

investigation against me that I believe to be grossly inappropriate and totally unrelated to the clinical issues involved. They have made a raft of unpleasant allegations against me and suggested that I am a 'danger to the public' based on these records alone. They have chosen to ignore my unblemished previous history, two immaculate CQC reports and several glowing recommendations from patients and staff. I have gone to considerable lengths in the last two years to vastly improve my record-keeping (SOE has been installed at the practice, I have had a number of external audits done by an expert at DPS and I have also done much in the way of CPD and remediation and reflective logs) but the GDC has chosen to ignore this and continue to pursue the case. At no point has anyone (including my legal team) made any attempt whatsoever to explore the actual clinical issues involved. My legal team (who I know are doing their best) have pretty much said that I am indefensible because my initial records were poor. This is akin, in my view, to making a definitive diagnosis on a patient based on some old records without even examining them. Frankly, this Kafkaesque procedure has destroyed much of my passion for a profession I once considered noble. If I was of an age and in a position to retire, I would.

It seems to me that the GDC has become an unfit for purpose, bureaucratic behemoth, built and fuelled by parasitic lawyers, that does precious little to protect patients and serves mainly to protect itself and those who profit from it. I think the current legal 'feeding frenzy' in medicine is doing a great disservice to patients and I feel the Government and the profession should be fighting hard to change this culture.

Name supplied

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Antimicrobial resistance

Refresh your memory

Sir, today is 18 November 2016, the European Antibiotic Awareness Day. I sincerely applaud today's eloquent *BDJ* editorial¹ which recapitulates the crucial importance of proper antibiotic management in dentistry and raises awareness of this issue that is so, so important for humankind.

Microbes almost always steal a march on us humans, and the weaponry as well as the armamentarium available to us in defence against these ferociously lethal enemies is rapidly dwindling for a variety of

reasons. Shortly we are bound to run out of our weaponry and it is critical we resort to rational prescribing to save our armoury.

The ground rules of rational prescribing of antibiotics are clearly articulated in the recently released Antimicrobial Stewardship Toolkit mentioned in the editorial and at <https://www.gov.uk/guidance/dental-antimicrobial-stewardship-toolkit>, and elsewhere. I implore all clinicians to visit this site for a few minutes to refresh their memory on strategic and rational antibiotic prescribing.

L. Samaranyake, by email

1. Hancocks S. Antibiotics don't cure toothache. *Br Dent J* 2016; **221**: 595.

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Smoking cessation

The role of e-cigarettes

Sir, I am writing in reference to the *Potential quitters turn to e-cigarettes* Upfront news article¹ that was published in a recent issue of the *British Dental Journal* which seemed to imply that e-cigarettes were undermining smoking cessation attempts. This article was written in reference to a Health and Social Care Information Centre report² which described the continued fall in the use of the Stop Smoking Services (SSS) and suggested that this 'may be partly' due to increased use of e-cigarettes.

This publication was very timely, because almost within the same week, a study which addressed this exact topic was published in the *BMJ*.³ This study, the first of its kind, estimated the population impact of e-cigarettes usage by undertaking a time series analysis to explore an association between use of e-cigarettes and changes in quit attempts at a population level. Some key conclusions of this study were that:

- E-cigarette use by smokers (in England) was positively associated with the success rates of quit attempts
- No clear association was found between e-cigarette use and the rate of quit attempts or the use of quitting aids (except for NRT obtained on prescription, for which there was a negative association with e-cigarette use).

The authors of the *BMJ* paper estimated that in 2015 there were 54,288 additional short- to medium-term quitters compared with no use of e-cigarettes in quit attempts, and on the assumption that approximately two-thirds of these may relapse in the future, that e-cigarettes

may have contributed about 18,000 additional long term ex-smokers in 2015. The authors point out that although these numbers are relatively small, they are clinically significant given the huge health gains of stopping smoking.

This is obviously an important area and continued careful surveillance of the data relating to e-cigarette usage, quit attempts, and smoking cessation is required. It is also critically important that we investigate further the oral health effects of e-cigarettes, to contribute to these complex discussions.

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3. Beard E, West R, Michie S, Brown J. Association between electronic cigarette use and changes in quit attempts, success of quit attempts, use of smoking cessation pharmacotherapy, and use of stop smoking services in England: time series analysis of population trends. *BMJ* 2016; **354**: i4645.

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Anaesthesia

LA in pregnancy

Sir, the use of local anaesthetics (LA) in the treatment of pregnant women is a difficult area as there is an absence of evidence because of ethical constraints preventing randomised controlled studies. Current advice is to avoid non-essential dental treatment until after pregnancy, and where treatment is required to aim to perform it in the second trimester. The reason for this is that in the first trimester organogenesis occurs and small degrees of insult may lead to significant damage to the developing foetus.

The difficulty with comparing the use of LA as opposed to not using them is further complicated because it is usually an adjunct to carrying out a secondary procedure, so a control group not having treatment under LA would also include the group that did not have actual treatment. Therefore, any complications noted in the mother and child would include some of the complications of lack of treatment of the dental problem (eg caries, dental abscess etc).

A recent article reported a prospective, comparative observational study following 210 pregnancies exposed to dental LA in the first trimester compared with 794

pregnancies not exposed to teratogens. The rate of major anomalies was not significantly different between the groups and there was no difference in the rate of miscarriages, gestational age at delivery, or birth weight.¹ The results suggest that use of dental LA, as well as dental treatment, during pregnancy does not represent a major teratogenic risk and there seems to be no reason to deny pregnant women these interventions.

Currently, the most widely used local anaesthetic agent in dentistry is lidocaine, which was originally marketed in 1948.² LA cross the placenta in varying degrees. The concentration in the foetal circulation in descending order are by prilocaine, lignocaine and bupivacaine.^{3,4} In addition the dose of adrenaline used in lignocaine is so low that it is unlikely to significantly affect uterine blood flow and the benefits of its incorporation justify its use.^{5,6}

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Safe intrapulpal anaesthesia

Sir, we read with great interest the article (*BDJ* 2015; **219**: 439–445) on symptomatic irreversible pulpitis. The intrapulpal injection technique (IPI) is commonly preferred in situations where patients encounter pain during pulp extirpation, especially in a hot tooth condition. The most significant factor contributing to the success of IPI is that its administration must be done under pressure. Monheim has suggested that prolonged pressure may lead to degeneration of nerve fibres in many instances leading to profound anaesthesia.¹ Various suggested methods that aid in pressure build up in such cases include obliteration of a large pulpal opening with either gutta-percha or a cotton pellet.²

In the *BDJ* article, under the section: Step Three – Intrapulpal Injection (IPI), a variation of the conventional IPI technique is given, ie use of a gutta-percha bung to aid in

pressure build up for profound anaesthesia, which has been developed and used by the restorative team at the Leeds Dental Institute. However, no reference was cited with regards to this. The paper also states that after access and de-roofing of the pulp chamber, IPI is administered followed by effective haemostasis achieved with a cotton wool pledge (CWP) soaked with local anaesthetic or haemostatic agents or sodium hypochlorite (NaOCl). However, Vidhya *et al.* studied the chemical interaction between lignocaine hydrochloride (with and without adrenaline) and NaOCl by using nuclear magnetic resonance (NMR) spectroscopy and reported the formation of a toxic precipitate, 2,6-xylydine, which is a known carcinogen.³ Hence, the immediate use of NaOCl for achieving haemostasis following intrapulpal injection with lignocaine hydrochloride (with or without adrenaline) should be avoided.

As stated by Birchfield and Rosenberg, the anaesthetic effect of the intrapulpal technique is mainly due to the back-pressure of the solution, independent of the type of solution injected.⁴ Hence, 0.9% normal saline can be employed for achieving intrapulpal anaesthesia to avoid potential interactions between lignocaine hydrochloride and NaOCl.

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Multidisciplinary management Inflammatory bowel disease

Sir, an increased incidence of dental conditions with inflammatory bowel disease (IBD) patients¹ suggests that dentists should play an active role in the multidisciplinary team managing them through recognising the associated oral conditions and screening for malnutrition and medication side effects.

Oral disease appears to be more prevalent in the benign and particularly active IBD population compared to a healthy

population.¹ The association between caries and the IBD population is well documented with children having statistically significantly higher rates of dmft compared to healthy controls.² With periodontal disease, incidence of clinical attachment loss was doubled in an IBD population *versus* control so surveillance could identify these conditions before they precipitate disease.³

IBD presents in the oral cavity as non-specific, recurrent, long lasting aphthous ulcers, which are treated through control of intestinal disease. Dentists should be aware of severe manifestations of IBD including cobblestoning of the lips and abscesses of the buccal mucosa. Routine dental appointments could identify signs of early flare activity that can be treated earlier to improve prognosis. It is theorised that oral inflammation may precede intestinal manifestations of IBD.⁴

Malnutrition, a cause of non-specific oral lesions, is extremely prevalent within the IBD cohort. Community outpatient appointment checks have identified one in four patients as being in a state of malnutrition.⁵ Deficiencies of iron, B₁₂ and folate manifest with characteristic features identified during dental screenings. IBD medications are generally potent immunosuppressant agents; methotrexate can cause ulcerative stomatitis and gingival ulceration, and purine analogues, such as azathioprine or 6-mercaptopurine, can lead to an increased risk of presentations of lymphoma⁶ which can be identified in a simple head and neck examination. Dentists can play a vital role in tailoring appropriate medication by recognising side effects on oral examination improving patient outcomes.

Dentists with IBD patients should liaise with general physicians and hospital gastroenterology services regarding concerns within the oral cavity, while doctors should encourage patients to attend oral check-ups.

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