

(6%), vertical fractures (5%), horizontal fractures (5%) and other pathologies.

In 58% of cases an extraction was performed, in 6% a scale and root planing of the pathological area and in 10% of cases only pharmacological treatment was indicated. Other procedures performed were first stage of root canal treatment, root canal treatments of monoradicular teeth, cementing fixed dentures and removal or repair of orthodontic appliances. Only three patients were referred to emergency hospital services. An estimated 80% of treatments provided a permanent resolution of the pathology and in the remaining cases it was possible to offer a partial or temporary solution.

In conclusion, the urgent dental care provided was undoubtedly strenuous, but it was also a source of great satisfaction for the dentist, both personally and professionally. Moreover, the patients greatly appreciated his degree of availability and the importance of the work achieved. After this period the dentist was tested for SARS-COV-2 antibodies and a negative result was received.

L. Varela-Montes, R. Gómez de Diego, M. Varela Morales, Madrid, Spain

<https://doi.org/10.1038/s41415-020-1730-4>

Skill mix alive and well

Sir, your correspondent E. Gordon (*The end of skill mix*; *BDJ* 2020; **228**: 655) derides the term 'skill mix' as 'an egalitarian fantasy supported only by salaried academic elites'.

The existence of Gateway Dental Practice in Abergavenny, which became an Employee Owned Trust (similar to the John Lewis Partnership) in October 2016, contradicts this view. This innovative dental practice ownership model is doing its part in building a motivated and sustainable dental workforce. In addition to promoting skill mix, the model also promotes social sustainability in its ethos of collaborative working, alongside the encouragement of entrepreneurial activity, training and development for the employees. It reflects the fact that dental practices are assets to the communities they serve, such as in providing employment opportunities to local residents, as well as providing vital healthcare services. I encourage practice owners considering disposal of their practices to read the recent paper by Allen and Karki.¹

I would agree, however, that there is a need for regulatory reform, both to bolster

skill mix throughout dental practices and to improve access for those in need. The COVID-19 pandemic is stimulating contract reform significantly throughout the UK, with commissioners of dental services having to re-evaluate provision and monitoring.

H. Hutchison, Abergavenny, UK

Reference

1. Allen M, Karki A. Employee Owned Enterprise - an innovative general dental practice model. *BDJ In Practice* 2020; **33**: 20-23.

<https://doi.org/10.1038/s41415-020-1731-3>

Loss of taste and smell

Sir, on 26 April 2020, the US Centers for Disease Control and Prevention included 'New loss of taste (dysgeusia/ageusia) and smell (anosmia/hyposmia)' in its list of symptoms of COVID-19 disease.¹

In the absence of any comprehensive analysis of the subject, we reviewed the published literature on COVID-19 associated early dysgeusia and anosmia, finding a total of five studies from the European community, China, Italy, USA, and Iran.^{2,3,4,5,6} These yielded a total of 10,847 COVID-19 patients; 8,816 (81.27%), and 8,119 (74.85%) presented with/developed dysgeusia and/or anosmia, respectively indicating these symptoms in almost three-quarters of COVID-19 patients.

However, there are knowledge gaps. The simultaneous presence of both symptoms in the prodromal or presenting stages of COVID-19 is unclear as is the temporal association of these with other critical symptoms. Some described anosmia prior to hospitalisation followed by symptoms of dysgeusia afterwards, and others the reverse. Also, the question of how long before the definitive early symptoms of COVID-19 such as fever, sore throat, etc does dysgeusia and/or anosmia appear, particularly in otherwise asymptomatic ambulatory patients, is unresolved.

If these two symptoms were relatively reliable harbingers of COVID-19, then there are multiple clinical, community interventional strategy and disease spread implications. Both are simple for self-awareness and without medical consultation could enormously expedite self- or tele-diagnosis of COVID-19. This would be particularly pertinent in overcrowded and resource-meagre communities in the developing world, and in refugee camps. In the event, community education of these

symptoms through media broadcasts, leaflets, and public notices could significantly reduce the disease spread and burden. Finally, if dysgeusia and anosmia were reliable and valid premonitory symptoms of the disease, then dental, medical and para-medical services may in future include a question on the acute loss of taste and smell in all pre-treatment patient history questionnaires so as to diagnose potential, or otherwise asymptomatic, COVID-19 patients.

L. Samaranyake, K. Sadir Fakhruddin, C. Panduwawala, Sharjah, United Arab Emirates

References

1. The National Law Review. CDC Adds New Symptoms for COVID-19 Screening – Employers Must Adjust Accordingly. 27 April 2020. Available at: <https://www.natlawreview.com/article/cdc-adds-new-symptoms-covid-19-screening-employers-must-adjust-accordingly> (accessed 30 May 2020).
2. Lechien J R, Chiesa-Estomba C M, De Siati D R *et al*. Olfactory and gustatory dysfunctions as a clinical presentation of mild-to-moderate forms of the coronavirus disease (COVID-19): a multi-center European study. *Eur Arch Otorhinolaryngol* 2020; doi: 10.1007/s00405-020-05965-1.
3. Giacomelli A, Pezzati L, Conti F *et al*. Self-reported olfactory and taste disorders in SARS-CoV-2 patients: a cross-sectional study. *Clin Infect Dis* 2020; doi: 10.1093/cid/ciaa330.
4. Mao L, Jin H, Wang M *et al*. Neurologic manifestations of hospitalized patients with Coronavirus Disease 2019 in Wuhan, China. *JAMA Neurol* 2020; doi: 10.1001/jamaneurol.2020.1127.
5. Yan C H, Faraji F, Prajapati D P, Boone C E, DeConde A S. Association of chemosensory dysfunction and Covid-19 in patients presenting with influenza-like symptoms. *Int Forum Allergy Rhinol* 2020; doi: 10.1002/iaf.22579.
6. Bagheri S H R, Asghari A M, Farhadi M *et al*. Coincidence of COVID-19 epidemic and olfactory dysfunction outbreak. *medRxiv* 2020; doi: <https://doi.org/10.1101/2020.03.23.20041889>.

<https://doi.org/10.1038/s41415-020-1732-2>

Virus-spreading procedures

Sir, the current pandemic highlights the need to consider alternative evidence-based treatments that involve no virus-spreading procedures to prevent transmission. For example, non-cavitated dental caries lesions involving up to outer third of dentine can be managed by preventive measures including fissure sealant and proximal sealing, with minimal risk of aerosol production.¹ Cavitated shallow to deep carious lesions that do not involve pulp can be managed using selective caries removal and atraumatic restorative treatment (ART), without the use of rotary instruments.^{2,3} Heavily broken-down teeth can be temporarily restored by using stainless steel crowns with no preparation required.⁴ Minimally invasive endodontic treatments

could be employed for managing pulp involvement.⁵ Orthodontic treatments are mostly aerosol free procedures and can be carried out as normal or with modifications as appropriate. Manual debridement can achieve similar clinical outcomes compared to aerosol generating ultrasonic instrumentation.⁶ Rubber-dam should be used where possible. Cotton pellets can be used for drying teeth instead of 3-in-1 air spray.

As governments prepare for a staged return to a new normal, it is imperative that dental societies join forces to develop clear protocols and pathways for evidence-based alternative temporary or definitive treatments with no or reduced risk of viral spread to help manage oral diseases.

M. Dorri, Bristol, UK

References

1. Dorri M, Dunne S M, Walsh T, Schwendicke F. Micro-invasive interventions for managing proximal dental decay in primary and permanent teeth. *Cochrane Database Syst Rev* 2015; **11**: CD010431.
2. Schewndicke F, Frencken J E, Bjørndal et al. Managing carious lesions: consensus recommendations on carious tissue removal. *Adv Dent Res* 2016; **28**: 58-67.
3. Dorri M, Martinez-Zapata M J, Walsh T, Marinho VC, Sheiham A, Zaror C. Atraumatic restorative treatment versus conventional restorative treatment for managing dental caries. *Cochrane Database Syst Rev* 2017; **12**: CD008072.
4. Discepolo K, Sultan M. Investigation of adult stainless-steel crown longevity as an interim restoration in pediatric patients. *J Paediatr Dent* 2017; **27**: 247-254.
5. Wolters WJ, Duncan HF, Tomson PL et al. Minimally invasive endodontics: a new diagnostic system for assessing pulpitis and subsequent treatment needs. *Int Endod J* 2017; **50**: 825-829.
6. Heitz-Mayfield L, Lang N. Surgical and nonsurgical periodontal therapy. Learned and unlearned concepts. *Periodontol* 2000 2013; **62**: 218-231.
<https://doi.org/10.1038/s41415-020-1733-1>

Beards and masks

Sir, there may be some colleagues who may be slightly more worried than others about PPE in the era of COVID-19: those of us with facial hair for religious/cultural reasons.

Fit testing of FFP3/FFP2 masks with facial hair has been largely unsuccessful with colleagues failing fit testing. Where facial hair was maintained for reasons other than religious or cultural it was advised that removal would help with the seal of the FFP3/FFP2 masks. Whilst some of our medical colleagues have suggested ways in which an adequate seal can be achieved by using a thin cloth tied over a beard for example, currently the efficacy of this method has not been proven widely. Increasingly, it seems that one of the plausible ways to achieve satisfactory

protection is to use a respirator hood device, however, with the proviso that not only do respirator hoods make the use of loupes/ powered light source challenging, but given the weight of the attached power pack, it can lead to postural discomfort as well as an inability to sit on stools with a back rest.

As the profession begins its preparations to re-open practices, it certainly will be interesting to see how we overcome this and many other unique hurdles.

K. Matharu, Slough, UK

<https://doi.org/10.1038/s41415-020-1734-0>

Incredulity and disappointment

Sir, it was with incredulity and disappointment I read the article entitled *Why re-invent the wheel if you've run out of road?* by the Chief Dental Officer for England (CDO).¹

The CDO references a 30-year-old book by my 'cons' Professor 'Dick' Elderton on the merits of minimally invasive dentistry as if it were some new concept in dentistry.² Where has Dr Hurley been for the past 30 years? Many current dental procedures utilise some of the most cutting-edge and non-invasive techniques available today. Guided implant procedures provide the most obvious example, with CT guided placement reducing surgery time, increasing long-term success, and significantly reducing levels of post-operative morbidity.

There is clearly a desperate need for the reorganisation of NHS dentistry into a basic, core service, free of charge, in line with the rest of the NHS service. All other services could then be delivered via private dental practices, eliminating the often confusing and litigious mixing of 'private' and NHS dentistry. A move that would surely be welcomed by regulators and indemnifiers alike.

Over the past weeks we have seen many well-researched and practical standard operating procedures (SOPs) published by various dental associations,³ corporate dental bodies,⁴ and devolved government.⁵ Even with the release of the CDO's 'Prompt to Prepare' and 'Resumption of Dental Services' letters published on 28 May, why are we still waiting for detailed guidance, SOPs and strong leadership? Perhaps the CDO should recall the often-used phrase from our alma mater Professor Crispian Scully: 'when the going gets tough, the tough get going.' The CDO rightfully recognises the leadership that many dentists have shown in England during the

COVID-19 pandemic. It is a shame that the profession has not witnessed the same trait in the current CDO.

In a recent poll of dentists in the British Association of Private Dentistry, 97% of its members called for the resignation of the CDO. Clearly, the profession feels totally let down at this unprecedented time. The CDO's commentary merely serves to underline how out of touch the CDO is with the level of skill, expertise, knowledge, and fortitude that GDPs possess to safely care for their patients and dental teams.

M. Cox, Devizes, UK

References

1. Hurley S. Why re-invent the wheel if you've run out of road? *Br Dent J* 2020; **228**: 755-756.
2. Elderton R. Principles in the management and treatment of dental caries. In Elderton R (ed). *The dentition and dental care*. pp 237-262. Oxford: Heinemann Medical Books, 1990.
3. BAPD Return to Practice Position Paper May 2020. Available at <https://bapd.org.uk/pdfs/3410-Corona-BAPD-Policy-Document.pdf> (accessed May 2020).
4. Standard Operating Procedures for Portman Dental Care Practices. May 2020. Available at <https://www.linkedin.com/feed/update/urn:li:activity:6669673903541010432/> (accessed May 2020).
5. Remobilisation of NHS Dental Services in Scotland. May 2020. Online information available at <https://www.scottishdental.org/wp-content/uploads/2020/05/CDO-Letter-Remobilisation-of-NHS-Dental-Services-20-May-2020.pdf> (accessed May 2020).

<https://doi.org/10.1038/s41415-020-1736-y>

Is amalgam more suitable?

Sir, prior to the cessation of routine dentistry due to the COVID-19 pandemic, the UK was trying to actively reduce the amount of waste mercury disposal. Regulations were introduced in 2018 to advise on the management and use of dental amalgam as a restorative material. It was advised that amalgam should not be used in children under the age of 15 or women that are breastfeeding or pregnant, unless deemed strictly necessary by the practitioner on the grounds of specific medical needs of the patient.¹

These are unprecedented times in dentistry. Waiting times and the number of patients that require to be seen has grown exponentially, carious lesions may have increased in size due to delays in follow up, cooperation from children may have decreased as desensitisation from regular dental exposure has reduced, and the NHS has come under intensive financial strain. One would ask the question, would composite still be a viable restorative material for this subgroup in these circumstances? Or