which may involve excluding other palliative treatments in addition to CPR.⁴

The numbers of DNACPR orders have increased globally and older people are the most common patient group to have these orders⁵ but it can also affect children⁶ and domiciliary dental patients.⁷ The medico-legal implications are very important since the outcome is essentially life or death. There have been reports of resuscitation being attempted despite patients having a DNACPR order in place and a UK cohort study looking at NHS hospitals reported 52 cases of inappropriate CPR on such patients.⁸

At present the recommended medical history forms from the BDA have no separate section on DNACPR orders or any of the alternatives used in the UK. Dentists should consider, if not already, adding such a section within the medical history in order to alert the dental team and also consider auditing this process to prevent potential medico-legal issues. It is important to note that DNACPR orders may be withdrawn and therefore evidence should be brought to dental appointments and regularly checked should there be a medical emergency.

I. Khan, West Midlands, UK

References

1. World Health Organisation (WHO). *Global atlas of palliative care at the end of life*. London: Worldwide Palliative Care Alliance. 2014. Available at: http://www.who.int/nmh/Global_Atlas_of_Palliative_Care.pdf (accessed May 2020).
2. British Medical Association, the Resuscitation Council (UK) and the Royal College of Nursing. *Decisions relating to cardiopulmonary resuscitation* (3rd edition - 1st revision). London, 2016. Available at: <https://www.resus.org.uk/EasySiteWeb/GatewayLink.aspx?allid=16643> (accessed May 2020).
3. General Medical Council. *Treatment and care towards the end of life: good practice in decision making*. London: General Medical Council, 2010. Available at: https://www.gmc-uk.org/-/media/documents/treatment-and-care-towards-the-end-of-life---english-1015_pdf-48902105.pdf?la=en&hash=41EF651C76FDBEC141FB674C08261661BDEFD004 (accessed May 2020).
4. Fritz Z, Slowther A M, Perkins G D. Resuscitation policy should focus on the patient not the decision. *BMJ* 2017; **356**: j813.
5. Charniak E P. Increasing use of DNR orders in the elderly worldwide: whose choice is it? *J Med Ethics* 2002; **28**: 303-307.
6. Morrison W, Berkowitz I. Do not attempt resuscitation orders in pediatrics. *Pediatr Clin North Am* 2007; **54**: 757-771.
7. Khan I, Harper R, Forbes E. The management of domiciliary dental patients. *J Disabil Oral Health* 2019; **20**: 53-66.
8. Findlay G P, Shotton H, Kelly K, Mason M. Time to Intervene? A review of patients who underwent cardiopulmonary resuscitation as a result of an in-hospital cardiorespiratory arrest. A report by the National Confidential Enquiry into Patient Outcome and Death. 2012. Available at: https://www.ncepod.org.uk/2012report1/downloads/CAP_fullreport.pdf (accessed May 2020).

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Oral health

Heart transplant recollections

Sir, reading the article *Oral health complications after a heart transplant: a review* (BDJ 2020; **228**: 177-182) brought back memories of two of my interactions with heart transplant patients.

In late 1968 I was a junior lecturer in periodontology and was asked by Cyril De Vere Green, consultant oral surgeon and dentist to the National Heart Hospital, if I would go with him to see one of the very early heart transplant patients who was fading fast. With most other possible causes eliminated the focus had gone to his mouth. It was obvious that the patient had several very carious teeth and wall to wall calculus overlaid with plaque. I suggested that he needed a scaling. This was a procedure that consultant oral surgeons did not do!

I was delegated the task, so back to UCH to collect a Cavitron, which was the size of a very large microwave, a chairside aspirator as the suction in the side ward of the hospital was not good enough, and two dental nurses. We squeezed into a taxi and then set up the equipment next to the patient in the side ward. The patient was semi-comatose but did apologise for the state of his mouth and was as co-operative as he could be with monitoring leads and drips etc all over the place. He did not have a pacemaker, but in those days the effect of the Cavitron electrics on pacemakers were not known. After 45 minutes we had cleared him of nearly all the supra and subgingival calculus and had stopped the bleeding from his gums. I identified four teeth for extraction. One of the transplant surgeons observed what we had been up to and that the patient looked cleaner. I could not resist, going far beyond my paygrade, telling him that it might have been better if someone had looked in the patient's mouth before the transplant and cleaned it before surgery. His reply surprised me when he said that a dental examination and emergency treatment would be in the protocol for the next patients. Needless to say I had to fight to get the taxi fare reimbursed, and sadly the patient died some five weeks later.

In 1988 I was asked to provide dental care for a patient who had a heart transplant in 1984. He had been

on permanent antibiotic cover and cyclosporine which had given him some gingival hyperplasia that was aggravated by poor amalgam interproximal restorations. Replacing the restorations improved the gingival contours. The patient had very good oral hygiene, a well-controlled diet and no new caries in the next ten years. He won a gold medal in the transplant games and said he had more trouble from the scar on his chest than the transplanted heart except that the fixed heart beating rate gave him a slight problem cycling up hills. When I asked him if he had any dental care prior to his transplant he said he had some care from a hygienist. So maybe my comments to that transplant surgeon did have some lasting effect!

S. Morganstein, London, UK

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Paediatric dentistry

Paediatric dentists and cleft patients

Sir, the members of the Paediatric Dentistry Clinical Excellence Network group of the Craniofacial Society of Great Britain and Ireland welcome the paper *A general dental practitioner's role in treating patients with a cleft lip and/or palate* (BDJ 2020; **228**: 19-21) as this is an area that the Cleft Lip And Palate Association is working to promote at present.

We were disappointed to note, however, that the importance of the role of a paediatric dentist within the multidisciplinary team (MDT) was not highlighted in the paper and the important relationship between these specialist clinicians and the GDP.

Within the MDT in each region of the UK there is a paediatric dentist who attends MDT clinics that these child and adolescent patients visit, the frequency of which is determined by their specific care pathway. They will not usually be seeing this group of patients for routine recall appointments. The role of the GDP is highlighted to these families at such clinics in all regions from infancy onwards.

It is our aim that children in this high priority group are provided with enhanced prevention as per the DBOH toolkit guidance as well as high quality, local dental care from the time of eruption of their first tooth and throughout their patient journey. In addition, we would like to highlight that specialist paediatric

dental input can be facilitated for this group of children by timely and effective communication with the MDT paediatric dentist involved in their care.

L. Burbridge, Newcastle, UK

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Parental behaviour

Sir, when I suggested applying some 'caramel gel' to my apparently co-operative, low-caries-risk paediatric patient last week, he burst into tears at the thought of it.

As a foundation dentist working in a relatively low-needs practice, most of my child patients are regular attenders and familiar with the dental environment. Despite having no experience of toothache, traumatic dental procedures, or phobic parents, many of them still present with dental anxiety. I have begun to wonder why certain children feel so threatened and unable to cope at the suggestion of something new being put on their teeth. It suggests that in a patient group whose basic physical and economic needs are met, there is more space to explore underlying emotional problems and psychological determinants of behaviour. In particular, the style of parenting is revealed as problematic.

I came across a review paper which began to address this issue and articulated many thoughts I had pondered during my experience with children at dental school.¹ It summarised parental behaviours that seek to control the child, and addressed areas of developmental psychology that can be applied to dentistry. From my understanding of the paper, certain controlling parental behaviours manifest as psychological intrusions which negatively influence how the child perceives a new situation. As a result of this, they do not feel empowered to cope with the task at hand and become anxious.

I am sure many of my colleagues, both students and qualified dentists, will have witnessed examples of controlling or manipulative tactics used by parents in an attempt to make their children cooperate. To quote just a few from the aforementioned article, these include bribing, shaming or 'babying' the child.¹ These are not always obvious and can often be well-intentioned despite being coercive.

In some cases I have been able to work with the child to overcome these intrusions and encouraged them to have an explorative

experience of the dental appointment. However, others have still been difficult to manage. To me, their phobia seems reinforced by the parent's behaviour, which coalesces as inner conflict for the child, especially when it is difficult to see the child without the parent present.

Looking beyond childhood and to the implications of parental intrusions later in life, I have seen several patients with hypersensitive gag reflexes, unusual fixations about their teeth, or idiopathic facial pain symptoms. Part of me wonders whether the symptoms of these patient groups are actually unconscious manifestations of unresolved parental intrusions. The behaviours used to cope with them could be the techniques patients have developed as a way of dealing with this inner conflict.

I would encourage dentists, students and DCPs to consider reading this paper as part of the quest to comprehend the patient experience. A greater understanding of the parent-child relationship, how it affects the dental consultation, and how it can be managed in practice, may help us to better engage with and care for these anxious children.

A. Beaven, Chelmsford, UK

Reference

1. Chapman H R, Kirby-Turner N. Psychological intrusion - an overlooked aspect of dental fear. *Front Psychol* 2018; 9: 501.

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Formula milk products

Sir, I am writing to express my concerns about the following article recently published in the *BDJ*: *A cross-country exploratory study to investigate the labelling, energy, carbohydrate and sugar content of formula milk products marketed for infants* (*BDJ* 2020; 228: 198-212).

The title and abstract of this article refers to the sugar content of infant formula milk. The study looks at the sugar content of a wide range of products including fortified cows' milk and milk based nutritional supplements marketed at toddlers. These are not infant formulas or breastmilk substitutes as implied in the article.

Looking at the data, the sugar content of the infant formulas shows little variability and is comparable to that of breastmilk. As I understand it, this sugar content is necessary to meet the nutritional requirements of

infants who rely on infant formula as a food source. The sugar content of the range of products targeting toddlers is more variable, as the authors note.

I am concerned that by referring to a wide range of milk products as 'infant formula', the article is misleading and may cause undue anxieties about the sugar content of infant formula.

I would be grateful if your journal could amend the original article to reflect the data it contains.

R. A. Harpur, on behalf of Infant Feeding Alliance, UK

Authors Gemma Bridge, Marta Lomazzi and Raman Bedi respond: We thank the editor for the opportunity to reply to the letter from Dr Harpur. We are grateful to Dr Harpur for her letter. She raises concerns the article could be misleading and cause undue anxieties about the sugar content of formula milk amongst some parents.

We believe these anxieties are unfounded. The title of our published paper states that we investigated a range of formula milk 'products' marketed at infants, ie babies and very young children.

We found that many of the products were high in sugar and that the sugar content was not clearly stated on the products. We argue that those responsible for providing information to parents about infant feeding, including The Infant Feeding Alliance, an organisation that Dr Harpur is affiliated with, public health groups, industry and health professionals should be concerned about the sugar content of all products that are consumed by infants as there is a significant proportion of young children with early childhood caries. The risk of caries is increased by high sugar intake, especially in the first 1,000 days of life.

The purpose of our article was to describe the sugar content of a sample of infant formula products from across the world, and to assess what information is available to caregivers on the labelling of such products about the amount and type of sugar in the products. These aims were achieved. However, we recognise that this study is just the start and do strongly recommend and support the need for further research on the possible long-term health effects of a high sugar diet in infancy, and argue that sugar content and labelling regulations of formula milk products for infants under three are warranted.

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