PostScript

LETTER

Can we identify abusive bites on children?

Bites are currently the only physically abusive injury where we can potentially identify the perpetrator. This may be from the dental characteristics or additionally from salivary DNA.¹ Bites may also be a source of cross infection, for example of hepatitis. It is essential therefore that paediatricians recognise a potential bite, and refer appropriately to a forensic odontologist (of which there are about 20 in the UK; details on the BAFO website²). We conducted an all language systematic review of the literature spanning more than 50 years to define the evidence base behind the diagnosis of an abusive bite on a child. We searched 12 databases, using 42 keywords, and supplemented this with hand searching of references and bibliographies. Although we identified 149 potentially suitable studies, all undergoing two standardised reviews, only five contained confirmed abusive bites, and they only describe five case studies³⁻⁸ (www.core-info.cf.ac.uk; see table on ADC website: <http://www.archdischild.com/supplemental>). All highlight the general characteristics of a bite, namely a 2-5 cm oval or circular mark, made by two opposing concave arcs, with or without associated ecchymosis. There were no studies validating the much used BAFO⁹ guidelines for bite mark analysis. Clearly confusion can occur between bites and dermatological conditions, burns, shoe prints, etc. In addition, the commonest bites children sustain are animal bites, although these have different canine distributions and usually tear rather than compress flesh.

The bite may show sufficient unique dental characteristics to identify the perpetrator (see fig 1). Traditionally measurement of the inter-canine distance of the bite will distinguish human adult bites (3.0-4.5 cm being adult human; 2.5-3.0 cm being child or small adult; and less than 2.5 cm, child's deciduous teeth). However, this is based on orthodontic data, and again have not been validated in clinical practise. While useful, there are individual, racial, and sexual variations, and a child reaches dental maturity at 12 years. The vital point for paediatricians is to ensure accurate photographs are taken of any suspected bite, using a tight angled measuring device, and taken in at least two planes if the bite is on a curved surface.¹⁰ Early referral to a forensic dentist is vital. If there is going to be a delay before a clinical opinion can be obtained, consider repeat photographs, as with reduced swelling the class characteristics of the teeth may become clearer. Clearly further research in this important area to define the clinical characteristics of abusive bites, and their likely location and pattern would be extremely valuable.

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The table is available on the ADC website (<http://www.archdischild.com/supplemental>)

Figure 1 Dental characteristics of a bite.

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- 9 BAFO (British Association of Forensic Odontology). Guidelines Bitemark Methodology. http://www.forensidentistryonline.org/Forensic_pages_1/bitemarkguide.htm. 2001.
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BOOK REVIEWS

Paediatric clinical research manual

Edited by Peter Helms, Peter Stonier. Euromed Communications, 2005, pp 150, £325.00 (US\$600 (approx.); €475 (approx.)), hardback. ISBN 13554808

This book is subtitled "A practical international handbook for all those working in clinical research". I received this book for review thinking that it was about "how to do paediatric clinical research".

I was mistaken. This book is actually about paediatric clinical pharmacology research.

The publication is a very useful handbook for those clinicians or clinical scientists who wish to embark on paediatric drug and therapeutics research. I say publication because the work is loose bound in an A5 ring binder and this makes the book feel much less authoritative than it probably is. No explanation is proffered as to why the book is presented in this ephemeral way. I can only assume that the busy paediatric pharmacologist (these people are busy because as the book points out, there are so very few of them) will have it propped open on the lab bench for immediate and handy access.

The book is timely as the paediatric clinical trial networks are about to commence in England through the establishment of the Medicines for Children Research Network. At the same time training in paediatric therapeutics as one of the 14 recognised subspecialties will lead to the emergence of a group of clinicians with CCSTs in paediatric clinical pharmacology.