

BDJ Team

MAY 2017

What is
SAFEGUARDING?

May 2017

CPD:
ONE HOUR

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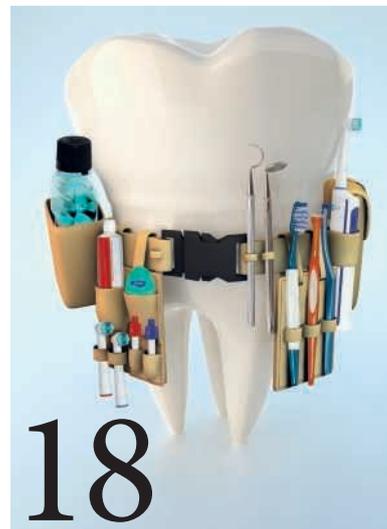
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Ed's letter



The GDC's *Standards for the dental team* states that all dental professionals must 'raise concerns if patients are at risk'. What should you look out for and how would you go about raising concerns?

This May *BDJ Team* is pleased to publish a headlining article by Priya Sharma on the recommended CPD topic of safeguarding children, young people and vulnerable adults. Check your reading of this article by visiting our CPD Hub and completing one hour of verifiable CPD: <http://bit.ly/2e3G0sv>.

In the paediatric sphere of dentistry DCT Shaadi Manouchehri focuses on a positive experience for the child dental patient: first impressions, communication and managing anxiety about dental treatment. Read Shaadi's guide to a team approach to child patient management. 'A warm and welcoming reception team with a positive attitude would help the patients be more at ease,' says Shaadi.

Continuing with our recent theme of looking at oral health related to specific patient conditions, this month we look at inflammatory bowel disease. *BDJ* authors Chandan and Thomas investigate how anti-inflammatory medications taken to manage Crohn's disease and ulcerative colitis can have side effects that affect the oral cavity.

We also delve into the background or daily routine of three dental nurses: Michelle, Michaela and Farzana, each very different but all with a passion for their roles in dentistry.

Recently we have been sharing a 'top six' list of our most popular recent articles on social media. If you wish to check that you haven't missed anything, or if you would like to comment on anything published in *BDJ Team*, pop along to www.facebook.com/bdjteam and 'like us'.



Farzana is in the spotlight p20

Kate

Kate Quinlan
Editor
k.quinlan@nature.com

Queen of the cogs p15

[bdjteam201771](https://www.facebook.com/bdjteam201771)

THE TEAM

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British Dental Conference and Exhibition 2017: Top picks for DCPs

Time	Name of session	Location
Thursday 25 May 2017		
10:00-10:30	Tooth whitening - the perspective of a dental hygienist and therapist, by Diane Rochford	Professional development theatre
11:00-11:30	NLP techniques to improve communication with patients, by Christine Macleavy	Professional development theatre
11:30-12:15	Dental medical emergencies: what to use and when to use it, by Peter Whiteford CORE CPD	Demonstration theatre
12:00-12:30	Safeguarding - your responsibilities as dental professionals, by Joanna Nicolas CORE CPD	Professional development theatre
16:30-17:30	Safeguarding children and young people: topical topics, by Jenny Harris CORE CPD	Charter Rooms 2 and 3 combined
Friday 26 May 2017		
10:00-10:30	Hypnosis in dentistry - dealing with anxiety, fear and phobia, by Christine Macleavy	Professional development theatre
10:00-10:45	Dental medical emergencies: accessibility, paediatric and bariatric, by Peter Whiteford CORE CPD	Demonstration theatre
11:00-11:30	The role of the dental nurse in providing prevention in practice-based clinics and the wider community, by Jane Dalgarno	Professional development theatre
12:00-13:00	Diet and nutrition with oral health, by Anna Larkham	Charter Rooms 2 and 3 combined
14:00-14:30	Complaints - prevention is better than the law, by Richard Birkin CORE CPD	Professional development theatre
15:00-15:30	The long-term benefits of mentoring - both as mentor and mentee, by Janine Brooks MBE	Professional development theatre
15:30-16:15	Use of dental acupuncture for relaxation and prevention of gagging, by Christine Macleavy	Demonstration theatre
16:00-16:30	Patient feedback - the key to a successful practice, by Lisa Bainham	Professional development theatre
16:15-17:30	Medical emergencies in the dental practice, by Phil Jevon CORE CPD	Charter Room 1
17:00-17:30	Extended duties for DCPs, by Bev Littlemore	Professional development theatre
Saturday 27 May 2017		
10:00-10:30	A team approach to dental radiography and radiation protection, by Graham Hart CORE CPD	Professional development theatre
11:30-12:15	Dental medical emergencies: anaphylaxis in the dental setting, by Peter Whiteford CORE CPD	Demonstration theatre
12:00-12:30	Aftercare of cancer patients - practical tips for the dental team, by Jocelyn Harding	Professional development theatre
15:00-16:00	Preventing and managing complaints, by Hazel Adams and Michelle Williams CORE CPD	Charter Room 1
15:00-16:00	The role of the team in the diagnosis, treatment and rehabilitation of oral cancer patients, by Andrew Baldwin CORE CPD	Professional development theatre

For further details and to register, visit www.bda.org/conference.



EXPANSION AND LUXURY MAKEOVER FOR LONDON PRACTICE

The Connaught Village Dentistry practice in London has transformed its branding and expanded its services in order to better meet the needs of its growing patient base.

The transformation has seen new luxury décor and increased Saturday services, as well as the recruitment of specialist multi-lingual clinicians and discounted prices for new patients.

Paula Pornaris, Practice Manager at Connaught Village Dentistry, said: 'Connaught Village Dentistry has always

been a beautiful practice that prides itself on providing a peaceful, tranquil and comfortable environment for patients. The recent makeover has enhanced this even further and we've worked really hard to enhance our luxury, high-end experience. We're delighted to be finally unveiling our new look.

'We always strive to give patients the best experience possible. From initial consultation, right the way through to our aftercare programme. As well as a new look clinic, we have also attracted

new staff members to augment our highly experienced team.'

Based at 48 Connaught Street, the clinic forms part of Oasis Dental Care's Platinum group of practices, and the Connaught Village team recently hosted an official re-opening ceremony where new and existing patients were able to learn more about its wide array of dental treatments.

BSP CONFERENCE 2017 TO FOCUS ON PERFORMANCE

This year's British Society of Periodontology (BSP) annual conference is based on the theme of 'Performance!' with a clear focus on inspiration, innovation and pushing the boundaries in periodontal treatment.

The event will be held at King's Place in London on 22 and 23 June and will start each day with keynote speakers Dr Dan Martin of UCL Extreme Everest and Baroness Tanni Grey-Thompson, 11 gold Paralympic medal winner. Each will bring practicality and experience to the subject of personal performance - and relate this to everyday life in practice improvement and development.

To explore the subject of performance in greater depth, the conference's four main

sessions also focus on ways to improve practice.

'Effecting behaviour change' will be led by Professor Susan Michie and Robert West, world experts in behaviour change, supported by Dr Birgitta Jonsson. 'Techniques for enhancing periodontal outcomes' closes the Thursday programme - led by one of the world's leading clinicians, Dr Otto Zuhler from Munich. Professor Roger Kneebone, Imperial College, will showcase his fascinating research on how we can improve our own operative outcomes from understanding artistic performance.

Friday's first session will explore improving the performance of long-term

outcomes - vital for periodontal health. Professor Ola Norderd from Sweden will present lessons from his team's long-term research studies. Professor Iain Chapple, from the University of Birmingham, will review new digital risk assessment tools to see what they offer in managing patients with periodontal disease. Digital medicine guru Dr Maneesh Juneja will explore the future of digital medicine.

For more information visit bsperio.org.uk.



DUBAI HEALTH PROFESSIONALS PROMOTE HEALTHY SMILES

Expat dental hygienist and *BDJ Team* panel member Rachael England (pictured, second from right) reports from Dubai

Dubai Health Authority (DHA) has collaborated with Philips and Dentist Direct Dubai to support the launch of the 'Dubai Smiles Healthy' programme at schools in celebration of World Oral Health Day, which takes place annually on 20 March.

As part of the programme, DHA and Dentist Direct Dubai are visiting schools to carry out dental checks on students. The head nurse in each school will be trained to spot children with dental problems and teachers will be trained to supervise tooth brushing in class.

Dr Hamda Al Mesmar, Director of the Dental Department at the DHA, said: 'We are pleased to be partnering with Philips and Dentist Direct, to drive awareness on the importance of good oral hygiene, as by 2021, we want to improve and change the overall oral health levels amongst students in Dubai. This new initiative is an excellent way of reaching the students in a way that can influence them from an early age. Oral hygiene is an important issue on our agenda, and through this programme, we will ensure that we reach as many students and parents as we can to drive awareness and behaviour change.'

Rachael England, Dental Hygienist at Dentist Direct, said: 'We are delighted to support the Dubai Health Authority. Improving the oral health of children is crucial. We want to encourage young people to adopt good brushing habits and reinforce



'WE WANT TO ENCOURAGE YOUNG PEOPLE TO ADOPT GOOD BRUSHING HABITS'

the message that it is important for both a healthy mouth and body. We want people to make smart decisions about their oral health and help them recognise that they need to give their oral hygiene routine more attention and go for regular check-ups, to achieve better overall health.'

In the United Arab Emirates (UAE) 90% of children suffer from caries. Oral disease is the most common disease in the UAE, followed by obesity, diabetes, cardiovascular disease, cancer and mental illness.

BSDHT 'First Smiles' initiative returns

The British Society of Dental Hygiene and Therapy's (BSDHT's) First Smiles initiative is to return on Friday 16 June, bringing oral health education to young children in their own classrooms.



First Smiles will encourage BSDHT members to enter schools and nurseries across the UK to deliver fun and accessible lessons to children on the importance of good oral health, teaching youngsters the necessary habits needed to maintain a healthy smile for life.

President of the BSDHT, Helen Minnery, said: 'Over the last two years, First Smiles has encouraged our wonderful members from all across the country to reach out to local schools and volunteer their services, and the services of their practice, by visiting local school children to teach them about the importance of good oral health.'

'Whether it's their first tooth or their first visit to the dentist, a child's early experiences of oral health can impact on the rest of their lives. That's why it's so important to teach them about their mouths and introduce them to good habits as soon as possible.'

'This year we are aiming for our programme to be bigger and better than before; to achieve this we need your help to ensure important oral health messages reach many more children.'

The BSDHT aims to mobilise its members to use their unique skills and knowledge to make a difference to children's oral health. The initiative is open only to dental hygienists, dental therapists and students who are BSDHT members.

BSDHT members who wish to take part and make a difference can find out more about First Smiles at www.bsdt.org.uk/FirstSmiles.



Paediatric dentistry and the dental team



In the second of our series of articles focusing on specific areas of dentistry, **Shaadi Manouchehri**¹ considers the complete team approach to child patient management.

Optimal holistic care

We often hear about four-handed dentistry. To me, that seems like an underestimation of reality. There is no doubt that coordination between a clinician and their assistant is essential for providing optimal care for the patient. However, we must also consider the complete team approach to patient management. As dentists and dental care professionals (DCPs), we all have a role to play in providing optimal holistic patient care.

¹ Shaadi graduated with Honours from Barts and The London School of Medicine and Dentistry in 2015 and is currently working as a Dental Core Trainee in Paediatric Dentistry at Guy's and St. Thomas' Hospital.

This is particularly true for paediatric patients. Children are typically more impressionable than adults, and experiences seem to stay with them for much longer than we might expect. Therefore, we must collectively ensure that we look after our patients and attempt to provide them with an experience that is memorable for all the right reasons.

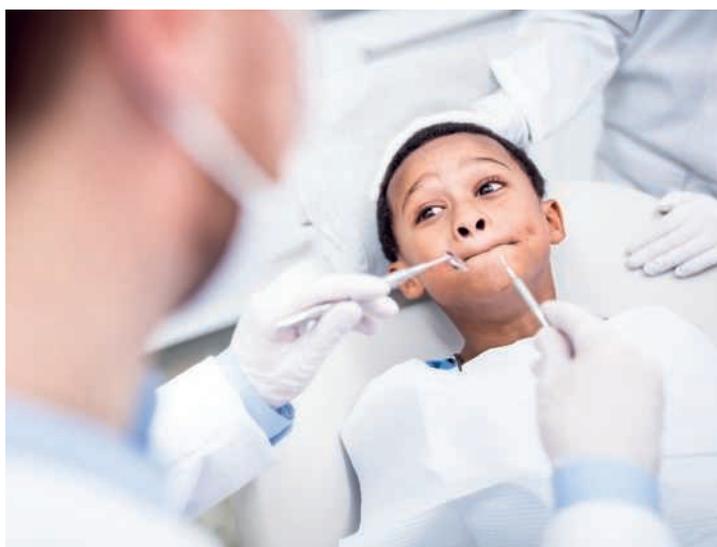
I personally have fond memories of my childhood visits to the dentist. I remember a warm and friendly welcome at reception, a fun stay at the waiting room followed by a kind and caring dentist and dental nurse. I also remember looking forward to being rewarded with a shiny pink sticker at the end of every visit. In fact, my choice of career was largely influenced by my positive experiences as a child. Therefore, I make a conscious

effort every day to provide my patients with a similar experience.

It is fair to say that most of the children I see at the paediatric unit are anxious to varying degrees. There are various factors that seem to affect a child's level of anxiety, such as age, previous dental experience and maternal attitude to dentistry - to name a few. Children with learning disabilities, medically compromised patients and the very young present some of the most challenging scenarios. In these cases, it is important to recognise our limitations and seek assistance from the appropriate specialists in the best interests of the patient.

Welcome

First impressions are extremely important. A child-friendly reception area can set the



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'IN FACT, MY CHOICE OF CAREER WAS LARGELY INFLUENCED BY MY POSITIVE EXPERIENCES AS A CHILD. THEREFORE, I MAKE A CONSCIOUS EFFORT EVERY DAY TO PROVIDE MY PATIENTS WITH A SIMILAR EXPERIENCE.'

mood and make a considerable contribution to putting the patient at ease. A play area, cartoons playing on a TV screen and colouring pencils are simple additions which can make all the difference. A warm and welcoming reception team with a positive attitude would also help the patients be more at ease. This introduction can make-or-break the consultation prior to the clinician ever being involved and, in turn provide the foundation on which the clinical team can build on.

The dental nurse would then call the patient in and establish rapport en route to the surgery where they meet the clinician. Following introductions, I often find that paying them a compliment, whether it is their light-up glittery shoes or a Batman hoodie, does wonders for making them smile and putting them at ease.

Now we come to the consultation itself, and the key here is positive reinforcement. It is fair to say that between us at the paediatric unit, we are never short of stickers. From the dentist to the dental nurse to radiographer, we are all fully loaded with stickers and always ready to provide positive reinforcement,

which has proved very effective in progressing the consultation.

Treatment and behaviour management

When it comes to the treatment itself, the consultation becomes more challenging as the children are understandably more apprehensive. I find that distraction techniques work quite well during treatment and with my nurse, we tend to work in synergy to provide the distraction. It is here that four-handed dentistry really comes into play. I try my best to multitask the procedure and the distraction simultaneously. However, at times when I am concentrating on a particularly complex clinical procedure, my nurse will step in and take over the distraction.

Most children seem to prefer the tell-show-do approach to treatment, but it may be advisable to remain discreet with certain dental instruments such as local anaesthetic needles, drills and the more visually 'scary looking' appliances. Perhaps consider passing these between assistant and clinician out of direct patient view.

Oral health educators and dental hygienists

are key members in the team approach to paediatric dentistry. A significant number of children are undergoing oral rehabilitation under general anaesthesia for treatment of caries, which, as we are all aware, is largely a preventable disease. Ensuring prevention advice is effectively delivered to children and their families is a crucial step in raising awareness to hopefully reduce the need for undergoing such extensive treatment at a young age. Establishing a solid foundation could also lead to improved oral health in adult life.

Conclusion

By working as a team we can provide optimal care for our paediatric patients without causing

any undue stress or discomfort. By adopting the right approach we can manage the patient's concerns in a number of ways and reduce the difficulty of particularly challenging cases. In doing so, we not only set the tone for future consultations but may improve our patients' entire future of oral health behaviour. We might even add to the future generation of dental health professionals!

Did you see
An introduction to
crowns? <http://www.nature.com/articles/bdjteam201761>
(one hour of verifiable CPD).

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CPD:
ONE HOUR

What is safeguarding?



Priya Sharma
explains
the dental

professional's duty of care to vulnerable children and adults at risk of abuse or neglect.

Introduction

Safeguarding is defined as protecting people's general wellbeing and human rights and allowing each person to live free from abuse and neglect. The Health and Social Care Act explicitly states that it is imperative to protect and promote the rights of people who use health and social care services. In turn, regulated providers of health care, such as dentistry, must take responsibility in safeguarding children and adults under their care who may be at risk of abuse or neglect.

CPD questions

This article has four CPD questions attached to it which will earn you one hour of verifiable CPD. To access the **free** BDA CPD hub, go to <http://bit.ly/2e3G0sv>

General Dental Council

The General Dental Council's (GDC's) *Standards for the dental team*, Principle 8 states that all dental professionals must 'raise concerns if patients are at risk'. This standard encompasses five separate duties including:

- Always putting patients' safety first
- Acting promptly if anyone is at risk and taking measures to protect them
- Making sure that all in a position of authority support a culture where all staff can raise concerns openly and without fear of reprisal
- Making sure there is an effective procedure for raising concern

¹ Priya Sharma BA (Dist.), BSc (Pharm.), RDN, FRSA, FRSPH is a dental nurse and dental practice manager in London and a GDC fitness to practise panellist. Priya graduated as a pharmacist and sociologist in Canada. Her work experience includes pharmacy, medical information, pharmacovigilance, teaching at university, presenting at national conferences and medical writing.

- Taking appropriate action if one has concerns about the possible abuse of children and adults.

Dental professionals should also be aware that the GDC recommends doing continuing professional development (CPD) courses in the areas of safeguarding children, young people and vulnerable adults.

Care Quality Commission

The Care Quality Commission (CQC) clearly explains that safeguarding children and young people and promoting their welfare is mandatory by addressing the following four points:

1. Protecting children from maltreatment
2. Preventing whenever possible impairment of children's health or development
3. Ensuring that children are growing up in circumstances consistent with the provision of safe and effective care
4. Taking action to enable all children to have the best outcomes.

as soon as they become aware of anything untoward.

Each practice should have a Safeguarding Practice Lead; this individual is not an expert but rather a centrally named person that all staff are aware of and who keeps an oversight on all safeguarding matters. The Lead should ensure that all staff have appropriate training, be aware who to contact locally and so forth.

how to identify, report and respond to potential, whether suspected or actual, abuse either to a child (an individual under 18 years of age) or a vulnerable adult (over the age of 18), someone who may not be able to look after themselves and/or protect

#Hitthehub
 There are currently TEN free hours of verifiable CPD available on the CPD Hub from 2016 and FIVE free hours for 2017 (so far)! Don't leave it till the last minute - hit the hub!



'ABUSE IS THE IMPROPER USE OR TREATMENT OF SOMEONE OR SOMETHING. IT IS A PATTERN OF BEHAVIOUR AND IT ALLOWS THE ABUSER TO GAIN, ESTABLISH AND MAINTAIN POWER OVER THE ABUSEE'

The CQC goes on to state that safeguarding adults means to protect the rights of adults to live in safety, free from abuse and neglect, people and organisations working together to prevent and stop both the risks and experience of abuse and neglect, ensuring that the adult's wellbeing is promoted and recognising that adults sometimes have complex interpersonal relationships which may have a potential risk to safety and wellbeing. In doing so an individual's views, feelings, beliefs and views must be taken into account.

Furthermore, one of the fundamental standards of CQC requires that all providers must ensure that children and adults are protected from abuse and improper treatment. It is mandatory that all providers regulated by the CQC ensure that they have policies, procedures and systems in place to effectively ensure that all people are protected from abuse, improper treatment and neglect and to know how to address, report and/or seek assistance

Dental professionals and safeguarding

All members of the dental team must understand their responsibilities as outlined in the GDC *Standards* and by the CQC. Although it is everyone's responsibility to ensure the safety of children and vulnerable adults, dental professionals have a duty of care to look after the safety and welfare of patients holistically.

To be vigilant

All people should be protected from abuse and avoidable harm. Simplistically defined abuse is the improper use or treatment of someone or something. It is a pattern of behaviour and it allows the abuser to gain, establish and maintain power over the abusee. Abuse can involve a single type of harm or it may consist of multiple wide-ranging abuse including neglect, physical, emotional, sexual, psychological, financial, institutional and/or discriminatory. In this regard all dental professionals must know

themselves from harm, a person who may need community care services due to a health condition or disability.

Each case will be unique and manifest differently, however, the role of the dental professional is to be aware and seek appropriate assistance in reporting to appropriate authorities even if one only suspects abuse. It is important to understand that it is not the responsibility of the dental professional to try and resolve matters, only to report as required, so that the named person is protected.

Generally it is suggested that in a case where one suspects abuse and where the individual is not in imminent danger then it may be worthwhile discussing it with the patient or carer. You will need to be prepared to explain that you will need to share the information with other professionals to help protect the individual concerned.

If, however, you feel that this approach is not sensible or that the individual is in any type of danger, it is critical to immediately report the person to your local safeguarding authority, social services or the police. Throughout one should keep contemporaneous records of the entire situation.

Types of abuse

Neglect

The ongoing failure to meet basic needs such as food, clothing, cleanliness, being unresponsive to an individual's emotional needs and so forth, may amount to neglect.

Dental neglect

The British Society of Paediatric Dentistry (BSPD) defines dental neglect as 'the persistent failure to meet a child's basic oral health needs, likely to result in serious impairment of a child's oral or general health or development'.

More specifically intentionally failing to provide dental care will have a clear effect on any individual. Dental practices indeed will encounter this most often at the practice.

Neglect of oral health may also lead to current and/or future harm such as toothache, difficulty eating a balanced diet leading to deficiencies and/or malnutrition, sleep deprivation, absence from school, work, etc. In addition the individual may get teased or bullied due to the unusual appearance of his/her teeth and so forth.

Before considering dental neglect as a safeguarding issue various dimensions should be considered. A place to start would be to discuss with the parents or carer the importance of maintaining oral health and the connection between sugar content, including hidden sugars in various food and drink. Paramount to the informed carer is dental health education, in turn instilling the importance of prevention and dental health maintenance. It may also be that the carer is anxious or has negative views of dentistry which is being instilled and perpetuated in the child for future years to come. Cultural differences should also be acknowledged. Some sectors of society may not consider oral health a priority at all. Treatment plans should be created and it is crucial to monitor compliance to it. Dental professionals should recognise a pattern of irregular or missed/failed appointments, lack of compliance to a proposed dental plan, and/or repeated dental pain appointments whilst recognising the extent of harm to the individual.

Physical abuse

Be aware that physical abuse will be visible on the neck, ears, eyes, molars and/or mouth as these specific areas are difficult to damage during various daily routine physical activity.

Emotional abuse

Although emotional abuse is profound it is difficult to detect it as it involves, for example, feeling unloved, feeling helpless, being bullied,

fear, discrimination and so forth. Moreover it may consist of many emotional layers making it hard to identify. If someone raises a concern it is vital to actively listen and engage with the individual. One will find open-ended questions will assist in painting the full picture.

Sexual abuse

When an individual is being forced or persuaded to take part in various sexual activities this correlates to abuse. Clearly this will have a very negative impact. One must also note that due to the presence of the internet, sexual abuse may take place online.

Long-term effects

Every type of abuse will have a life-long detrimental impact on the individual. Being able to be vigilant, identifying it early and reporting the abuse is mandatory so that the individual's needs may be appropriately and safely met.

Conclusion

Abuse and neglect of any type may occur to anyone therefore it is important for all dental professionals to be aware of the issues related to safeguarding. Every dental professional should be trained in safeguarding. The practice should have a Safeguarding Lead and a straightforward policy when concern arises. It may be that the individual's only external contact is with you as a dental professional; in turn it becomes your duty of care that the matter is reported as deemed appropriate. It is critical that these individuals do not slip through the net - a visit to you may be the only hope they have. Do not rely on someone else reporting it as it is your responsibility to raise your concern immediately with the utmost care and caution in order to stop the cycle of abuse and/or neglect.

Useful websites

General Dental Council: www.gdc-uk.org
Care Quality Commission: www.cqc.org.uk
British Society of Paediatric Dentistry: <http://bspd.co.uk/>

CPD questions

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Why didn't you tell me?

FREE



10 **FREE** hours
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BDJ Team

Being prepared for a medical emergency

Every day is unpredictable, so it is important to take the time to invest in your own health as well as that of your patients, writes **Dentists' Provident**.¹

A Dentists' Provident member in 2015 who was in their 40s had an accident involving a chemical that splashed into their eye and as a result had to have surgery. They were off work for over a year and received almost £26,000 from Dentists' Provident during that time.

While every dental practice has a duty of care to ensure patients are in a safe environment when undergoing dental care, this case highlights the need to look after your own health and your fellow team members' health too. The care of patients is the very foundation of good practice and, as we know, is regulated by both the General Dental Council (GDC) and Care Quality Commission (CQC). These bodies' written regulations set out their expectations regarding equipment, resuscitation training, clinical governance, risk management and the regularity of clinical audits, as well as the aforementioned standards of care.¹

The GDC's *Scope of practice* 2013 reminds us that: 'A patient could collapse on any premises at any time, whether they have received treatment or not. It is therefore essential that all registrants are trained in dealing with medical emergencies, including resuscitation, and possess up-to-date evidence of capability.'²

An (un)likely victim?

Essentially, it is important to be prepared for anyone – be it a patient, a member of your team or, indeed, yourself – to be the victim of a medical emergency, with the latter two potentially having a major impact on the smooth running of any practice.

If the medical emergency of a team member leads to a longer term sickness absence, it can

have a marked impact on the team. According to the Resuscitation Council, dental teams should therefore be well versed in emergency procedures and health and safety training should be updated regularly. Resuscitation equipment should be checked every week and other health and safety concerns, such as handling of equipment, should be checked at regular intervals also.³

Medical emergencies in your practice

We all hope we never have to face an emergency, but a survey of dentists in England published in the *British Dental Journal* in 2012⁴ demonstrated that medical emergencies do happen more often than you may think. It showed that some 300 respondents said they had encountered the following, over a 12-month period:

- Vasovagal syncope [the most common type of fainting] (63%) – 596 patients affected
- Angina (12%) – 53 patients affected
- Hypoglycaemia (10%) – 54 patients affected
- Epileptic fit (10%) – 42 patients affected
- Choking (5%) – 27 patients affected
- Asthma (5%) – 20 patients affected.

These are also conditions that can affect a dentist as well, impacting their ability to work. Our 2016 claims statistics include headaches and migraines with claims paid of over £9,000, vertigo and blurred vision of over £5,000 and over £110,000 for cardiovascular conditions including heart attacks and over £45,000 for strokes alone.⁵

More than half of all employees have either been made redundant or suffered long term illness during their working life, research by MetLife Employee Benefits indicates. The nationwide study showed that 23% of employees questioned had been off work for periods longer than four weeks.⁶

The welfare of your team

Increased financial pressures on workers and the risk of long-term ill health during a working life are issues that employees and employers need to be aware of, and to guard against where possible, particularly as research shows that 41% of workers admit they could not afford to live on statutory sick pay,⁶ which is a weekly rate of £88.45.⁷ Dentists' Provident's claims statistics also demonstrate that conditions that dentists have experienced could potentially cause long-term sickness absence. In 2016 we paid claims for conditions such as myocardial infarction for over £13,000, over £64,000 for fractures, over £80,000 for Parkinson's disease and over £123,000 for road traffic accidents.⁵

The standards for CQC practice inspections also looks at health and safety measures, in relation to the preparation – and equipment – for medical emergencies. This guidance⁸ states that 'it is a practitioner's responsibility to ensure that medicines required for resuscitation or medical emergencies are easily accessible in tamper evident packaging'. The CQC also addresses the need for adequate medical emergency training, outlining that 'all staff involved in using the equipment have the competency and skills needed and have appropriate training'.

Former dental nurse Wendy Berridge is a CPR, first aid, medical emergencies and defibrillator trainer at Berridge Medical Training based in Yorkshire. She is passionate about the necessity for the whole dental team to have the knowledge and skills to cope in a medical emergency.

She explains: 'I cannot stress enough how important it is for every member of the dental team to receive the relevant training, in order for all staff to work together should a medical emergency happen at work. Training will ensure that everyone has the confidence and capability to quickly and efficiently deal with the situation, and to administer the correct first aid to the casualty. Medical emergency training should be undertaken on a yearly basis as recommended by the Resuscitation Council (UK).'⁹

Resuscitation Council guidelines

Although, for example, cardiorespiratory arrest is rare in primary dental practice, there is, as the Resuscitation Council outlines,³

¹ *Dentists' Provident is the market leading provider of income protection insurance to dentists.*

an expectation that dental teams should be competent in treating cardiorespiratory arrest. It states that: 'All primary care dental facilities should have a process for medical risk-assessment of their patients' and 'specific resuscitation equipment should be available immediately in all primary care dental premises. This equipment list should be standardised throughout the UK.'



staff training sessions must be available to the CQC. Practices are advised to hold training sessions and simulation exercises at least quarterly. There must be written practice protocols for dealing with collapsed patients, with which all staff should be familiar. European Resuscitation Council guidelines should be printed off, laminated, and kept with the emergency drug kit. Signs and directions should be displayed in the practice to show where the emergency drug kit is kept. This must not be kept locked, or in a locked cupboard or room, whilst the premises are occupied. If the practice has an automatic external defibrillator (AED) staff should be trained in its use and a record kept. Internal signage should be used to indicate the whereabouts of this machine. It is also desirable to have a sign outside the building to indicate that an AED is kept inside.'

'THERE MUST BE WRITTEN PRACTICE PROTOCOLS FOR DEALING WITH COLLAPSED PATIENTS, WITH WHICH ALL STAFF SHOULD BE FAMILIAR'

affect dentists as well as patients and it is essential to consider your own financial and personal health protection and prevention.

1. General Dental Council. *Standards for the dental team*. Updated 3 January 2017. Available at: <https://gdc-uk.org/professionals/standards/team> (accessed April 2017).
2. General Dental Council. *Scope of practice*. Updated 20 March 2017. Available at: <https://gdc-uk.org/professionals/standards/st-scope-of-practice> (accessed April 2017).
3. Resuscitation Council (UK). *Quality standards for cardiopulmonary resuscitation practice and training*. November 2013. Available at: <https://www.resus.org.uk/quality-standards/> (accessed April 2017). An earlier version was called *Medical*

emergencies and resuscitation - Standards for clinical practice and training for dental practitioners and dental care professionals in general dental practice.

4. Jevon P. Updated guidance on medical emergencies and resuscitation in the dental practice. *Br Dent J* 2012; **212**: 41-43.
5. Dentists' Provident 2015 Claims stats.
6. Watermark Wealth Management. *Protecting your income*. 16 January 2014. Available at: <http://www.welcome2watermark.com/20140116/protecting-your-income/> (accessed April 2017).
7. UK Government. *Statutory Sick Pay (SSP): employer guide*. Available at: <https://www.gov.uk/employers-sick-pay/overview> (accessed April 2017).
8. Care Quality Commission. Information available at <https://www.cqc.org.uk/> (accessed April 2017).
9. Resuscitation Council (UK). *Quality standards for cardiopulmonary resuscitation practice and training. Primary dental care - Quality standards*. November 2013. Available at: <https://www.resus.org.uk/quality-standards/primary-dental-care-quality-standards-for-cpr/> (accessed April 2017).

The old adage of 'practice makes perfect' is key here; according to the Resuscitation Council, dental staff knowledge and skills in resuscitation should be updated at least annually.³

Expectations for dealing with medical emergencies

Dental Protection Limited is a defence organisation that protects the whole dental team. When it comes to medical emergencies, they maintain that: 'The records of all

So, when putting all of these systems and plans in place for dealing with patient medical emergencies, make sure you protect your own health and income too.

Bryan Gross, head of claims and underwriting at Dentists' Provident, summarises by saying: 'It's important for all dental professionals to make sure they are protected. When members call us they often express their concern about the impact their injury or illness has on their lives. It's worth remembering that medical emergencies can

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‘CHILDREN ARE ALWAYS DROPPING THEIR PARENTS IN IT, WITH COMMENTS LIKE “DADDY DOESN’T BRUSH HIS TEETH THAT OFTEN” OR “MUMMY DOESN’T LIKE THE DENTIST”.’

the elderly gentleman in the chair. A nurse was shadowing me at the time and we tried to stem the flow with our hands, but to no avail. In the end, we had to get a bucket to collect the water until we worked out how to turn the mains off. The dentist was the ultimate professional and carried on with the patient’s treatment whilst we cleared up the carnage! The patient recalled that it was the best and funniest experience he’d ever had at the dentist and did not mind being soaked in the process!

We have plenty of funny moments. Usually it’s the old and the young who make us laugh the most. One elderly gentleman was convinced he’d come to us to have his feet looked at. To placate his concern we actually took his shoes off, admired his socks and said that today we were going to focus on his mouth! Children are always dropping their parents in it, with comments like ‘Daddy doesn’t brush his teeth that often’ or ‘Mummy doesn’t like the dentist’.

You’ve been dental nursing for quite a few years now, are there any areas of dentistry that particularly interest you?

I love oral health education. It’s tremendously rewarding to think that you can prevent disease through brushing your teeth properly and managing your diet. It’s such a simple message, but the consequences of not adhering to it can be catastrophic. Oncology is another area that interests me, and one in which I will seek further training. Cancer touches so many people. Oncologists do an amazing job in treating the disease, but often don’t have the necessary time to reinforce the oral health implications of treatment.

We know you’re involved in charitable work. Can you tell us a little more?

I started working as a volunteer for BrushUpUK about two years ago. The communities served by BrushUpUK are different to those in which the majority of us work. Educating patients within a surgery environment is challenging, but at least those patients are partly engaged in their

oral health as they’ve actually visited a dental practice! BrushUpUK is targeting the 50% of people who do not regularly visit a dentist, in particular those that are most ‘at risk’ such as the elderly, those in palliative care and SEN schools. I can honestly say that I get as much benefit from my contribution as the audience that I educate do.

‘I LOVE MY TEAM AT SHEPTON MALLET AND LEARN FROM THEM ALL THE TIME, BUT THERE’S DEFINITELY MORE TO BE GAINED FROM REACHING OUT BEYOND YOUR “PRACTICE BUBBLE” TO THE WIDER DENTAL COMMUNITY.’

Are you going to this year’s Dental Showcase at the NEC? What’s the best thing about attending dental industry events?

I do plan to attend Showcase, as I know it’s the biggest industry event in the dental calendar. The appeal to me comes from the broad range of lectures on offer. It’s a great opportunity to top-up your CPD, but really it’s more than that. You could achieve CPD very easily online, but I do not believe that this is the same experience as hearing the lecture live at an event.

How important do you think it is for dental nurses to attend trade events (from a career development and CPD perspective)?

If you have the ways and means to get to a dental event I would urge any dental nurse to go. Meeting other people who work in the same industry is invaluable. You can exchange ideas and share best practice. I love my team at Shepton Mallet and learn from them all the time, but there’s definitely more to be gained from reaching out beyond your ‘practice

bubble’ to the wider dental community. Dental Showcase is at the NEC so it’s easy to get to and very ‘do-able’ in a day.

Is there any other advice you’d give to dental nurses entering the profession?

If you want to specialise in something, such as radiography, then go for it! I believe that you should allow your work to broaden your mind and outlook on life. Treating patients who differ widely in terms of age, ethnicity and background, really does help you to see things differently. Don’t make snap judgments; the patient who looks grumpy in the waiting room could simply be nervous. Imagine the satisfaction you’d feel if you managed to break down the barrier and that same patient left with a smile on their face. I congratulate nervous patients by telling them that they’ve

done the hardest part by entering the practice when they had the choice not to! This is empowering and can also put them at ease.

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A day in
the life
of dental
nurse

Michelle Woolridge, 36.



I get up at 6:30 am. I live with my husband and our three-year-old daughter in Durham City. I'm naughty and don't eat breakfast.

I am a dental nurse at Queensway Orthodontics in Billingham, which is about 20 miles away from home. I drive to work which takes about half an hour. I love my Volvo S40; I've had four now in 20 years of driving and sadly almost the same colour each time - so people think my car is about 20 years old, though it looks brand new.

I work Monday, Tuesday and Thursday from 8:45 am to 5:45 pm with one hour for lunch if I'm lucky. I like to arrive at work early, 8:15-8:30, to allow for being stuck in traffic.

I work within the orthodontic facility of our dental clinic; I have my own appointment book, room and dental chair. I treat patients under the prescription or direct supervision of a specialist orthodontist to take dental photographs, impressions, scans and X-rays.

I deliver oral health education to patients, patient information and instructions. I am also required on occasions to work at the chairside of either the orthodontist or orthodontic therapists.

Queensway dental clinic has over 100 employees; we provide the highest standard of dental care in a professional, relaxed and understanding environment. With oral health at the top of our agenda, dental care available ranges from essential preventive dentistry through to complex care including dental implants, orthodontics, oral surgery, the treatment of gum disease, root canal treatment and complex reconstructive dentistry. This takes place all under one roof at the Billingham Clinic. We also have facilities in Jesmond, Newcastle, in Durham and in Darlington.

Michelle Woolridge is nominated as Dental Nurse of the Year at The Dental Awards 2017 which are due to take place on 12 May 2017 at the NEC Hilton Metropole Hotel in Birmingham.

*'My main hobby is
anything dental'*

In the orthodontic department where I am based we have two specialist orthodontists, three orthodontic therapists, seven qualified dental nurses, four receptionist/administrators, one patient care co-coordinator and a wider team supporting sterilisation, management, marketing, financing and clinical governance. Our department sees both NHS and private patients who are wanting or are interested in orthodontic treatment, and their families.

I first started as a trainee dental nurse in January 1997. I had my interview, got the job and started immediately at a practice that was short staffed. After only nine months I took the NEBDN examination early due to course funding problems. Immediately afterwards I completed the Basic Oral Health course due to my interest in and passion for dental nursing. A year later I was promoted to senior dental nurse and then assistant practice manager.

I have been at Queensway since 2007, first as dental nurse then as dental nurse manager. I have completed post-graduation certificates in Sedation, Oral Health, Radiography and Orthodontic Dental Nursing, and certificates

We have verifiable training delivered at work and our employers also support our learning with in-house teaching for NEBDN qualifications. I also complete CPD in my own time and book my own courses outside of work.

I take pride in keeping up to date with all documents and legislation surrounding

lab can create a 3D printed model from the scan. The technology amazes me. Most dental practices will never have seen one, yet I'm lucky enough to have it in my room and use it daily on both NHS and private orthodontic patients.

When I'm working I usually get home between 6:30 and 7 pm.



My daughter loves swimming, gymnastics and dancing so I live my life around her activities.

I am very strict with my daughter's overall daily sugar intake and snacking in between meals. I'm lucky in that she prefers water over juice and loves fruit. I make sure that she brushes her teeth correctly and attends our dentist for routine fluoride applications.

As a family we go away to Germany or the Netherlands yearly in November with a coach load of friends from the UK to visit the Christmas markets. We also have a family holiday home in a village called Staithes near Whitby (this is where the children's television programme 'Old Jack's Boat' is set), and enjoy kayaking, fishing and visiting the beach.

My main hobby, however, is anything dental – I'm always reading and learning. I'm very happy where I am at the moment; I work with an amazing team and wouldn't be where I am today without amazing colleagues over the last 20 years.

I'm in bed by 10 pm - I like my beauty sleep.

' I AM PART OF OUR PRACTICE TEAM THAT

CARRIES OUT FLUORIDE VARNISH APPLICATION

IN SCHOOLS. IN MY OWN TIME I HAVE

ALSO GIVEN ORAL HEALTH EDUCATION TO

GROUPS WITHIN THE LOCAL COMMUNITY.'

in fluoride varnish application, impression taking and photography.

What I enjoy most about my job is the facility and the team that I work with, and talking to and helping patients. It can be a challenge to find time for a cup of tea during my working day as I never stop, but I love every minute. After all the experience I have had, I'm very relaxed about almost everything that goes on in a day at the practice.

I am part of our practice team that carries out fluoride varnish application in schools. In my own time I have also given oral health education to groups within the local community.

dentistry and if I don't know the answer to something immediately I know where to find it; if that's not possible, I always know a colleague who will.

We are fully supported by our practice - in fact Queensway Orthodontics is one of the few practices in the country to have Investors in People gold status.

Our plans for 2017 include rolling out protocols to our newly taken over Jesmond Queensway Dental Clinic plus further development of community outreach. My little project at work at the moment is setting up and working the iTero dental scanner; this allows us to scan patients' teeth instead of taking impressions, then our orthodontic

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Dental nurse in the spotlight

My name is Farzana Sacranie and I am 51-years-old. I was born in Harare, Zimbabwe. I am married and have two daughters. I live in Leicester with my husband and my eldest daughter.

Usually I wake up at 6.30 am Monday – Saturday and start off with a light breakfast which is fruit and black coffee. I drive to work which is 10.6 miles away from home.

I am at present employed at Glenfield Dental Practice in Leicester where I work Monday to Friday 9 am-5.30 pm and also the first Saturday of every month. My role is varied depending on each day where I may be asked to complete administrative duties, provide chair side support or cover reception, which I enjoy because no one day is the same.

I also work at the Dental Access Centre as and when required at weekends as a bank dental nurse. My role here is to provide chair side support and reception until I am triage trained. In addition to my role as a dental nurse I also work as an OSCE Examiner for NEBDN.

Before I started working for Glenfield Dental Practice and the Dental Access Centre I worked for a local college as a Trainer Assessor and Internal Quality Assurer where I supported trainee dental nurses in achieving their Level 3 Diploma in Dental Nursing.

The qualifications I hold include the National Certificate for Dental Nurses, Licentiateship in Dental Nursing, PTTLs, Lead IQA, TAQA, and First Aid at work.

I actually find each day challenging in my role, as it is so varied. One minute I can be providing chair side support and the next covering reception or decontamination/admin.

At Glenfield there are ten dental nurses, six receptionists, four hygienists, five dentists, one practice manager and one administrator.

The treatments provided at the practice are examination, cosmetic treatments, implants, minor oral surgery, periodontal treatment, fillings, orthodontic and various other treatments to suit patients' needs.

In my second role at the Dental Access Centre the treatments are limited to short term solutions to a problem such as temporary dressings, prescriptions, dry socket treatment and extractions.

I mostly eat lunch at the practice which I take from home; this could be either soup and fruits or a traditional rice dish with salads.

I tend to do CPD in my own time at the moment due to time constraints.

I get home at around 6:10 pm daily and start cooking for my family and then have dinner just after 7 pm and then relax.

'I FIND EACH DAY CHALLENGING IN MY ROLE, AS IT IS SO VARIED'

I enjoy charitable work, jogging, walking, going out with friends/family and baking.

I have booked my holiday to Marrakech in May 2017 and I am looking forward to this as I have never been there before, I have also planned to complete a 5k Race for Life in July 2017 and raise more money than last year.

We are a very health conscious family, and tend to have treat days to protect our general and oral health.

My bedtime is varied; I could be in bed as early as 9 pm or as late as midnight.

If I hadn't become a dental nurse I would have been in the beauty trade as I am a qualified Beauty and Holistic Therapist.



Inflammatory bowel disease and oral health

J. S. Chandan¹ and **T. Thomas**¹ summarise the treatments for inflammatory bowel disease (IBD) and how anti-inflammatory medications can have side effects that affect the oral cavity.

Inflammatory bowel disease (IBD) mainly comprises of two separate inflammatory conditions: Crohn's disease (CD) and ulcerative colitis (UC). The aetiology of these conditions is still being explored with current evidence pointing towards a combination of environmental and genetic components. However, the pathophysiology is understood as a cytokine driven inflammatory response. There is significant association between IBD and dental conditions such as dental caries, other infections and periodontitis. Anti-inflammatory medications such as 5-aminosalicylic acid (5ASA), steroids and biological therapies are the treatment of choice for these chronic conditions, dependent on aetiology. Therefore, this article aims to educate dentists regarding possible implications IBD and its treatment can have for clinical practice and future research.

Introduction

Inflammatory bowel disease (IBD) is an umbrella term mainly comprising of two separate medical conditions: Crohn's disease (CD) and ulcerative colitis (UC). They are chronic inflammatory conditions affecting the digestive system that can lead to acute flare-ups of the respective conditions. CD can affect any part of the GI system (most commonly the small bowel, whereas UC only affects the large bowel.¹

The incidence of IBD is beginning to stabilise in Europe with about 2.2 million people suffering from the condition.² In the UK it is estimated at least 115,000 people have CD and around 146,000 have a diagnosis of UC.³ It is a condition that is most commonly diagnosed during childhood or early adolescence.⁴

Risk factors involved in IBD

IBD is thought to result from inappropriate and ongoing activation of the mucosal immune system facilitated by defects in both the intestinal epithelium and mucosal immune system.⁵ There are both genetic and environmental factors implicated in the aetiology of IBD.⁶ Although traditionally associated with the developed world, recent epidemiological studies suggest an increasing incidence in rapidly developing countries, especially in South-East Asia.⁷ In addition, the increased risk of IBD in the immigrant populations in the West suggests environment has a role in the development of IBD.⁸

Genetic

Detailed genetic mapping has identified specific genetic changes on chromosome 16 carried in families which appear linked to CD, however no significant changes have been mapped as of yet to UC.^{9,10} Specifically, variants of the NOD2 gene provide the strongest association with susceptibility to CD. NOD2 plays a key role in regulating the gut mucosal barrier involving, specifically, the microbiota, as well as the related response by the innate and adaptive immune system. The IBDchip European Project showed NOD2 has been implicated in ileal location colitis with stenosing and penetrating disease behaviour.¹¹ A genome wide association study has also identified a strong link between the IL23R gene and CD.¹² The gene in particular codes for interleukin 23 that plays a role in regulating innate immunity within the intestine.¹³

Cigarette smoking

Unusually, cigarette smoking is associated with decreased rates of incidence of UC and has been associated with protective features to prevent further flare-ups of the condition¹⁴⁻¹⁹ such as relapses,²⁰

¹Queen Elizabeth Hospital, Birmingham, B15 2TH

hospitalisations²¹ and colectomies.²² Also, complications of the condition are reduced in those who do smoke. This raises the concept of encouraging smoking to prevent adverse events occurring. However, there is a plethora of evidence that suggests that smoking has adverse effects on overall morbidity outcomes. In particular, it can increase failure in dental implants,²³ increase the risk of oral cancers and increase the incidence of dental infections.²⁴ Guidelines advocate smoking cessation in UC patients. On the contrary CD patients who smoke have a more severe disease course and can increase the incidence of CD with further complications.^{18,25-27} In fact, smoking cessation can provide a 65% reduction in the risk of relapse versus smokers. This is comparable to the reduction of risk attributed to immunosuppressive therapy.²⁸

Other environmental risk factors

In observational studies, appendectomies appear to provide a risk reduction in the development of UC.²⁹ Oral contraceptives statistically significantly increased the risk for developing CD and appeared to increase the risk of UC.³⁰ The other important environmental factor playing on the development of IBD is diet control. The greatest association appears to be between increased sugar intake and developing IBD.³¹ This is especially important to note considering increased sugar intake can lead to the development of dental caries.^{32,33} Secondly, increased sugar content will be a contributing factor to diabetes which already has a causal link with periodontal disease.³⁴

Pathology of IBD

The pathophysiology behind IBD has been under intense research scrutiny for the last decade, and much of it is still unknown. However, it is clear that it consists of complex interplay between genetic influences, environmental factors, microbial flora and the host immune system.³⁵ The dysfunction of the innate and adaptive immune system is at the centre of the inflammatory process. The innate immune system is the immediate nonspecific response system of the body with response times ranging from minutes to hours. It consists of the epithelial cells, neutrophils and natural killer Tcells among other cells. The pattern recognition receptors (PCR) such as toll-like receptors and NOD-like receptors recognising valid pathogen associated molecular patterns (PAMPs) are one of the main triggers for this system. However, mutations in underlying genes such as NOD2, that plays a key role in immune tolerance, result in inappropriate

immune responses. In addition, it can lead to inappropriate Th1 pathway stimulation due to decreased inhibition of the TLR2 stimulation.³⁶ Other important factors affecting the innate immune system in IBD include autophagy defects due to gene mutations such as in the ATG16L1 gene, which has been implicated in CD.

The adaptive immune system is the specific immune response system, consisting of Bcells and Tcells among others. There have been theories that there are two distinct adaptive immune system pathologies driving CD and UC. It was suggested that the IL12 cytokine stimulation resulting in Th1 mediated upregulation and thereby IFNY could be one of the main players in CD. Likewise, in the case

symptoms were also present in a greater proportion within the active phase cohort than in the remission cohort (70.6% vs. 52.1%, $P = 0.001$). Moreover, aphthous ulcers had a substantially increased presence within the active phase when compared with remission (35.3% vs. 4.2%, $P < 0.001$).

Signs/symptoms of oro-facial IBD

Signs and symptoms that manifest with IBD are overwhelmingly that of CD. The most common sites involved are the lips, buccal mucosa and gingiva.⁴³ Orofacial CD can present with aphthous ulcerations, angular cheilitis, and cobblestoning with or without oedema of the lips. Figures 1 and 2 demonstrate some of these oral manifestations of CD. Mucosal tags

‘SIGNS AND SYMPTOMS THAT MANIFEST WITH INFLAMMATORY BOWEL DISEASE ARE OVERWHELMINGLY THAT OF CROHN’S DISEASE. THE MOST COMMON SITES ARE THE LIPS, BUCCAL MUCOSA AND GINGIVA.’

of UC, Th2 mediated inflammation reaction was thought to be a key player. However, recent research has described mixed cytokine profiles in UC, and therefore, it is clear that further research needs to be performed to investigate the specific roles of Th1 and Th2 in IBD.³⁷

Oral presentations of IBD

Current literature suggests that up to 35% of IBD patients will have an extra-intestinal manifestation.³⁸ The oral cavity could potentially be affecting up to 5-50% of patients. The wide range is due to the non-specificity of oral symptoms. However, broadly speaking, this population tends to be made up of CD patients, with children being affected more than adults.³⁹ Older children and adolescents in particular are vulnerable to oral CD manifestations.⁴⁰ One of the reasons why it is important to be aware of the signs and symptoms of CD is due to the hypothesis that oral inflammation may precede intestinal manifestation of disease.⁴¹

In a tertiary centre case-control study conducted in Portugal, consisting of 113 patients with previously diagnosed IBD and 58 healthy controls, there was a significantly increased prevalence of oral symptoms when compared with the control that did not have IBD (54.9% vs. 24.3%, $P = 0.011$).⁴² Oral

in the gingiva should also be treated with suspicion. The buccal mucosa can also contain abscesses, alongside cobblestone features and oedema. Pyostomatitis vegetans is a rare condition that could indicate the presence of CD as well as UC. It is characterised by dramatic erythematous thickened mucosa with widespread erosions. Case reports^{44,45} have indicated that oro-facial fistulae can be another rare outcome of IBD often presenting as a discharging abscess on the face. The aetiology of these fistulae is unclear as there appears to be overlap with granulomatous oro-facial disease.⁴⁶

Conditions associated with IBD

Current research suggests that IBD patients are more likely to undergo dental procedures than a healthy cohort.⁴⁷ In particular, CD patients were 1.18 times more likely to undergo dental treatment compared to healthy controls ($P < 0.000$). Removable dentures (+65%), front teeth fillings (+52%), and endodontic treatment (+46%) in particular were more prevalent in the CD cohort. Similarly, UC patients were 1.09 times more likely to undergo dental treatment compared to health controls ($P < 0.005$). In particular, these patients were 1.33 times more likely to have fillings in canines and

incisors than the healthy controls ($P < 0.001$). The impact of IBD on oral health is thus well described. However, the exact nature of this relationship is unclear. The underlying inflammatory changes in IBD plays a role in poor oral health, however, the link is not causal aside from in the case of specific oral complications of IBD. The associations mainly appear to be linked to the development of dental caries, periodontal disease and other loosely related conditions through other risk factors associated with the development of IBD, such as high sugar intake.

Dental caries/infection

There appears to be a significant association with tooth caries and oral ulcers in IBD compared to the normal population.⁴⁸ A case control study consisting of 110 participants⁴⁹ identified children with IBD had statistically significantly higher rates of decayed, missing and filled teeth (dmft) (2.95 vs 0.91). IBD patients also have increased rates of lactobacilli and streptococcus mutans found in their oral cavity contributing to caries.⁵⁰ The reasoning behind why these increased rates of caries and infections are not clear, however, proposed arguments include salivary components (increased bacterial concentrations), oral hygiene and diet.^{51,52} As discussed above, a risk factor for patients developing IBD is the increased sugar intake that can be associated with further infection.

Periodontal disease

The association between IBD and periodontal disease is starting to emerge in recent literature.⁵³ Due to the inflammatory nature of both disorders, it is hypothesised that underlying IBD can trigger a raised basal cytokine response that can induce periodontal disease. Several case control studies have been conducted to explore this relationship further. A German study⁵⁴ identified that twice as many patients with IBD, compared to those without IBD, had clinic attachment loss >5 mm, however, mean loss was not statistically significant. However, since then further prospective trials have identified that IBD patients have higher provenances of periodontal disease, deeper pocket depth and more clinical attachment loss.^{55,56}

Malnutrition

Malnutrition is very prevalent within the IBD population. Literature has previously estimated this number to be almost one in four outpatients, and almost nine out of ten inpatients.⁵⁷ This could be due to direct factors such as loss of normal resorptive mechanisms and higher nutritional requirements due to

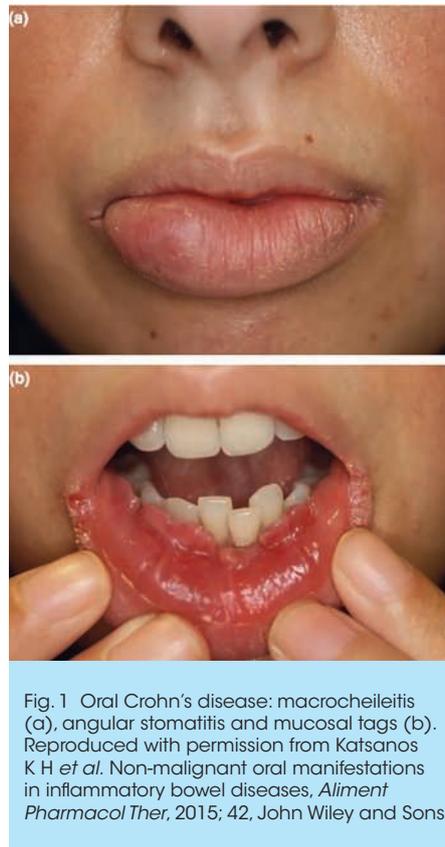


Fig. 1 Oral Crohn's disease: macrocheilitis (a), angular stomatitis and mucosal tags (b). Reproduced with permission from Katsanos K H *et al.* Non-malignant oral manifestations in inflammatory bowel diseases, *Aliment Pharmacol Ther*, 2015; 42, John Wiley and Sons

the inflammatory process. Indirect factors can also play a role and this can be due to reduced intake and side effects of concurrent medication. Particularly in CD, involvement of the small bowel can hinder absorption of vital nutrients. Iron malabsorption can occur if the duodenum and upper jejunum is affected, and this can manifest as angular cheilitis and glossitis.⁵⁸ On a systemic level, low iron gives rise to the microcytic hypochromic anaemia picture. Involvement of the terminal ileum can result in folate and B_{12} deficiencies causing painful glossitis and stomatitis, among others. This manifests as macrocytic anaemia. Other nutrients prone to deficiencies include magnesium, potassium, vitamin D, selenium and zinc. Malnutrition of these micronutrients often results in non-specific oral lesions.

Medications

The therapeutic route to disease remission in IBD differs slightly between CD and UC. Steroids play an integral role in induction of remission in both conditions. In summary, the NICE-recommended UC pathway⁵⁹ (as per individual patient needs) is as follows:

1. 5-aminosalicylic acid (5ASA) therapy such as sulphasalazine or mesalazine
2. Thiopurine therapy (Azathioprine or 6mercaptopurine)
3. Biologic therapy consisting of infliximab/adalimumab.

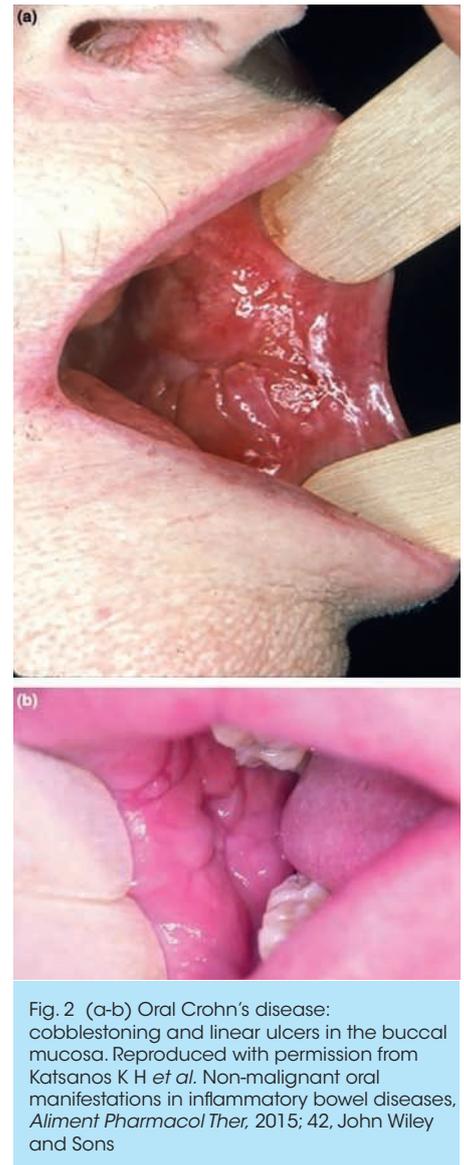


Fig. 2 (a-b) Oral Crohn's disease: cobblestoning and linear ulcers in the buccal mucosa. Reproduced with permission from Katsanos K H *et al.* Non-malignant oral manifestations in inflammatory bowel diseases, *Aliment Pharmacol Ther*, 2015; 42, John Wiley and Sons

Newer monoclonal antibody therapies such as golimumab, vedolizumab and ustekinumab are now in use in specialised cases within tertiary centres.

The corresponding pathway for CD60 (again as per individual patient needs) is as follows:

1. Thiopurine therapy (Azathioprine or 6mercaptopurine)
2. Methotrexate
3. Biologic therapy consisting of infliximab/adalimumab.

In the case of colonic CD, 5ASA therapies may also be used with good efficacy. As the medications overlap largely between the conditions we will explore the dental associations related to these medications. It should be noted that these medications have potent anti-inflammatory and immunosuppressant actions and therefore reduce the body's ability to fight infection, which is an important consideration in an oral health context.

5-ASAs

5-ASAs such as sulphasalazine and mesalazine act as anti-inflammatory medications providing topical relief inside the intestines. They do this by reducing synthesis of inflammatory cytokines and have been used for many years.⁶¹ They are medications that can cause a host of side effects from common ones including nausea, vomiting and GI upset.⁶² However, three are of particular importance and interest to dentists. The first being the risk of drug induced agranulocytosis.⁶³

Agranulocytosis is an acute condition leading to a severe leucopenia where there a reduction in white blood cells affect the way the body can fight infection. Secondly, of interest to the dental profession, 5-ASAs have supposedly caused a few cases of parotitis which is a swelling of the parotid gland similar to mumps but it is unclear whether this was due to the medication or progression of the condition, however, it is still noted as a side effect for the medication.⁶⁴ Thirdly, a few patients have noted taste disturbances which may present to the dentist before the doctor.⁶⁵

Purine analogues

Azathioprine and 6mercaptopurine are both purine analogues and widely used immunosuppressants to dampen the immune response in both conditions.⁶⁶ Similarly to 5ASAs, these medications can cause an acute leucopenia which can severely impair the body's effect on fighting infection.⁶⁷ Secondly, there is a fourfold documented increase in the risk of lymphoma with these medications which can present in the oral cavity.^{68,69} It should be noted, however, that there is only a very small absolute increase in the risk of lymphoma occurrence.

Methotrexate

The role of methotrexate in IBD management is rare. However, methotrexate can be used as an effective immune-modulator in inflammatory bowel disease.⁷⁰ Of importance to dentists, methotrexate can commonly cause ulcerative stomatitis⁷¹ and recent case reports have identified Epstein-Barr associated lympho-proliferative disorders occurring in the gingiva of patients taking methotrexate, causing gingival ulceration.^{72,73}

Biologic anti-TNF agents

Both infliximab and adalimumab are relatively new antibody-based drugs against TNF (tumour necrosis factor), which is a cytokine agent in the body's immune response, upregulated in inflammatory conditions such as IBD. These medications pose fewer adverse effects related to the oral region, however, they are associated with reactivation of latent TB.^{74,75}

Therefore, it is still worth enquiring about opportunistic dental screenings whether or not these patients have experienced systemic symptoms of TB as it is of public health importance. In addition, as these medications are still relatively new, the long-term risks of them are unknown. Any cause for concern in a patient on biologic treatment should ideally be escalated to the medical team for thorough investigation.

Treatment of oral lesions

The main underlying principle in treating oral lesions in IBD lies in identifying the cause of oral lesions. These could be directly due to IBD, malnutrition or concurrent medication use (as mentioned below).

Oral involvement of IBD revolves around treating the intestinal manifestation of the disease. However, topical and systemic medical treatment modalities are available. Corticosteroid injections can be applied locally to the lesion. In addition, symptomatic relief is available via use of lidocaine 2% in the most severe cases. Less potent treatment modalities take the form of ointments.

Evidence shows that topical tacrolimus at relatively low concentrations of 0.5 mg/kg can be potent in oral manifestations of CD.⁷⁶

Other ointment options include the use of 1% hydrocortisone three times daily. Steroid mouthwashes (dexamethasone elixir) are also available for symptomatic relief. These methods of treatment, particularly topical dexamethasone ointments, are effective treatments for refractory aphthous ulcers as well.⁷⁷

Typically, systemic medical treatment is reserved for the most severe of oral cases. Evidence advocating systemic medical treatment to combat oral manifestation of IBD consists largely of low sample size studies. However, it has been shown that combination therapy of steroids and azathioprine can potentially be beneficial.⁷⁸ Staines *et al.* 2007⁷⁹ suggested that anti-TNF inhibitors can be of benefit in complex oral manifestations such as fistulating oral disease.

Surgical treatment and biopsy

Surgical modalities for treatment of oral manifestations of IBD are used in cases where complications have developed such as fistulations and abscesses. In these cases, a combination of maxillofacial surgery and plastic surgery may be indicated. Orofacial surgery is relatively more complex in the IBD cohort. There is evidence to suggest that this cohort is at higher risk of oropharyngeal perforation.⁸⁰ Post-operative recovery may also be impaired in these patients due to concomitant use of systemic steroids and potent immunosuppressants.

Diet

Diet is an important factor that can be overlooked in managing oral health manifestations of IBD. An early study⁸¹ identified that strict elimination diets, where a potential trigger in the diet leading to the flare of aphthous ulcer is identified and removed, provide symptomatic relief. The management of diet-related oral manifestations largely represents replacing the vitamin or mineral that is depleted. There are known associations between decreased ferritin levels and oral ulcers, therefore, appropriate replacement would help prevent development.⁸²

'A STUDY IDENTIFIED THAT STRICT ELIMINATION DIETS, WHERE A POTENTIAL TRIGGER IN THE DIET LEADING TO THE FLARE OF APHTHOUS ULCER IS IDENTIFIED AND REMOVED, PROVIDE RELIEF'

Take home message

From the literature and clinical experience earlier, there is an evident association between IBD and various dental health conditions. Implications for education, practice and future research should be considered.

Implications for education

Dentists should be aware of the conditions that comprise IBD and their links to dental conditions such as dental caries, periodontitis and other oral infections. Secondly, dentists should be aware of the medications such patients take for the conditions, which in their own right can induce oral signs.

Implications for practice

Dentists should be able to identify oral presentations associated with IBD. Where early

oral signs and symptoms exist, especially in young patients without a medical diagnosis, dentists should be implored to refer patients to their GP for further testing. Evidence has shown that early expert oral investigation in children presenting with these signs can be of great diagnostic benefit.⁸³ Patients susceptible to eating high amounts of sugar should also be spoken to further in consultation regarding risk factors to do with IBD. Dentists should use dental check-ups as opportunistic screening moments for patients on these medications to ensure they are not getting any oral side effects.

Implications for further research

As this was a review of the available research to educate dentists it did not act to increase the evidence base in this field. There remains many opportunities to conduct audits and investigations, especially regarding oral side effects of medications as this is a particularly under researched area.

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DRY MOUTH IS ON THE RISE

In a survey of dental professionals, 89% agree that 'dry mouth is on the rise'.

During February Oralieve asked dental professionals about their experience of patients with dry mouth and the results are in. Out of the 621 dental professionals who answered the survey:

- 80% of dental professionals are seeing more than five patients a month with dry mouth and 44% are seeing more than ten a month
- The main causes of dry mouth are: types of medication taken, polypharmacy, Sjögren's syndrome and mouth breathing at night
- 89% agree dry mouth is on the rise.

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SURFACE DISINFECTION SURVEY RESULTS

A survey recently conducted by Initial Medical (January 2017) confirmed that infection control and prevention protocols are generally very good within dental practices. After asking 131 teams across the UK how often they disinfected different areas of the premises, here are some of the key results (Table 1).

Almost 14% of the practices surveyed indicated that they give the waiting area a 'deep clean' every day (where furniture is moved round and every nook and cranny is cleaned), while 26% do it weekly, once a month (20%), every other month (27%) and every six months (7%).

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For further information visit www.initial.co.uk/medical or call 0870 850 4045.

Table 1 How often UK dental practices disinfect different areas of the practice (n = 131)

Area of the dental practice	Frequency of cleaning				
	Daily	Weekly	Monthly	Never	Other
Reception desk	92%	5%	1%	0%	3%
Magazine table in waiting room	75%	12%	0%	0%	14%
Children's play area/equipment	47%	8%	1%	5%	40%
Door handles	87%	9%	1%	0%	3%
Keypad on the card chip and pin reader	81%	11%	2%	2%	5%

(NOTE: all percentages have been rounded to the nearest whole number)

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ARE YOU SITTING COMFORTABLY?

Most of us, without even realising it, are damaging our spines by the way we sit at work. For dental professionals, this is a serious issue, since musculoskeletal disorders are the main reasons for early retirement in the profession.

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BDJ Team CPD

CPD questions: May 2017



What is safeguarding?

- a) Dental professionals must act promptly if a patient is at risk and take measures to protect them. b) Safeguarding refers to children only.

A. only a) is correct
 B. only b) is correct
 C. a) and b) are correct
 D. a) and b) are incorrect
- Which statement is **incorrect**: a dental practice's Safeguarding Lead:

A. is an expert on safeguarding matters
 B. is a centrally named person that all staff are aware of
 C. should ensure that all staff have appropriate safeguarding training
 D. should be aware of who to contact locally in safeguarding matters
- Which of the following is **false**?

A. if you suspect abuse and you feel that the individual is in danger, it is critical to immediately report the person to your local safeguarding authority, social services or the police
 B. if you suspect abuse and the individual is not in imminent danger, it may be worthwhile discussing it with the patient or their carer
 C. all dental professionals must know how to identify, report and respond to potential, whether suspected or actual, abuse either to a child or a vulnerable adult
 D. it is the responsibility of the dental professional to try and resolve matters in cases of suspected abuse
- Which statement is **false**?

A. before considering dental neglect as a safeguarding issue, dental health education should first be discussed with the patient's parents or carer
 B. asking open-ended questions is wise with patients who you suspect may be suffering from emotional abuse
 C. it is only the practice's safeguarding lead that is responsible for raising concern about an at-risk patient
 D. in patients where you might be considering dental neglect as a safeguarding issue, it is crucial to monitor compliance with a treatment plan



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