reception, waiting rooms, staff rooms, links to mail and laboratories and so on.

There is a blizzard of information GDPs are required to digest. I do not pretend to have the answer but we need coherent policy in advance of reopening. To paraphrase the 7Ps: we need to Plan and Prepare (both Physically and Psychologically) our staff and our Patients, we need new Protocols and we need to Practise them. We cannot simply show up on the day of unlock. It is also to be hoped we are joined up with our medical and nursing colleagues in this new normal.

A. Mulford, Edinburgh, UK

#### References

- U. S. Air Force website. Available at: http://www.af.mil/ news/story.asp?storyID=123012084 (accessed May 2020).
- FGDP(UK). Latest guidance news and resources. Available at: https://www.fgdp.org.uk/news/covid-19-latestguidance-news-and-resources-odos (accessed May 2020).
- Coulthard P. Dentistry and coronavirus (COVID-19) moral decision-making. Br Dent J 2020; 228: 503-505.
- Cochrane Oral Health. Personal protective equipment: a commentary for the dental and oral health care team. Available at: https://oralhealth.cochrane.org/news/ personal-protective-equipment-commentary-dental-andoral-health-care-team (accessed May 2020).
- CEBM. Editor's commentary: Rapid reviews of PPE an update. 14 April 2020. Available at: https://www.cebm. net/covid-19/editors-commentary-rapid-reviews-of-ppean-update/ (accessed May 2020).
- Li R W K, Leung K W C, Sun F C S, Samaranayake L P. Severe Acute Respiratory Syndrome (SARS) and the GDP. Part II: Implications for GDPs. *Br Dent J* 2004; **197:** 130-134.

https://doi.org/10.1038/s41415-020-1724-2

## Povidone iodine development

Sir, I write further to correspondence in your columns on reducing virus transmission. Commencing on 17 March, we at Povidien have been working on a solution to the problem and have been in communication with many academic and clinical groups including S. J. Challacombe *et al.*, with whom we shared our ideas to urgently produce a ready to use povidone iodine solution for front-line healthcare workers. During discussions we highlighted some potential pitfalls in the use of the commercially available povidone iodine solutions, and I feel compelled to do the same here.

Following an intensive exploration regarding the use of Videne as a potential product, we came to the conclusion that it is preferential to completely avoid phenol, a component of Videne, as this represents an unnecessary risk. We have therefore produced a product in partnership with a Pharmacy Specials NHS manufacturer, which contains no

excipients apart from water. This has reduced the product expiration to 28 days, however this will be extended in due course as the solution is self-preserving. We have followed the S. J. Challacombe et al. dosing protocols as accurately as possible (to standardise the dosing), and we anticipate the that the product will be available mid-May, initially in a 5L presentation, primarily for dentists, while a nasal and throat spray will follow in late May primarily for pre-procedural use in the hospital setting. While it cannot now be claimed that my position is unbiased, I can claim my intention from the start of this project was to find a low cost intervention to potentially break the link of patient to healthcare worker transmission. It has been very pleasing to have one's research intention and findings validated by S. J. Challacombe et al., amongst others, and it is these validations that have motivated and enabled the speedy provision of ready to use povidone iodine for dentists and for preprocedural applications in the hospital setting.

J. O'Sullivan, Chief Scientific Officer Povidien, Dublin, Ireland

https://doi.org/10.1038/s41415-020-1725-1

# Successfully protecting staff

Sir, I am the Chief of Dentistry at a tertiary care hospital in the biggest metropolis of Pakistan. The first documented case of COVID-19 in our country was reported in late February at our very own hospital. As cases in our population grew the dental clinic went on an emergency only protocol and to date we have provided dental care to almost 500 patients and performed approximately over 100 dental emergency procedures. During this period we also had 11 patients who subsequently underwent COVID-19 testing for various non-dental reasons; later, two patient visits were verified as confirmed COVID-19 cases.

Whilst the average infection rate for our surgery colleagues at the hospital was 20%, the dental clinic has had zero infections amongst 60 dental staff members including faculty and residents. This fortuitousness can be attributed to strict administrative and engineering controls, and provision of adequate personal protective equipment (PPE) immediately after consulting recommendations which came out from national health services and the American Dental Association.

Special attention towards PPE and initiating a respiratory programme including fit testing for all our dental staff were key elements of our success.2 Furthermore, donning and doffing measures for PPE were reinforced to all staff members; adequate training via online meetings and hands-on exercises were provided; and each staff member was asked to observe one another and provide constructive feedback to improve these procedures every day. I would also like to acknowledge the unwavering support from our leadership and department of infection control during this pandemic; the provision of an adequate supply of PPE was dynamically managed and stocked up, which went a long way towards uplifting staff morale.

As there is still limited understanding of the COVID-19 disease, it is important to share the learnings from our experiences to help build the evidence-base. Once any new guidelines come into place we can recalibrate our responses and adjust our priorities.

F. Umer, Karachi, Pakistan

## References

- Rana R, Ather M. Change in surgical practice amidst COVID 19; example from a tertiary care centre in Pakistan. Ann Med Surg (Lond) 2020; doi: 10.1016/j. amsu.2020.04.035.
- Umer F, Haji Z, Zafar K. Role of respirators in controlling the spread of Novel Coronavirus (Covid-19) among dental health care providers: a review. *Int Endod J* 2020; doi: 10.1111/iej.13313.

https://doi.org/10.1038/s41415-020-1727-z

#### The future for dental events

Sir, social distancing measures are predicted to last for some time but networking and face-to-face contact have always been important in the world of dentistry. For example, picking up and trying on a pair of loupes at a trade show cannot be emulated over the internet. Ideally, the exhibition industry will return to its pre-COVID-19 status. Yet, social distancing may well become a way of life, and in that case it will be interesting to see the effect on the future of dental events.

N. Axiotis, L. Benson, Manchester, UK https://doi.org/10.1038/s41415-020-1749-6

## Altered exodontia techniques

Sir, we write to inform your readers about techniques for non-surgical exodontia we have adapted to at Liverpool University Dental Hospital during the COVID-19 pandemic. As part of the avoidance of aerosol generating

44

procedures (AGPs) we have been avoiding the use of a surgical handpiece where possible, removing bone with rongeurs, bone chisel/ osteotome (with a mallet) and bone files and using chisels to divide teeth (with a mallet). The importance of a good pre-operative clinical and radiographic assessment as well as fully informing the patient of potential treatment and risks involved is essential. These older techniques are useful to avoid additional PPE issues and environmental issues associated with AGPs.

M. Dingle, H. Irshad, S. McKernon, K. Taylor, Liverpool, UK

#### Reference

 Sabino-Silva R, Jardim A C, Siqueira W L. Coronavirus COVID-19 impacts to dentistry and potential salivary diagnosis. Clin Oral Investig 2020; 24: 1619-1621.

https://doi.org/10.1038/s41415-020-1726-0

# Antibody testing

Sir, now that Roche's SARS-CoV-2 antibody test has been approved by Public Health England, might it be reasonable for dental practice generally and SDCEP in particular to take this into consideration?

A patient who has tested positive could be viewed as reasonably safe for AGPs, with normal PPE. I do understand that we have a lot still to learn, but we need some decent working hypotheses. In the larger picture, we might be able to help roll out broader testing, take the load off our medical colleagues and help the public and especially the NHS and carers get back to work safely. This is in line with Scottish Government policy.<sup>1</sup>

Dental patients could also be tested on their examination appointment by the dentist; results are rapid and follow up could be quickly organised to book positive patients in for AGPs. Dentists will need some phlebotomy training. Many of us have experience in this but may need updating and being taught the specific requirements of the Elecsys Anti-SARS-CoV-2 serology test; others do not have such experience and will need a somewhat more extended course. Perhaps the practicalities of such training could be investigated by NES.

In Scotland a mechanism for reimbursement already exists within the SDR; 3601 – Taking of material for pathological examination: per course of treatment £14.00 (£11.20). This would be a good mechanism for reporting results via practitioners' services, to the wider NHS and

researchers. I imagine that the fee would be about right for the practice, but that the test itself would be funded through local pathology services. The implementation of this is within the gift of practitioner services or failing that the CADO or failing him, the minister. At the moment, while we are on 'benefits' it would cost the treasury nothing.

It is a little distressing that private companies (like Sodexo at Edinburgh Airport) have been given public funds to do antigen testing, while dentists are sitting at home and currently being supported by the NHS, when they could be doing this work.

D. Chong Kwan, Dunfermline, UK

#### Reference

Scottish Government. Coronavirus (COVID-19): framework for decision making. 23 April 2020. Available at: https://www.gov.scot/publications/coronavirus-covid-19-framework-decision-making/ (accessed 30 May 2020). https://doi.org/10.1038/s41415-020-1728-y

## **Undergraduate uncertainty**

Sir, I would like to share my thoughts and experiences on how COVID-19 has affected me as a year 13 student, applying to university to study dentistry this September.

Unfortunately our A-level examinations have been cancelled this summer. This means that instead of receiving our final grades, determining meeting our offers for university, our results will be based on grades predicted by our teachers based on past exams and schoolwork. If we are not satisfied with our predicted grades on A-level results day, we have the option to appeal and sit alternative exams during the autumn or next year. Therefore, we were advised by our schools to continue revising to complete the specification of our subjects in case the appeal process is necessary. This circumstance of a retake will probably void our current university offers.

I am majorly concerned about being successfully admitted to dental school this September, having already battled through the incredibly competitive personal statement, interview process and securing my offer. My fellow students and I are experiencing a number of difficulties. We are also troubled about our early dental school career possibly being spent in lockdown instead of in university, as I understand the importance of being orientated with the introduction of the course and the onsite facilities available. This is particularly essential for first year students.

I feel lost and uncertain about my future and the status of my university application.

I hope this time of uncertainty does not disadvantage me and my year group from excelling in our future dental studies. Although I understand that we are currently experiencing unprecedented times, I am hopeful in the near future things will settle and we will have learnt many invaluable lessons.

*U. Janjua, A. Rasool, Birmingham, UK* https://doi.org/10.1038/s41415-020-1729-x

## COVID-19 in Madrid

Sir, the region of Madrid (population 6.6 million) is one of Europe's regions most affected by COVID-19 with around 60,000 cases officially reported (beginning of May). On 14 March 2020 the Spanish Government decreed a state of alarm under which the whole population was subjected to compulsory home confinement. A few days later, the General Dental Council of Spain advised that due to a general shortage of PPE, practices which do not have this equipment available would immediately cease to operate, including cases involving dental emergencies. Consequently, only 5% of the dental clinics remained open for urgent dental care.

We present a preliminary analysis of some aspects of urgent dental care performed by a dentist in this region (17 March-3 May) who was on call 24 hours a day, six days a week, with the support of an assistant. Before an appointment patients underwent a telephone interview by the dentist; none reported COVID-19 symptoms nor contact with infected persons. Following this protocol, patients were then seen at the practice within one hour. Some 25% were treated between midnight and 6 am. The time span between the presentation of symptoms and the request for urgent consultation was usually over ten days. The majority of patients (75%) had received treatment involving only the usual medication. At all times, the dentist used appropriate PPE, minimising the use of aerosol generating procedures.

Total patients seen were 187 (98 women; 89 men; aged 20 months–87 years). Seven were children under the age of 12 and 12 were over 75. The most common diagnosis (50%) was acute periapical periodontitis, with associated abscess (19% of cases), irreversible pulpitis (13%), complications of third molar pericoronitis (7%), periodontal abscesses