however, like to highlight the possible radiological implications of the use of certain aesthetic treatments, especially to our colleagues who provide these treatments for their patients.

A 49-year-old female was referred by her dental surgeon to the maxillofacial department with severe and worsening right-sided facial pain. Having undertaken a comprehensive clinical assessment and examination, relevant investigations were arranged, including an MRI scan. The use of MRI scans in the investigation and assessment of facial pain is well documented.¹

The resulting images were reviewed by a consultant radiologist and reported as showing 'unexplained bilateral subcutaneous malformations of possible vascular origin'.

At the following review appointment, it became evident that our patient had undertaken non-surgical cosmetic treatment with dermal fillers, which she had failed to mention.

Dermal fillers have long been used to mitigate the effects of ageing, with the aim of temporary replacement or augmentation of lost tissue volume.²

Several types of dermal filler are in current use by practitioners: these comprise short-term, medium-term (temporary) and long-term (permanent) fillers.

Whilst patients are inclined to provide a full history of all treatments to their

aesthetic practitioner, they are less likely to disclose these cosmetic treatments to other healthcare providers and therefore this should be communicated by the clinician.

We would suggest that patients should disclose any history relating to their receiving aesthetic (facial) treatments. Colleagues performing these procedures, such as injecting dermal fillers, should also be aware of the possible radiological implications,³ as is evidenced with MRI scanning images (Fig. 1).

Furthermore, chronic facial pain has been noted following injections in the region of the tear trough, leading to pain within the distribution of the infra orbital and zygomatico facial nerve territories. Whilst at present the exact mechanism for such pain is not understood, the use of permanent rather than temporary fillers may be more difficult to resolve⁴.

*J. Turner and C. J. Mannion,
Maxillofacial Surgery Department,
by email*

1. Zakrzewska J.M. Differential diagnosis of facial pain and guidelines for management. *Br J Anaesth* 2013; **111**: 95–104.
2. Fallacara A *et al*. Hyaluronic acid fillers in soft tissue regeneration. *Facial Plast Surg* 2017; **33**: 87–96.
3. Ginat D T, Schatz C J. Imaging features of midface injectable fillers and associated complications. *AJNR Am J Neuroradiol* 2013; **34**: 1488–1495.
4. Foroglou P, Kirkpatrick N. Treating Permanent dermal filler complications. *Aesthetics* 2016; **12**: 34–36.

DOI: 10.1038/sj.bdj.2018.985

Never events

Patient safety definitions

Sir, we thank Horton and Cottam for their interest¹ in our study in which we sought to develop an international expert consensus-based list of 'never events' for primary care dentistry.²

Horton and Cottam question our understanding of never events and propose we re-label these 'significant events'. Horton and Cottam's suggestion is conceptually misaligned with modern patient safety theory and definitions being operationalised in health systems worldwide.

Our list of candidate never events are consistent with the NHS definition for patient safety incidents and the four never event criteria.³

The purpose of the Delphi study was to reach consensus about 'preventability', 'severity' and finally expert opinion on whether candidate never events should 'be

classified as never events' as per the NHS definition.

The list of possible never events was identified from our systematic scoping review of the international literature over a 20-year period⁴ and a detailed analysis of relevant patient safety incidents reported to the National Reporting and Learning System (NRLS) in England and Wales over a period of eight years.⁵

Thus, we empirically drew upon learning from incidents that have occurred as a result of a medical error and not an expected trajectory of a disease process. In our paper, we demonstrate the majority of candidate never events (which reached expert consensus) in our study were retrieved from the NRLS database.

Significant events and never events are overlapping concepts related to the term 'patient safety incident'. A patient safety incident is defined as 'an event or circumstance that could have resulted, or did result, in unnecessary harm to a patient'.⁶

In this context, never events are 'serious, largely preventable patient safety incidents that should not occur if the available preventive measures are implemented'.

Horton and Cottam's cited definition for significant event is 'any event which has an outcome either beneficial or detrimental, which differs significantly from that expected'.

The level of abstraction of this definition is greater than the term 'patient safety incident'.

As this definition for significant events suggests these events are linked to an outcome, which can range from a serious patient safety incident to an event demonstrating high-quality dental care provision.

Labelling our list of 'never events' as 'significant events' will bring confusion to dental professionals and their staff for reporting.

A 'significant event' is linked with an outcome whereas a 'never event' includes 'near misses' and 'no harm incidents', which should all be used for professional learning and practice improvement purposes.⁷

Patient safety in dentistry is an emerging field with a paucity of empirical evidence about the frequency and burden of patient safety incidents in dentistry, and limited understanding of why errors occur.⁸

This lack of data hinders progress to develop effective interventions to reduce

Fig. 1 MRI scan indicating the subcutaneous areas identified by the radiologist as being of concern

unintended harm in dental settings. Agenda setting studies of the kind that we have undertaken are paramount for laying firm foundations from which the field can grow.

Our proposed list of never events is a starting point for setting research priorities to support production of a robust evidence base for dentistry, which we hope will be translated into action through effective resource allocation, policymaking, and evaluation of preventive strategies.

*E. Enseldo-Carrasco, A. Carson-Stevens,
K. Cresswell, R. Bedi, A. Sheikh,
by email*

DOI: 10.1038/sj.bdj.2018.986

1. Horton M, Cottam D. Never events: 'Significant' rather than 'never' events. *Br Dent J* 2018; **225**: 274–275.
2. Enseldo-Carrasco E, Carson-Stevens A *et al*. Developing agreement on never events in primary care dentistry: an international eDelphi study. *Br Dent J* 2018; **224**: 733–740.
3. Department of Health. Revised Never Events Policy and Framework. National Health Service, London; March 2015. Available at <https://improvement.nhs.uk/resources/never-events-policy-and-framework/> (accessed 22 October 2018).
4. Enseldo-Carrasco E, Suarez-Ortega M F, Carson-Stevens A *et al*. Patient safety incidents and adverse events in ambulatory dental care: a systematic scoping review. *J Patient Saf* 2016; Sept 8.

5. Enseldo-Carrasco E, Sheikh A, Cresswell K, Bedi R, Carson-Stevens A, Sheikh A. Patient safety incidents in primary care dentistry in England and Wales: A mixed-methods study. *Journal of patient safety*. 2018; DOI: 10.1097/PTS.0000000000000530 [Published Ahead of Print].
6. World Alliance For Patient Safety Drafting Group. The Conceptual Framework for the International Classification for Patient Safety. World Health Organization; 2009. http://www.who.int/patientsafety/taxonomy/icps_full_report.pdf. (accessed 22 October 2018).
7. Battles J B, Lilford R J. Organizing patient safety research to identify risks and hazards. *Qual Saf Health Care* 2003; **12**(suppl 2): ii2–7.
8. Bailey E, Tickle M, Campbell S *et al*. Systematic review of patient safety interventions in dentistry. *BMC Oral Health* 2015; **15**: 152.

Technology in dental care

Oral health by mobile phone

Sir, we read with interest the letter by Dr Stevens on children's oral health (*BDJ* **225**: 96) in particular in relation to parents and their children in many developing and underdeveloped countries through mobile apps for oral hygiene and oral health

information from dentists and oral health professionals.

In developing countries like India, large numbers of infants and children living in rural areas and also in urban areas (in lower socioeconomic groups) have no access to dental care. Oral health is often neglected and so prevention and public health promotion programmes can be effective in preventing dental caries and gingivitis in children under five years of age.¹

At present mobile phones are used by the majority of people, in lower socio-economic groups also, even in rural areas and as suggested by Dr Stevens, mobile apps can be of great help in promoting oral health where dentists are not readily available.

*M. V. Math, Y. R. Kattimani,
R.M. Khadkikar, K. Mani,
by email*

DOI: 10.1038/sj.bdj.2018.987

1. Alves A P, Rank R C, Vilela J E, Rank M S, Ogawa W N, Molina O F. Efficacy of a public promotion program on children's oral health. *J Pediatr (Rio J)* 2018; **94**: 518–524.