# UPFRONT

This alternative has been touted to be the safest in treating warfarin users with oral candidiasis.<sup>3</sup>

There appears to be scarce epidemiological and indeed theoretical evidence to indicate the causation of derangement in warfarin anticoagulation with nystatin.<sup>4</sup>

A note here must be made of the fact that the nystatin oral suspension contains sugar; given this and its mode of delivery, the suspension generates conditions conducive to promote dental decay.<sup>5</sup>

Practitioners must advise and follow-up with the patient pertaining to this aspect of the prescription as well.

V. Sahni, New Delhi, India

#### References

- Mehmood Z, Mahmood S, Oktseloglou V. Bruising. Br Dent J 2022; 232: 4.
- Iversen D B, Hellfritzsch M, Stage T B, Aabenhus RM, Lind B S, Pottegård A. Antimycotic treatment of oral candidiasis in warfarin users. *Am J Med* 2021; doi: 10.1016/j.amjmed.2020.10.018.
- Hellfritzsch M, Pottegård A, Pedersen A J et al. Topical antimycotics for oral candidiasis in warfarin users. Basic Clin Pharmacol Toxicol 2017; 120: 368–372.
- Pemberton M N. Nystatin and miconazole: pharmacological and clinical evidence regarding interactions with warfarin. Oral Dis 2016; 22: 761–765.
- Donaldson M, Goodchild J H, Epstein J B. Sugar content, cariogenicity, and dental concerns with commonly used medications. J Am Dent Assoc 2015; 146: 129–133.

https://doi.org/10.1038/s41415-022-4004-5

## Paediatric dentistry

### **PROMs in AI patients**

Sir, we read with interest the recent wellreported prospective multi-centre specialistsetting paper by Lyne *et al.*<sup>1</sup> detailing the patient-reported outcome measures (PROMs) of a young population with amelogenesis imperfecta (AI) when transitioning to definitive dentition. This comment is focused on the need for discussing the study limitations and validation of the newly introduced PROM questionnaire.

Indeed, this was a very ambitious project since AI, a rare genetic disorder typified by faulty enamel development, can be difficult to diagnose and treat in young people. Additionally, AI presents with varying degrees of severity. However, there were six participants with an 'unknown' or 'unclassified' phenotype. How does the inclusion of these participants affect the results of this study? As treatment plans are likely to be patient-specific, this presents yet another variable with unknown effect. Furthermore, 40 participants (67%) were recruited from a single institution, whereas between six and seven participants were recruited from each of the remaining three institutions. Thus, it is unknown if the Eastman dataset was affected and diluted in the combined results as has been shown in multi-centre trials.

Interestingly, given that participants with all AI clinical phenotypes experienced a range of concerns, the personalised and multidisciplinary specialist strategy seems to be the safest option. Despite the young patients with AI in Ohrvik and Hjortsjö<sup>2</sup> stating a high satisfaction level with aesthetics and function of their restorations, all-ceramic bonded restorations were superior to indirect or direct compositeresin restorations in terms of clinical success criteria, anatomy and marginal integrity.<sup>2</sup> This demonstrates the disparity between our assessment as clinicians and that of patients as reported elsewhere.<sup>3</sup>

The PROM questionnaire has not been validated. Consequently, recommending it for daily practice or future studies might not be the current best suggestion. Moreover, some questionnaire items may require revision. Three categorical answers were available in eight of the ten questions. Thus, it is not surprising that three-quarters of the sample mentioned that they 'often' or 'sometimes' felt dissatisfied, with the appearance of their teeth becoming the most common concern.

We were glad to see that Lyne *et al.*<sup>1</sup> took the analysis one step further, and found that 81%, 41% and 33% of the 'post-treatment', 'mid-treatment' and 'pre-treatment' patients, respectively, were happy with their teeth. Once again, the encouraging positive outcome of their 'post-treatment' patient satisfaction implies that UK specialist centres are delivering effective personalised care to young patients with AI. Finally, we would like to congratulate the authors despite the caution discussed in this comment letter.

K. I. Afrashtehfar, University of Bern, Switzerland; R. J. Rezaei-Soltanabadi, Ajman University, UAE

Dr Alexandra Lyne responds on behalf of the authors: The authors would like to thank the readers for their letter highlighting the complexities of providing care for patients with amelogenesis imperfecta (AI) and their helpful comments. The AI patient-reported outcome measure (PROM) described in our recent paper was developed as a service evaluation tool to improve AI care and communication within the participating paediatric dentistry specialist units in the UK. This simple questionnaire was not developed with the rigour required for a research tool, but it did benefit from the invaluable input of young patients themselves. Our findings demonstrated the range of responses received but were not intended to be applied to the AI population in general, or to determine what treatment modalities are most successful in this group.

The readers highlighted the challenges of reaching a correct classification and diagnosis for the different types of AI, which were also noted in our paper. They also commented on the fact that the PROM had not been validated for wider use which is something we hope to address in future studies.

The intention of this paper was simply to demonstrate how a PROM can be developed with children and young people to help communicate their individual concerns and needs at various stages of their treatment.

#### References

- Lyne A, Parekh S, Patel N et al. Patient-reported outcome measure for children and young people with amelogenesis imperfecta. Br Dent J 2021: doi: 10.1038/ s41415-021-3329-9.
- Ohrvik H G, Hjortsjö C. Retrospective study of patients with amelogenesis imperfecta treated with different bonded restoration techniques. *Clin Exp Dent Res* 2020; 6: 16–23.
- Afrashtehfar K I, Assery M K A, Bryant S R. Aesthetic parameters and patient-perspective assessment tools for maxillary anterior single implants. *Int J Dent* 2021; doi: 10.1155/2021/6684028.

https://doi.org/10.1038/s41415-022-4005-4

## **Cosmetic procedures**

#### **Botox hidden dangers**

Sir, the indications for the use of botulinum toxin (BT) in the head and neck region include hypersalivation, migraine, masseteric hypertrophy, hemifacial muscle spasm and for the treatment of rhytids.<sup>1,2</sup> Although widely accepted as a safe drug, there are many side effects and interactions, and we hope this summary serves as a quick yet essential guide.

There are no absolute contraindications except a history of allergy to constituents of BT product. It should not be injected directly into infected skin or skin with psoriasis or eczema. Relative contraindications include avoiding injecting BT in patients who are breastfeeding, on contraceptives or pregnant unless clinically highly indicated. The evidence suggests that botulinum does not cross the placenta and systemic levels after cutaneous injections are extremely low.<sup>3</sup> As a caution, BT injected into patients with neuromuscular or neurological disorders (eg myasthenia gravis) can result in severe muscle weakness.

With regards to drug interactions, antibiotics - through their blockade effect at the neuromuscular junction gentamycin, amikacin, tobramycin and neomycin may result in exaggerated effects of botulinum toxin. Acetylcholinesterase inhibitors, prescribed for patients with myasthenia gravis, act as toxin antagonists and therefore may reduce the effect of botulinum toxin (common medication includes pyridostigmine). Aminoquinoline: these antimalaria medications have a negative effect on acetylcholine and therefore reduce nerve excitation. The result is that it has the potential to magnify the effect of BT. Cyclosporin: through an unknown mechanism, cyclosporin may potentiate the effects of BT.

Side effects can include:

- Keloid scar at injection site
- Ptosis if an injection is too close to the eyebrow, toxin solution may diffuse to the levator muscles of upper eyelid causing obvious weakness
- Dysphagia if injection given to major salivary gland or to the sternocleidomastoid muscle. Diffusion of toxin into surrounding muscles can cause this issue<sup>4</sup>
- Respiratory embarrassment injections into both submandibular glands for excessive hypersalivation may result in toxin solution extruding out of the gland capsule and into surrounding muscles involved with breathing<sup>4</sup>
- Facial weakness caused by diffusion of toxin to facial nerve branches, in particular when injected into the masseter muscle
- Pain, bleeding, swelling, bruising, infection
- Headache
- Paraesthesia
- Aesthetic disenchantment.

The vast majority of BT injections in this region are safe but a full patient assessment and thorough medical history is essential. Risks must be clearly explained and documented in the medical notes.

> N. Althawadi, A. Ujam, B. Visavadia, Northwick Park, UK

#### References

- British National Formulary. Botulinum toxin type A. Available at: https://bnf.nice.org.uk/drug/botulinumtoxin-type-a.html (accessed February 2022).
- Small R. Botulinum toxin injection for facial wrinkles. Am Fam Physician 2014; 90: 168–175.
- Trivedi M K, Kroumpouzos G, Murase J E. A review of the safety of cosmetic procedures during pregnancy and lactation. Int J Womens Dermatol 2017; 3: 6–10.
- Chan K H, Liang C, Wilson P, Higgins D, Allen G C. Longterm safety and efficacy data on botulinum toxin type A: An injection for sialorrhea. *JAMA Otolaryngol Head Neck Surg* 2013; **139**: 134–138.

https://doi.org/10.1038/s41415-022-4006-3

# Safeguarding

### Continuing vulnerability awareness

Sir, I was assured and saddened to see safeguarding being highlighted once again within the *BDJ*. I would like to thank Mrs Harris for her expert opinion<sup>1</sup> based on the important recent research published by Tuthill *et al.*<sup>2</sup> into child safeguarding. The role dental teams play in safeguarding is key now, perhaps more than ever.

The National Society for the Prevention of Cruelty to Children published a document regarding child welfare and the pandemic in June 2020.<sup>3</sup> Within this document, they conclude that 'the combined impact of increased stressors on caregivers, increased child vulnerability, and reduced safeguards increases the potential for new and recurring cases of abuse in all its forms'. This view was supported by the Children's Commissioner, National Crime Agency and the Children's Society.

Childline subsequently reported record numbers of phone calls,<sup>4</sup> with the top concerns reported to their helpline being:

• Adult health and behaviour (including worries about parental alcohol and substance misuse, domestic abuse and parental mental health), which increased 42%

# UPFRONT

- Neglect, which increased 15%
- Physical abuse, which increased 18%
- Emotional abuse, which increased 40%.

As dental services return to a new normal, it is essential that we understand our responsibilities. It may be that we are the first external party, aside from the education sector, to engage with a child or young person since the onset of the pandemic. Principle 8 of the GDC *Standards* document<sup>5</sup> states we have a responsibility to raise concerns when patients are at risk of abuse and neglect and know how to manage these circumstances.

I would implore and encourage my colleagues to continue to utilise excellent guidance<sup>6</sup> we have in our possession. Support is available from local safeguarding teams, paediatric dentistry departments, social services and medical colleagues. All of the aforementioned is imperative to protect our paediatric dental patients from harm – particularly as it may be that we are encountering them at their most vulnerable.

S. J. F. Wright, Liverpool, UK

#### References

- Harris J. Expert view: Jenny Harris. Br Dent J 2022; 232: 36.
- Tuthill D, Guest-Rowlands G, Hingston E J. When does childhood dental caries become neglect or abuse: do parents think what we think? *Br Dent J* 2021; doi: 10.1038/s41415-021-3569-8.
- Romanou E, Belton E. Isolated and struggling: social isolation and the risk of child maltreatment, in lockdown and beyond. June 2020. Available at: http://www. cokmed.net/ps-sistem/dosyalar/kutuphane/ Isolated%20and%20Struggling.pdf (accessed February 2022).
- NSPCC. Record numbers contact the NSPCC with concerns during lockdown. 2020. Available at: https://www.nspcc.org.uk/about-us/newsopinion/2020/2020-10-07--helpline-recovery-plan/ (accessed 16 January 2022).
- General Dental Council. Standards for the dental team. 2013. Available at: https://www.gdc-uk.org/ information-standards-guidance/standards-andguidance/standards-for-the-dental-team (accessed January 2022).
- Harris J, Sidebotham P, Welbury R et al. Child protection and the dental team: an introduction to safeguarding children in dental practice. 2006. Available at: https://bda. org/childprotection/Resources/Documents/ Childprotectionandthedentalteam\_v1\_4\_Nov09.pdf (accessed February 2022).

https://doi.org/10.1038/s41415-022-4007-2