Letters to the editor

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Aesthetic dentistry

Is the NHS equipped to manage complications?

Sir, there has been a recent rise in popularity of dermal fillers with the increased use of social media, video calling and conferencing since the start of the pandemic.¹ As personal care premises, such as beauty salons, have been able to re-open following the easing of COVID-19 restrictions, there has been a rise in the number of patients attending Accident and Emergency (A&E) departments, with vascular occlusion following the injection of filler material undertaken in these establishments.

Vascular occlusion is a rare, but severe, complication occurring due to inadvertent intravascular injection of dermal fillers, or external vascular compression. The incidence of a vascular occlusion following soft tissue augmentation with filler is 1 in 100,000.² It is more common in the glabella and nasal area due to the limited collateral blood flow,³ and has the potential to result in skin necrosis and tissue death if left untreated.² The first-line treatment for vascular occlusion is hyaluronidase, which is a prescription-only medication; it can break down hyaluronic acid, the component found in dermal fillers.⁴

Whether undertaken by medical or non-medical practitioners, it is vital that there is a clear protocol in place for the management of such complications before administering dermal filler. Many patients are referred to their local oral and maxillofacial surgery (OMFS) department once a diagnosis of vascular occlusion is made, but it is important to bear in mind that A&E departments and maxillofacial units may not necessarily be able to manage acute complications of facial aesthetic procedures. The maxillofacial dental core trainees receiving the referrals may not have advanced aesthetics knowledge and training.

In addition, the hospital may not have hyaluronidase medication readily available.

As the public continue to seek facial aesthetic treatments, post-operative A&E attendances are also likely to rise. We believe it is important that A&E and OMFS teams are trained to spot these complications and be aware of onward specialist referral pathways, as appropriate, for the patient to receive the optimum level of care that is vital in these situations.

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References

1. Livingstone N. Covid: 'Zoom boom' sees rise in cosmetic treatment calls. 23 October 2020. Available at: <https://www.bbc.com/news/uk-wales-54651078> (accessed May 2021).
2. DeLorenzi C. Complications of injectable fillers, Part I. *Aesthet Surg J* 2013; **33**: 561–575.
3. King M, Walker L, Convery C, Davies E. Management of a vascular occlusion associated with cosmetic injections. *J Clin Aesthet Dermatol* 2020; **13**: E53–E58.
4. King M, Convery C, Davies E. The use of hyaluronidase in aesthetic practice (v2.4). *J Clin Aesthet Dermatol* 2018; **11**: E61–E68.

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History of dentistry

Bluetooth

Sir, as a dentist with a penchant for history, I was reading about the Anglo-Saxon King Canute (1016–1035). A Danish Prince, he became King of England, Denmark and Norway at a time when the Vikings were at large in Northwestern Europe and was the grandson of King Harald Bluetooth.¹

My surprise and amusement in learning the name of this latter Viking gentleman, who was obviously in need of root canal treatment, was only surpassed on learning about the contemporary company Bluetooth.² The Bluetooth company website explains that King Harald Bluetooth was known for uniting Denmark and Norway in the year 958. It goes on to explain that in 1996, industry leaders Intel, Ericsson and Nokia met to

standardise the short-range radio technology subsequently coined 'Bluetooth'. Jim Kardac from Intel was quoted as saying 'King Harald Bluetooth was famous for uniting Scandinavia just as we intend to unite the PC and cellular industries with a short-range wireless link'.²

Another interesting fact is that the curious Bluetooth symbol is a unification of the Danish runes for letters H and B – the initials of Harald Bluetooth.^{3,4} Thus, Anglo-Saxon history, dentistry and modern technology are inexorably linked.

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References

1. Wikipedia. Cnut the Great. Available at: https://en.m.wikipedia.org/wiki/Cnut_the_Great (accessed July 2021).
2. Bluetooth. The story behind how Bluetooth technology got its name. Available at: <https://www.bluetooth.com/about-us/bluetooth-origin/> (accessed July 2021).
3. Viking News by Skjalden. Why is bluetooth called bluetooth? 22 March 2018. Available at: <https://skjalden.com/why-is-bluetooth-called-bluetooth/> (accessed July 2021).
4. Sadeghi M. Fact check: Bluetooth is actually named after the Viking king who united Denmark, Norway. Available at: <https://www.google.co.uk/amp/s/amp.usatoday.com/amp/4505776001> (accessed July 2021).

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Restorative dentistry

Veneers not crowns

Sir, sadly, the rhetoric from Dr Kelleher and Professor Burke is not surprising, failing to address any of the issues raised in my initial response and adding nothing to the debate.¹ I made no mention of abfraction and I don't subscribe to any occlusionista tribe, whatever that may be. No treatment was undertaken on temporomandibular disorder grounds but to generate a favourable occlusion ensuring long-term success. Much is made of anterior marginal ridge preservation but current studies relate to molar/premolar teeth where occlusal forces are completely different. Simply extrapolating this data to anterior teeth is unsound.

In regard to the case referred to, composite rehabilitation had failed rapidly due to not addressing occlusal risk factors previously discussed and outdated traditional composite techniques.² The restorations also failed to meet the aesthetic expectations of the patient so the next logical stage would be addressing the occlusal risk factors and 360 Bioclear composites or minimally invasive ceramics, which in my experience far outperform traditional composites.

It appears some hospital-based dentists have little appreciation of the aesthetic aspirations of many private patients (where the majority of tooth wear is treated) and their treatment follow-up is often short-term with little experience of treatment longevity, particularly regarding traditional composite techniques in more compromised cases.

Veneers with palatal coverage which break through contacts have been described in the form of the overlap preparation nearly a decade ago, in an often cited and excellent *BDJ* book.³ The 360 veneer concept is a development on this design in compromised cases which incorporates the synergy of modern monolithic high-strength ceramics, minimal biologically controlled preparation and contemporary bonding protocols. The restoration provides superb aesthetics, restoration longevity, and the risk of failure lies with the restoration and not the tooth. It is a far cry from early, heavy-preparation traditional ceramic crowns. It is not a new concept, having been previously published four years ago.⁴

Interestingly, I recently gave an online lecture to dental practitioners: 'The definitive guide to anterior ceramic and composite restorations', where a number of cases were discussed and preparation designs presented such as in Figure 1 (these restorations were provided as traditional composite

restorations had failed prematurely). The overwhelming response to the 360 veneer concept was supportive. This lecture is available at dhti.co.uk as part of my evidence-based toolkit so readers can make their own informed decision on the concept and the limitations of traditional composite techniques.

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References

1. Kelleher M, Burke T. Veneers or crowns? *Br Dent J* 2021; **231**: 2.
2. Hassall D C. Of little consequence. *Br Dent J* 2021; **230**: 553–555.
3. Wassell R W, Walls A W G, Steele J G, Nohl F. *The Clinical Guide Series. A clinical guide to crowns and other extra-coronal restorations. The authoritative reference for dental practitioners and students*. London: BDJ Books, 2002.
4. Hassall D C. The ceramic revolution. *Dentistry* 2017; 46–50.

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Hall technique

Sir, Hall crowns are a relatively straightforward and non-invasive technique used for patients who may not be cooperative for conventional restorations. The placement of separators for Hall crowns can be difficult, particularly when there are tight contacts, abnormal anatomy or reduced cooperation from the patient. Rubber dam clamp forceps can be used effectively to place separators for Hall crowns using the following technique.

Place the separator in the grooves on the rubber dam clamp forceps and extend them to full width, ensuring the separator has not moved from within the groove or been torn. The separators should be straight and not twisted. The rubber dam clamp forceps are then inverted for separator placement interdentally using a rocking motion and applying downward pressure simultaneously. Close the rubber dam clamp forceps and remove from the mouth.

The technique has advantages and disadvantages.

Advantages:

- The separator is held straight and is not twisted and therefore easier to place, with greater downward pressure possible compared to floss
- The separator can be stretched more and with less effort compared to using floss
- It may be more effective in patients with smaller mouths as only the rubber dam clamp forceps need to be placed inside the mouth

- The rubber dam clamp forceps can also be used to remove the separator if required
- May be more suitable for patients with a gag reflex.

Disadvantages:

- Some children/special care patients may find the rubber dam clamp forceps threatening compared to floss
- The rubber dam clamp forceps would need to be sterilised prior to each patient
- Because the separator is stretched more than with floss, there can be more of the separator above the crown and therefore this may become an annoyance to the patient. This can be overcome by not extending the rubber dam clamp forceps to full width, which may not always be required
- There is a risk of damage to adjacent teeth/tissue with sudden movements from the patient.

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Social media

Real dentistry amidst the reels

Sir, social media platforms were engineered to make people engage in a common digital platform for sufficient time so that everyone eventually becomes a consumer by inadvertently paying attention to the advertisements. What began as a simple model of sharing photographs over the internet has been so meticulously curated over time by its creators with the introduction of short videos as Instagram Reels, Facebook Stories, WhatsApp Status and YouTube video link options. The idea behind new sharing options has been to create visually appealing posts, thereby making users spend more time and eventually get more views on advertisements.

Dentistry has been swift in adapting to the new way of life.¹ Numerous dentistry-specific pages and social media influencers leave no stones unturned to make their presence felt and stand tall amongst peers. Dentistry-related content ranges from sharing the visually captivating clinical outcome of a patient's treatment, tips and tricks on patient management, scholarly work and open discussion groups amongst peers for discussing different case scenarios. However, such posts should be treated with caution as they often lack any peer review when

Fig. 1 360 veneer preparations, conditioned for bonding showing the enamel nature of the preparations