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## Primary dentition

Sir,- It is incredible that the authors do not mention the word 'prevention' even once in a two-and-a-half page article concerning 'how to the care for the primary dentition' (BDJ 2003, **195**: 301).

It appears that, in drawing battle lines over the care of the primary dentition, the authors have chosen the wrong opponent (specialists in paediatric dentistry) on the wrong battleground (restorative treatment decisions for deciduous teeth). The authors state in paragraph two 'The records show that nearly half of the (regularly attending) children (48 per cent) had experienced at least one episode of pain...' and in paragraph four they say 'It would appear that GDPs have learned experientially how to deal with the problem of caries in the primary dentition.... This approach is largely successful...'

In the words of John McEnroe 'You cannot be serious!' - half of the children experienced pain and this is 'largely successful'?! Surely the opponent here is the disease caries. The battleground should be the way in which (and how much) dentists are paid to deal with the disease in terms of primary, secondary and tertiary prevention (restorations being but one part of the latter).

C. Longbottom

The authors of the paper K. M. Milsom, M. Tickle and D. King respond: It is disappointing that the respondent sees the dental care of children as a 'battleground'. The authors feel that their research raises valid questions about the optimal approach to the dental care of children and they seek a rational debate on the matter.

The BDJ article drew the attention of the reader specifically to differences in restorative approach between the British Society of Paediatric Dentistry and 50 general dental practitioners in the north west of England. Despite there being very clear differences, in the hands of GDPs, 80 per cent of carious primary molars exfoliate without causing pain. It is difficult to argue that this is not success.

Almost half of the children in the study experienced dental pain. Given that all the children had two surface molar caries, it is perhaps surprising that the figure was not higher. Disappointingly, increased restorative care did not reduce pain experience. The logic of this observation must be that effective prevention of caries is the optimal approach and the authors wholeheartedly support this position. <sup>1</sup>

 Milsom K M, Tickle M, Blinkhorn A S. Dental pain and dental treatment of young children attending the general dental service. Br Dent J 2002; 192: 219-223.

## doi: 10.1038/sj.bdj.4810919

Sir,- The authors are correct to pose the question 'Does the dental profession know how to care for the primary dentition', and they confirm the gulf between the public health approach and that taken by paediatric dentists. <sup>1</sup> In questioning the rationale for the British Society of Paediatric Dentistry (BSPD) statement they selectively quote from several papers, to give in our opinion a quite inappropriate bias to their thesis.

They say that in Dawson's paper<sup>2</sup> over 10 per cent of stainless steel crowns (SSCs) needed further treatment but without adding that based upon that same study 75 per cent of one-surface and 70 per cent of two-surface amalgam restorations would need replacing before the age of eight.

In the Braff study<sup>3</sup> they quote a conclusion that it was not possible to conclude that SSCs were superior to amalgams in terms of longevity, but ignore his findings that SSCs had a success rate of 70 per cent compared with 11.3 per cent with multisurface amalgams, highly significant p<0.001. In terms of re-treatment, of great importance to whoever is paying for treatment, the State or parents, SSCs were highly superior to amalgams. Roberts and Sheriff<sup>4</sup> did report broadly similar longevity rates for SSCs and amalgams, and emphatically stated that amalgams were only placed in minimal, classical cavities, anything larger receiving an SSC.

Those of us working exclusively with children and especially those who like us bear the cost of re-treating our failed

restorations will attest to the superiority of SSCs where indicated for primary molars. The authors quote that the records showed nearly half of the children, 48 per cent had experienced at least one episode of pain, and that the more teeth affected by decay the more likely it was that pain was recorded. Also levels of caries experience were associated with an increased likelihood of extractions due to pain or sepsis.

They also talk about the consequences of disease and/or treatment in terms of pain impacting on family life and the child's psyche; surely, if the caries is detected and treated early enough then there will be no reason for pain/infection. In our experience restoration of a tooth with or without local anaesthesia as appropriate is much less traumatic for both the child and the parent compared with extraction under local/general anaesthesia. Perhaps the problem does not lie in the principle of restoring primary teeth, but in the quality of the restorative work carried out on children in this country. Maybe the authors should concentrate on standards of training in order to provide sound treatment for our child patients in order to prevent much pain and anxiety for the children and their parents, not to mention the cost benefits of not re-treating.

## J. F. Roberts, N. Attari Weymouth

- Milsom K M, Tickle M, King D. Does the dental profession know how to care for the primary dentition? Br Dent J 2003; 195: 301-303.
- Dawson L R, Simon J F, Taylor P P. Use of amalgam and stainless steel restorations for primary molars. J Dent Child 1981; 48: 420-422.
- Braff M H. A comparison between stainless steel crowns and multisurface amalgams in primary molars. J Dent Child 1975; 42: 474-478.
- Roberts J F, Sherriff M. The fate and survival of amalgam and preformed crown molar restorations placed in specialist paediatric dental practice. *Br Dent J* 1990; **169**: 237-244.

The authors of the paper K. M. Milsom, M. Tickle and D. King respond: If there is a gulf within the dental profession with respect to the care of the primary dentition, it is that the High Street primary care dentist does not follow the guidance set down by the specialist society in in paediatric dentistry. The stainless steel

crown is advocated by the BSPD and the claim is that this type of restoration lasts longer than amalgam. This may be true, but replacement rates for a particular type of restoration, whilst perhaps being an acceptable measure of technical success, cannot be regarded as the optimal professional benchmark for their success.

If we care about children (as opposed to restorations) then we should consider the impact of treatment on the child and also the likelihood of any treatment causing pain and discomfort. We have no scientifically rigorous comparative data on the prevalence of pain and discomfort and longer term outcome measures associated with teeth restored with stainless steel crowns and amalgam.

As a consequence, we are unable to say which, if either of these two techniques, is superior for teeth which are essentially temporary structures. We do, however, know that dentists in the northwest use glass ionomer more than amalgam for the treatment of two surface caries in molar teeth and that in so doing, replacement of fillings are common. Nevertheless, teeth restored with glass ionomer are no more likely to result in pain than teeth restored with amalgam.<sup>1</sup>

In this case longevity of amalgam restoration has taken second place to treatment simplicity with no detriment in outcome for children. The authors acknowledge that almost half (48 per cent) of the children in the study experienced pain. It is salutary to note that all the children in the study had interproximal

caries at the outset and that increased restorative intervention did not lead to reduced prevalence of pain. If it is the case that restorative care may actually not be the best way to stop pain in children with carious primary molars, then it is unlikely that advanced restorative care in the form of stainless steel crowns is the key to dealing with the problem! Clearly prevention of dental disease is the key to care of the primary dentition.

The respondent suggests that the problems of paediatric dentistry are associated with a lack of quality in the work carried out in the UK. One would hope that the majority of the dental profession would take issue with that position. The authors would ask, what is meant by quality? If by quality we mean removal of all caries in all teeth, ideal cavity preparation, followed by placement of the technically perfect restorations then clearly, many NHS GDPs may well fall short of the mark.

If on the other hand, quality means that children attend the dentist regularly, avoid pain and the need for extraction of their primary teeth and reach adulthood without having unnecessary interventions and are not anxious about visits to the dentist then one might argue that GDPs are indeed delivering a 'quality service'.

 Milsom K M, Tickle M, Blinkhorn A S. The prescription and relative outcomes of different materials used in general dental practice in the north west region of England to restore the primary dentition. J Dent 2002; 30: 77-82.

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## Disappearing lesions

Sir,- A 14 year old male patient attended another surgery for care in March 1995. He had a retained LLC. An OPG showed LL3 erupting and an 11 mm diameter well defined circular radiolucency over the apex of LL4 mesial to and above the mental foramen (Fig. 1). I saw him for the first time in July 1997.

The previous dentist supplied me with the original radiograph and a new radiograph (Fig. 2) showed that the lesion was now more irregular and much larger (3cm x 2.5 cm). The adjacent teeth had been visibly displaced by the growing lesion. LLC was still retained and LL3 had not apparently moved; however he was suffering pain consistent with an infection in the lower left quadrant.

He was given penicillin and at a subsequent appointment the LLC was extracted. He was referred for a consultant's opinion with regard to the growing cyst-like lesion between LL4 and LL5. He failed to attend for care at the hospital.

However the consultant agreed that investigation was a good idea after seeing the radiographs. I next saw the patient in September 2003.

He was complaining of pain on his left side. A further OPG was taken to assess the state of the lesion (Fig.3). The lesion had spontaneously resolved and the premolars had moved back together.

His pain was from the UL7 which was grossly carious. Perhaps the removal of LLC and subsequent eruption of LL3 allowed the cyst to exteriorise. Comments?

J. B. Rawcliffe Hull

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Fig. I

Fig. 2

Fig. 3