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EDITORIAL

# Perimacular retinal folds and nonaccidental injury—Yes, No, or Maybe?

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The high-profile case of Professor Sir Roy Meadow and nonaccidental injury of children remains clearly in our mind. His role in several prosecutions and subsequent successful appeals of cases when sudden infant death syndrome was used as a defence, his verdict of serious professional misconduct by the General Medical Council, and the dismay of the verdict by the editor of the Lancet[1] raised the question upon the fine balance between protection of children and falsely accusing the parents or carers. Furthermore, it highlights the difficulties placed on doctor, who tries to put the interests of a child first and, when the suspicions turn out to be unproven, that doctor becomes the subject of investigation and the smear of the media.

Taking it closer to home, many ophthalmologists have been regularly asked to examine the retina to see whether there is any evidence of nonaccidental injury, in particular the so-called 'shaken baby syndrome'. In March 2004, the *British Medical Journal* had an editorial on shaken baby syndrome[2] and an article called evidence base case report of perimacular retinal folds from childhood head trauma.[3] After examining 42 articles and book chapters, the authors of the latter concluded that the previous suggestion that perimacular retinal folds are diagnostic of shaken baby syndrome are not supported by objective scientific evidence. Nonetheless, perimacular retinal folds are associated with increased neurological morbidity and mortality in infants and children with abusive head injuries.[4] The reported incidence of perimacular retinal folds in shaken baby syndrome varies from 6% in a consecutive clinical case series to 50% in a sequential autopsy case series.[5] The editorial went one step further, including retinal haemorrhages in the discussion. This has sparked off a series of letters of claim and counter claim from a large number of experts in the field, including comments from the Ophthalmology Child Abuse Working Party of the Royal College of Ophthalmologists.

The working party has also published an update roughly at the same time[6] and concluded that 'it is highly unlikely that the forces required to produce retinal haemorrhage in a child less than 2 years of age would be generated by a reasonable person during the course of (even rough) play or an attempt to arouse a sleeping or apparently unconscious child'.[6] It appears that there are certain points that the experts have to agree to disagree; however, most would agree that the scientific evidence to support the diagnosis of shaken baby syndrome might be not as reliable as we want and more research in this area would be welcomed.

In this issue, Gnanaraj *et al* have examined the ocular manifestations of crush head injuries in children.[7] They have examined both a clinical series and a pathological series; admittingly, both series were small. The clinical series was from crush head injuries due to television tip over; only one out of 11 who was examined had retinal haemorrhages and none had perimacular retinal folds. The autopsy series of crush head injuries were due to road traffic accidents, all had multiple skull fractures, and four out of nine had retinal haemorrhages, while none had perimacular retinal folds.

Is perimacular retinal fold pathognomonic of nonaccidental injury? Might be Not. Is it suggestive? Might be Yes. As Kennedy suggested, we might need the wisdom of King Solomon to figure that one out.[8]

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