UPFRONT

brushes and that this should be brought to the attention of the relevant International Standards body.

C. Turner, Bath, UK

### Reference

 The Dentist. New periodontitis patient study finds interdental brushes and rubber interdental picks most efficient in reducing both plaque and gingival inflammation. 2022. Available at https://www.the-dentist.co.uk/content/news/ new-periodontitis-patient-study-finds-interdentalbrushes-and-rubber-interdental-picks-most-efficientin-reducing-both-plaque-and-gingival-inflammation (accessed May 2022).

https://doi.org/10.1038/s41415-022-4360-1

# Paediatric dentistry

## **Brush sampling**

Sir, I read with interest the recent correspondence in the *BDJ* entitled 'A COVID complication' by Buxton *et al.*<sup>1</sup> I noticed the quandary for clinicians encountering such situations and the fact that the child was still maintaining oral hygiene with a fluoride-free toothpaste (I assume with a toothbrush).

There is evidence to support the utilisation of toothbrushes as a methodology to perform sampling for SARS-CoV-2 with a reported sensitivity of 60%.<sup>2</sup> Another alternative to nasopharyngeal swab (NPS) sampling are buccal swabs (sensitivity of 58.9%). These methodologies may be utilised in patients, paediatric included, who seem unamenable to NPS sampling. Toothbrush sampling appears to be painless, economical, requires no specialised training for collection, can be self-collected and involves a device (toothbrush) with which the paediatric patient is familiar inside the oral cavity. Further research into these methods would seem to be relevant.

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#### References

- Buxton L, Collard M, Ezzeldin M. A COVID complication. Br Dent J 2022; 232: 588.
- Gupta S, Mohindra R, Jain A et al. Toothbrush as a sampling methodology for detection of SARS-CoV-2. Oral Dis 2021; DOI: 10.1111/odi.14122.

https://doi.org/10.1038/s41415-022-4361-0

# DIY dentistry

### **Damaging self-treatment**

Sir, a patient aged 38 who was an irregular attender, not currently registered with a GDP and therefore unable to access emergency dental care easily, had suffered two days of severe toothache. The patient attended the dental hospital emergency clinic via 111 access complaining of pain from a 'gum flap' and fluids passing from the mouth into the nose after extracting her own teeth with forceps purchased online. Her request was to have the 'flap stitched back into place'.

Medically, the patient had well-controlled epilepsy, asthma, anxiety/depression and chronic back pain. Clinical and radiographic examination confirmed that she had successfully extracted the 13 and 14 and had removed what she thought was a blood clot. This in fact was the gingival and palatal soft tissue and supporting alveolar bone thus creating a significant oral-antral connection (OAC) (Fig. 1).

A microbiology swab of the wound was obtained for culture and sensitivity and the defect was irrigated with normal saline. The patient was given oral hygiene instructions and was advised to avoid nose blowing. Ephedrine nasal drops 1% TDS and Doxycycline 200 mg on day one followed by 100 mg OD for five days were prescribed. An obturator/suck-down splint was constructed to be worn full-time to cover the defect as it was initially considered to be too large to heal spontaneously. At a six-week review, the patient was no longer experiencing pain or fluid passage into the nose. Clinically there was no OAC evident. Refractory cases may require surgical closure of the defect with a buccal advancement flap or buccal fat pad where soft tissue is deficient.

There is a vast collection of dental resources available online, including demonstration videos of dental treatment techniques and even the possibility to buy equipment and materials. It is not always clear that these are mostly for dentally trained persons resulting in the general population accessing them for 'self-treatment'. Looking at this case in particular, the ability to self-inflict such damage without local anaesthetic brought into question the patient's mental state in response to severe dental pain, the dental services for failing to offer this patient treatment in a timely manner and the quality and ease of access of dentistry-related information online. M. Hajivassiliou, C. Smith, S. Kashyap, Newcastle, UK

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Fig. 1 The patient who had extracted two of their own teeth, along with gingival and palatal soft tissue and supporting alveolar bone, thus creating a significant oral-antral connection