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- 1 Abbas AK, Lichtman AH, Pober JS. Effector mechanisms of immunoglobulin E-initiated immune reactions. In: Abbas AK, Lichtman AH, Pober JS, eds. *Cellular and molecular immunology*. 2nd Ed. Philadelphia: WB Saunders, 1994: 279-92.
- 2 Brostoff J, Hall T. Hypersensitivity - type 1. In: Roitt I, Brostoff J, Male D, eds. *Immunology*. 3rd Ed. St Louis: Mosby Year Book, 1993: 19.1-22.
- 3 Tanaka T, Ben-Sasson SZ, Paul WE. IL-4 increases IL-2 production by T cells in response to an accessory cell independent stimuli. *J Immunol* 1991; **146**: 3831-5.
- 4 Maeda K, Sone S, Ohmoto Y, Ogura T. A novel differentiation antigen on human monocytes that is specifically induced by granulocyte-macrophage colony stimulating factor or IL-3. *J Immunol* 1991; **146**: 3779-84.
- 5 Lebedin YS, Raudla LA, Chuchalin AG. Serum levels of interleukin-4, interleukin-6 and interferon-gamma following in vivo isotype-specific activation of IgE synthesis in humans. *Int Arch Allergy Appl Immunol* 1991; **96**: 92-4.
- 6 Lawlor GJ, Tashkin DJ, Asthma. In: Lawlor GJ, Fischer TJ, eds. *Manual of allergy and immunology*. 2nd Ed. Boston: Little Brown, 1988: 115-65.
- 7 Schauer U, Kohl I, Jager R, Becker H, Rieger CH. Coexpression of CD4 and CD8 on mitogen-activated peripheral blood T cells from children with asthma: possible involvement of interleukin-4. *Ann Allergy* 1992; **68**: 354-9.
- 8 Bruijnzeel PL, Rihs S, Virchow JC Jr, Warringa RA, Moser R, Walker C. Early activation or 'priming' of eosinophils in asthma. *Schweiz Med Wochenschr* 1992; **112**: 298-301.
- 9 Schleimer RP, Sterbinsky SA, Kaiser J, et al. IL-4 induces adherence of human eosinophils and basophils but not neutrophils to endothelium. Association with expression of VCAM-1. *J Immunol* 1992; **148**: 1086-92.

A judicial comment on temporary brittle bone disease

EDITOR.—A recent reported judgment by Mr Justice Wall¹ in the Family Division of the High Court is relevant to the debate on temporary brittle bone disease.² The use of this diagnosis to explain injuries in both child protection and criminal court proceedings is largely due to the work of Paterson.³ In the case reported he was asked how two earlier cases that had been before the courts had been treated in his research data. In one case there had been a criminal conviction and in the other there had been a finding of non-accidental injury by the Wardship Court. It is reported that Paterson replied that both cases were included in his research as proven cases of brittle bone disease. Indeed, when asked how he would log the case before the court (the baby had suffered brain injury and multiple fractures), should the judge make a specific finding of non-accidental injury, he replied that he would still regard the case as being one in which the child had suffered temporary brittle bone disease. In the words of the judge 'Whilst courts of course accept that there may be cases where there is a divergence between judicial and clinical findings, I regard as worrying in the extreme Dr Paterson's failure to record in his research material of cases of proven brittle bone disease judicial findings to the contrary. In my judgment this is a factor which must cast the gravest doubts on his findings'.

The judgment also reaffirms that the courtroom is no place to advance untested hypotheses⁴ and emphasises the need for expert witnesses to provide independent assistance to

the court and not omit to consider facts which detract from their concluded opinion. Attention is also drawn to an earlier judgment by Cazalet J,⁵ also involving brittle bone disease, which points out that a misleading opinion from an expert may well inhibit a full assessment by non-medical advisers, reinforce parental denial, and thereby put a child at risk.

For future cases coming before the High Court there will be awareness of previous judgments relating to evidence on temporary brittle bone disease, however, this may not be so in the Family Proceedings Court. As Mr Justice Wall comments: 'It is not difficult to imagine circumstances in which a non-accidentally abused child might be returned to abusing parents on the false premise that the child has not been abused. That in my judgment is just as much an injustice as a false finding that a parent has injured a child'.

During investigation of suspected child abuse, even before legal action is considered, the possibility of temporary brittle bone disease may be raised and threaten to compromise or obstruct protection of a child or therapeutic work with their family. By being aware of and referring others to relevant law reports¹⁻⁵ paediatricians can help keep the issues in perspective.

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- 1 Wall J. Re AB (Child Abuse: Expert Evidence) [1995] 1 FLR 181.
- 2 Smith R. Osteogenesis imperfecta, non-accidental injury, and temporary brittle bone disease. *Arch Dis Child* 1995; **72**: 169-76.
- 3 Paterson CR, Burns J, McAllion SJ. Osteogenesis imperfecta: the distinction from child abuse and the recognition of a variant form. *Am J Med Genet* 1993; **45**: 187-92.
- 4 Williams C. Expert evidence in cases of child abuse. *Arch Dis Child* 1993; **68**: 712-4.
- 5 Cazalet J. Note Re R (A Minor) (Expert Evidence) [1991] 1 FLR 291.

Infant length measurements

EDITOR.—Dr Doull and colleagues presented a paper on the reliability of infant length measurements.¹ Hoorah! Some of us have for many years tried, without much success, to encourage the measurement of infant length. In many studies it is a better measurement of growth than weight and is a stable linear growth measure.

Why the unsucces? 'It's very difficult to do; it's unreliable; you need a special apparatus; it's impractical to do in the field'. It has been shown that none of these concerns is valid,^{2,3} but Dr Doull has done so in an up-to-date persuasive way including showing that you do not need two professionals but only one, mothers being excellent holders of their infants' heads.

For velocity growth in infancy it is an important measure and there are a growing number of reference values available.⁴

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- 1 Doull IJM, McCaughey ES, Bailey BJR, Betts PR. Reliability of infant length measurement. *Arch Dis Child* 1995; **72**: 520-1.
- 2 Falkner F. Office measurement of physical growth. *Pediatr Clin North Am* 1961; **8**: 13-7.
- 3 Falkner F. Recommendations for monitoring growth in childhood: a human growth foundation committee report. *International Child Health* 1995; **6**: 79-85.

- 4 Roche AF, Himes JH. Incremental growth charts. *Am J Clin Nutr* 1980; **33**: 2041-52.

AUTUMN BOOKS

Management of Pediatric Trauma. Edited by William L Buntain. (Pp 788; £142 hardback.) W B Saunders Company, 1994. ISBN 0-7216-6280-3.

This comprehensive book covers all aspects of trauma care. It starts with a historical review, discusses the philosophy and organisation of paediatric trauma management, describes the treatment of specific conditions, and looks to the future.

There are 85 contributors (mainly surgeons) three of whom are Australian, all the others being North American. The book was more than six years in gestation and the chief editor has done well to produce a book that reads so fluently.

There are six separate sections. The first covers the history of the subject, the biomechanics of trauma, injury prevention, organisation of services, and developing standards of care. The figures report the agencies involved in prevention and some of the legislative solutions suggested have an American slant. Nevertheless, the principles of aetiology and prevention are universal and well described.

The chapter on trauma care organisation is excellent. Care of the injured starts at the roadside or in the home and continues until tertiary care is reached and provided. The authors write with authority on the improvement in care following the introduction of a team approach to the injured child 'There is no place ... for competition amongst care providers'. The response teams are described. Resuscitation and stabilisation are orthodox and follow advanced paediatric life support and advanced trauma life support (ATLS, ATLS) teaching. There are some exceptions: for example, use of a trocar in introducing a chest drain is deplored as dangerous by most of us in emergency care. The radiological evaluation is clear and uncontroversial, but our anaesthetic colleagues may balk at the suggested use of ketamine in potentially hypotensive, cerebrally injured children.

In fairness, the author admits to differences of opinion over this. He is not dogmatic: 'No singular approach should be considered the only correct approach. Rather a protocol for trauma care that is attuned to the institution's geographic and urban demographics, the availability of surgical expertise and the physical limitations of the building itself is appropriate'.

Chapters are devoted to trauma scores, protocols, and blood products. There is detailed consideration of specific system injury and then to special situations such as falls, birth injuries, non-accidental trauma, farm and submersion injuries. My surgical colleagues assure me that the operative procedures described are standard. A conservative approach is taken to urinary tract injuries and liver damage, but a slightly more aggressive approach than ours to splenic injury. A