIC PAIN

By **Nayan Patel** and **Phillip End**

INTRODUCTION

One of the main reasons patients require dental attention is due to pain, and a majority of the time, this is odontogenic in nature. Having a sound understanding of the development of dental disease allows us as medical professionals to diagnose and manage patients appropriately.

When presented with a patient in pain, we as students are quick to panic and think of an array of questions to ask that will help to reach a suitable diagnosis. Many of us are aware of the acronym SOCRATES which lists certain aspects to cover when taking a pain history. However, we know that from this, it is necessary to then extrapolate the relevant information which can help diagnose the cause of the pain. Basically, there's a lot going on. This process can sometimes prove inefficient and from personal experience, for a patient sitting in the chair in pain, it becomes rather alarming for them if you are repeating the same long winded process for several different teeth. This poses the question… Is SOCRATES truly a means to an end?

UNDERSTANDING THE PATHOLOGY

We have looked at a method which involves following a series of questions which will help to eliminate the impossibilities and narrow down the possibilities for common causes of odontogenic pain (Figure 1). It is important to note that the flowchart is a guide to diagnosing the common causes of odontogenic pain as these diagnoses can be multi factorial. Refer to Figures 5 & 6 to confirm your diagnoses.

CONSIDERATIONS

In an ideal world the patient would be fully aware of the symptoms that they have been experiencing and will be able to convey them in a coherent manner, allowing you to follow the questions as shown in Figure 1. It would also be ideal if there was no biological variation which could cause an overlap in symptoms. However, we know that this is far from the case. This reinforces the importance of using special tests to help confirm your definitive diagnosis once your provisionals have been made. Furthermore, the following factors should also be considered:

- Multiple teeth involvement: Before assuming that the pain is poorly localised consider the fact that multiple teeth may be affected which could be causing pain in multiple areas rather than poorly localised pain due to the pathology. Local anaesthesia can often be used to eliminate certain origins of pain
- Root morphology: It is also important to note that root morphology will affect your results. In a multi-rooted tooth, only one root may have symptoms of acute apical periodontitis. This could lead us towards signs of a vital tooth, but the prognosis may not always be the same [3]
- Iatrogenic causes: Pain may also be caused iatrogenically, e.g. placing a large restoration can irritate the pulp. This will therefore present with hypersensitivity to thermal tests indicating reversible pulpitis. It is also worth noting that this could be irreversible
- Pulpal sclerosis: Radiographs are an important diagnostic tool and can help differentiate between two possible diagnoses, e.g. a tooth showing signs of irreversible pulpitis and a sclerosed pulp
- Bruxists: The patient may be a bruxist or their diet and lifestyle may elicit tooth erosion and abrasion. Bruxists specifically may experience low grade intermittent pain as a result of occlusal trauma, especially on teeth which have non-working side contacts. If the pain cannot be attributed to stimuli such as: sensitivity to hot/cold or tenderness to palpation or percussion, and there is no radiological evidence of pathology, assess non-working side interferences and adjust accordingly. Furthermore, these habits may lead to long term exposure of the pulp and present with sensitivity[5]
- Cracked Tooth Syndrome (CTS): If the cause is CTS then the patient may experience pain on biting if there has been separation of the dentin as this causes fluid movement within the tubules. It will differ from the symptoms of periapical inflammation

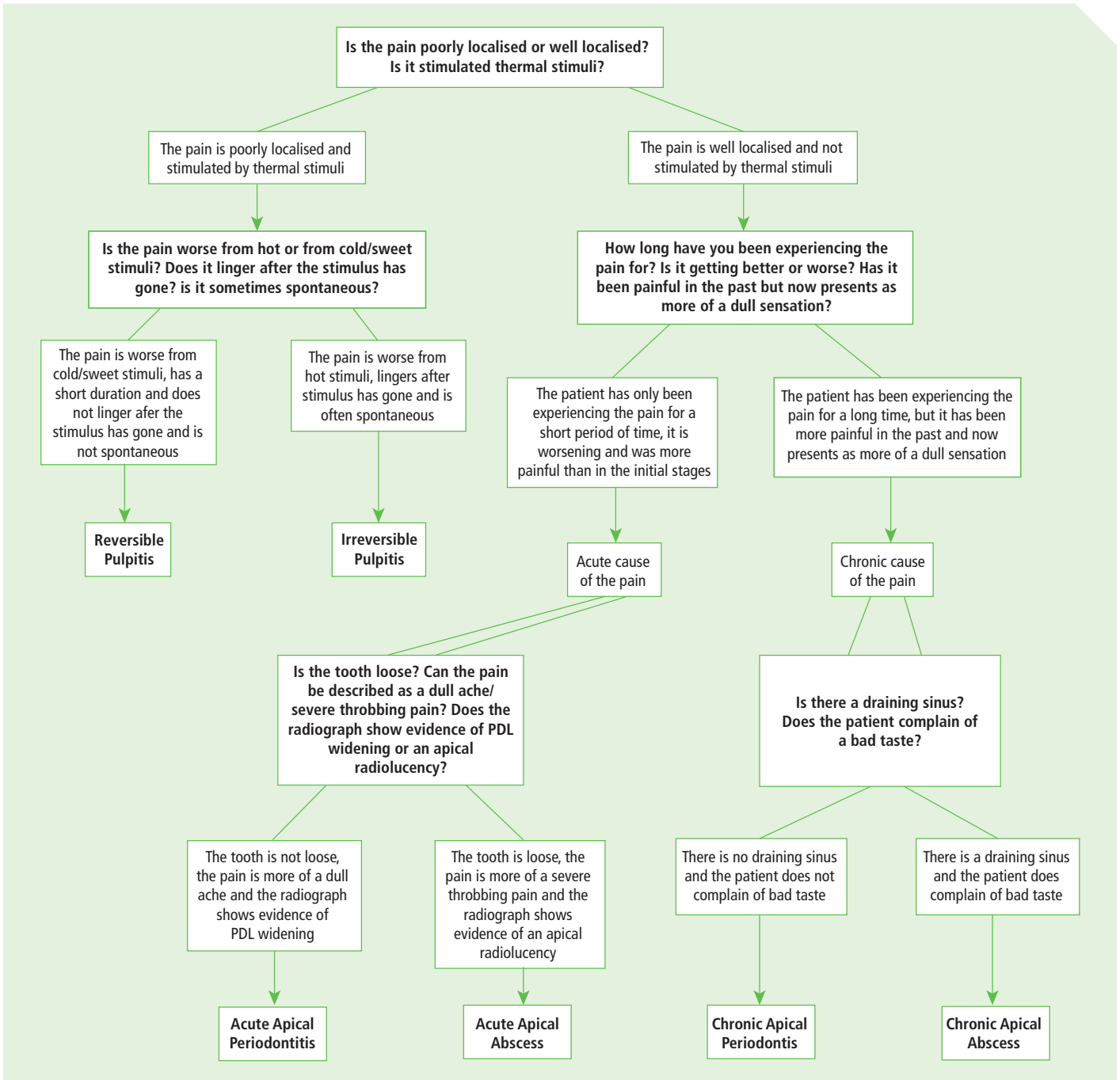


Fig. 1 Flowchart illustrating a guide to diagnosing common causes of odontogenic pain [1,2]

as the pain will not linger after the stimulus has been removed. Typically, patients experience pain either on application or release of pressure. Eventually, the tooth (usually vital) will develop symptoms of reversible pulpitis and if left untreated, CTS can elicit irreversible pulpitis. Diagnosis can be confirmed by using a tooth sleuth however the symptoms are sporadic and the tooth in question may not always cause pain on occlusion [1,6-9]

- Tenderness to percussion: A positive tenderness to percussion test leads you towards ligamentous pain. It can indicate apical pathology, lateral (periradicular) pathology or vertical root fracture. A periapical radiograph will help reach a definitive diagnosis[10]
- Pain at night: The question which ponders as to whether the pain is worse at night should help indicate the severity of the active inflammation, more so than aiding in diagnosis. Pain can often be greater when supine as a result of increased blood flow and pressure in the head or increased sinus pressure. Another factor that may play a part is general awareness of the pain at night time. During a routine day, one may simply not pay as much attention to the pain, making it feel worse at night when relaxed. Finally, if the choice of meal before bed consists of hot, starchy, acidic or sugary contents, soreness and pain may be more pronounced [9]. The answer given by the patient in response to pain at night suggests whether more emergency treatment is required or not

SPECIAL TESTS

When using diagnostic aids to subsidise your diagnostic investigation it is important to use control teeth as a comparison for the suspect teeth. This calibrates the test. Additionally, even though pulpal pain can be generalised along a dental arch, it cannot cross the midline [2], so it may be more

beneficial to select control teeth from the opposite side of the mouth.

Percussion

Method:
Tap the occlusal or incisal tip with the opposite end of an instrument, such as a mirror [3,11,12].
Result:

- Sharp pain indicates periapical pathology

Palpation

Method:
Apply pressure on the mucosa which overlies the apex of the suspect tooth [3,11].
Result:

- Pain indicates periapical pathology or periodontal disease. Normally, pain is a result of abscess formation
- Swelling indicates: abscess, periapical granuloma, apical cyst or cellulitis [9,13]

Cold Stimulation

Method:
Dry and isolate test and control teeth. Apply a cotton wool pledget with ethyl chloride.
Result:

- A short pain which does not linger after stimulus is removed indicates reversible pulpitis
- Pain relief can potentially indicate irreversible pulpitis
- A lack of response indicates necrotic pulp

It is important to realise that a false negative may occur if the dentinal tubules have sclerosed and a false positive may occur if the cold sensation is transferred to the adjacent teeth or gingiva [3,4,9,11].

Heat Stimulation

Method:
The use of a rotating dry rubber prophy cup will produce frictional heat when applied to the tooth [3,9,11].
Results:

- A sharp response which does not linger may indicate healthy pulp
- An intense response which lingers is more likely to indicate irreversible pulpitis

The pain fibres that are stimulated during the pulpal inflammatory reaction reflect the type of pulpitis. A change in haemodynamic pressure in the dentinal tubules and accumulation of inflammatory cells either translates to a reversible or irreversible type of pain [4,11]. Fast acting Aδ nociceptors are stimulated during an acute more reversible stimulus, presenting with a short sharp pain however deeper slow acting C fibres are stimulated to bring about a persistent dull ache in irreversible pulpitis [4,11]. As the inflammation spreads towards the rigid walls of the root canal system, the increase in pressure collapses the vasculature of the tooth and exacerbates the sensitivity and pain

Electric Stimulation

Method:
Apply prophy paste to the electrode to aid conduction and ask the patient to hold the electrode before applying it to the tooth [4,9,11]. Note down the value at which a response is initiated.
Result:

- An absence of a response or a higher value compared to the control tooth will indicate a necrotic pulp

False positives may occur with large restorations (particularly amalgam), in multi-rooted teeth and where suppuration is present. False negatives may also present if the dentinal tubules are sclerosed.

Periodontal Probing and Mobility

Method:
Take a detailed pocket chart (6 point pocket chart) to record periodontal pockets that are deeper than 5mm. Use mobility index to grade the mobility of the teeth [3,11,12]
Results:

- Pockets >5mm indicate periodontal disease; therefore gingival inflammation and possible root dentine exposure are likely to be part of the cause of the patient's pain
- Tooth mobility can also show signs of periodontal disease due to the loss of bone causing the tooth to be mobile within the socket

PERIAPICAL RADIOLUCENCIES [3,11,9]

After taking a radiograph, it is easy to jump to conclusions with regard to diagnosing periapical pathology (see Fig. 3). It is important to note that an abscess is not the only possible differential diagnosis. Where patients leave lesions untreated, either the infection spreads or a chronic inflammatory process occurs.

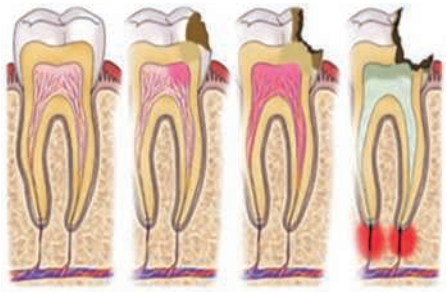


Fig. 2 Sequelae of disease from health (left) through pulpal tissue to induce apical pathology (right).[4]

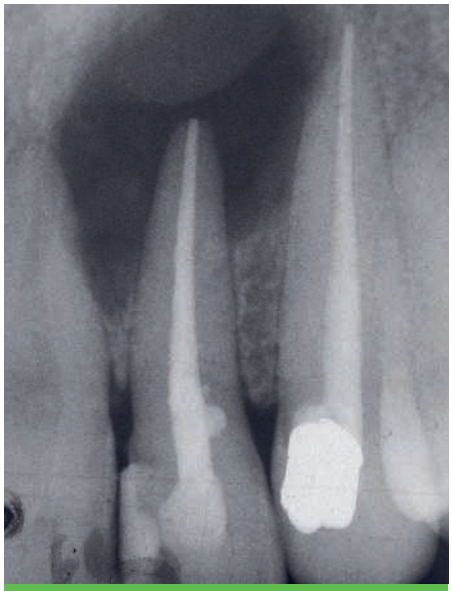


Fig. 3 Periapical Radiolucency
(Radiograph courtesy of Dr. P. L. Tomson)

During chronic inflammation, a granuloma or cyst is formed. A granuloma can be described as a collection of inflammatory cells in an area of infection. A cyst is a pathological cavity containing fluid or semi-fluid contents, no pus. It forms as a sequelae of a granuloma if it becomes epithelialised by either odontogenic or non-odontogenic origin.

Although granulomas and cysts are said to be seen under the umbrella term of chronic inflammation, secondary acute inflammation can occur in these lesions.

Figure 4 – Periapical Radiolucencies [3,10,11]

	Abscess	Granuloma	Cyst
Present with:	Acute/chronic inflammation	Chronic inflammation	Chronic inflammation
Symptoms	Painful when acute & often asymptomatic when chronic	Usually asymptomatic but percussion and acute flare up can be painful	Usually asymptomatic but percussion can be painful
Radiographic appearance	No distinct margin on radiograph	Corticated margin on radiograph	Defined margin and usually greater than 10mm in diameter

Figure 5 - Pulpal Pain [1,3,6-9,11,13]

Health of Pulp	Symptoms	Special Test				Treatment
		Pulp Tests	Percussion	Palpation	Radiographic	
Normal	**Insignificant**	**Normal response**	**No pain**	**No pain**	**No abnormal findings**	**Nil**
Reversible Pulpitis	Sharp pain Poorly localised Pain does not linger after stimulus removed Usually no pain at rest	Sharp pain to cold, sweet stimulus	Tooth may/may not be tender to percussion (tender if occlusal trauma is a factor)	No pain	Possible radiolucencies in crown suggesting caries	Treat depending on cause: Caries Exposed dentine Cracked tooth syndrome
Irreversible Pulpitis	Throbbing pain Patient may not be able to locate pain until later stages (when periodontal ligament is involved) Spontaneous pain Pain will linger after stimulus removed Patient kept awake at night	Pain often on hot rather than cold or sweet stimulus - cold stimulus may ease pain indicating progression to pulpal necrosis	May be tender to percussion (if inflammation has spread to the PDL)	No pain	May notice condensing osteitis	Endodontics Extraction
Necrotic Pulp (Has some overlap with periapical conditions)	May be asymptomatic (will have a history of pain) Can have spontaneous pain	Not responsive (May notice some response in multi-rooted teeth)	May be tender to percussion	May be painful	May see apical radiolucencies	Endodontics Extraction

These can be referred to as phoenix abscesses and flare up causing severe throbbing pain. Without successful endodontic treatment or tooth extraction, the patient is at risk of the infection spreading [10].

Periapical lesions must therefore be treated to prevent the spread of infection, causing oro-facial pain. An abscess, which is a collection of pus can either stay within the bone, spread through the cortex or spread laterally into soft tissue spaces. Infection can therefore spread sublingually, submandibularly, into the buccal spaces and can even affect the muscles of mastication. This can often cause airway obstruction and trismus. This spread of infection is known as cellulitis - diffuse inflammation without necrosis and localisation of pus and presents as vast swellings which require drainage and possibly antibiotics.

It can be very difficult to diagnose whether pain is a result of an abscess, granuloma or cyst without resection and histopathological studies. However, granulomas are responsible for pain for over half of the cases (see Fig. 4).

OTHER COMMON DIAGNOSES

Condensing osteitis (focal sclerosing osteitis):

Another abnormal radiographic presentation which is attributed to an inflammatory condition of bone - condensing osteitis. It is characterised by bony sclerosis which occurs secondary to long standing low grade periapical inflammation, and therefore presents radiographically as a radiopacity [12,14].

Pericoronitis:

This is caused by inflammation of the operculum overlying a partially erupted tooth. Therefore, it presents clinically as a swelling with a throbbing, intermittent pain which is potentially exacerbated on occlusion and responds to thermal stimuli[2]. With recurrence extraction should be considered, however primary treatment includes oral hygiene advice supplemented by anti-inflammatories and a course of antibiotics if indicated [9,12].

ANTIBIOTICS

It is important to note that we have not indicated a definite need for antibiotics following diagnosis of an acute or chronic dento-alveolar infection or pericoronitis [9,15]. A study undertaken in 2011 reported that over 40% of dentists inappropriately prescribed antibiotics with reference to the recommended guidelines outlined by FGDP (UK); Antimicrobial Prescribing for General Dental Practitioners. These guidelines outline when and how antimicrobials should be prescribed as part of a treatment plan and when they are contraindicated. Recent research carried out by Lord Jim O'Neilland published by the BBC portrays the overuse of antibiotics. It has been predicted that superbugs will kill someone every three seconds by 2050 as a result of over prescribing and subsequent resistance[16]. It is therefore imperative for students to recognise the significance that antibiotic resistance could impose on their practicing lives.

CORRECT APPLICATION

The guide we have illustrated is a useful tool to differentiate between odontogenic and non-odontogenic pain [5,17]. If the pain does not fit a specific set of criteria attributed to dental pain and the clinical testing you have undertaken does not invoke a dental explanation for the pain, then it is worth considering non-odontogenic causes of the pain. Non-odontogenic disorders can be confirmed by asking the patient if pain is relieved with the use of anti-inflammatory analgesics. If infection is present, pain will subside with anti-inflammatories. If the pain persists after the use of anti-inflammatories, neuropathic pain must be considered, for example: trigeminal neuralgia, headaches, vascular pain syndromes or maxillary sinus disorders.

Knowledge of these is important, however it is not within our scope of practice to treat these diseases. Therefore, referral to a medical professional, neurologist or other relevant specialist is routinely advised.

SUMMARY

A well recognised medical diagnostician known as Harvey McGehee stated that: 'In making the diagnosis of the cause of illness in an individual case, calculations of probability have no meaning. The pertinent question is whether the disease is present

Figure 6 - Periodontal Pain [1,11,13,15]

Health of Periodontium	Symptoms	Special Test				Treatment
		Pulp Tests	Percussion	Palpation	Radiographic	
Normal	Insignificant	Normal response	No pain	No pain	No abnormal findings	No treatment necessary
Acute apical periodontitis	Dull ache Well localised Severe spontaneous discomfort Tooth extruded	Vitality suspect – responds to thermal stimulus	Pain on biting Tender to percussion	Variation of swelling and pain dependent on extent of spread	May have widening of PDL	Endodontics Extraction
Chronic apical periodontitis/ apical cyst	May be asymptomatic Usually not as painful Tooth extruded Tooth may feel different	Non-vital	Dull to percussion	Tender to palpation	Apical radiolucency	Endodontics Extraction
Acute apical abscess	Severe throbbing pain Well localised Rapid onset Worse when lying down Keeps patient awake Malaise Tooth extruded/ loose	Non-vital	Tender to percussion	Very tender Mucosa may be red Possible swelling	Apical radiolucency	Drainage (Buccal/Palatal incision) Endodontics Extraction *Consider antibiotics
Chronic apical abscess	May be asymptomatic History of pain Tooth may feel different Tooth extruded May complain of bad taste May have a draining sinus	Non-vital	May be tender to percussion	May be tender to palpation	Apical radiolucency	Drainage Endodontics Extraction
Lateral Periodontal Abscess	Dull ache Well localised Pressure in gums Variation in severity of pain Tooth may be extruded/ loose	Vitality suspect	May be TTP if apical tissues involved	Very tender swelling	Radiolucency lateral to the root - less likely to be visible if lesion more superficial/ not in interproximal areas	Subgingival instrumentation of root surface to establish drainage Extraction if prognosis poor

*Antibiotics may be considered in the following situations: management of acute or chronic dento-alveolar infections presenting with pyrexia, acute aggressive forms of periodontal disease including aggressive periodontitis and ANUG; abscesses causing systemic illness - fever, malaise, lymphadenopathy; when the infection is spreading and causing cellulitis; trismus; and in medically compromised patients whom cannot be treated immediately [9]. Refer to FGDP (UK) Guidelines [15].

or not. Whether it is rare or common does not change the odds in a single patient. If the diagnosis can be made on the basis of specific criteria, then these criteria are either fulfilled or not fulfilled'[17].

Our interpretation of the underlying lesson that should be learned from McGehee, is that we should assess each incidence of pain on a case by case basis. We should make no assumptions and use our knowledge of how the symptoms reflect the underlying pathology to diagnose accurately and reliably.

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