PostScript

LETTERS

After the Court of Appeal: R v Harris and others [2005] EWCA crim 1980

Analysis of judgements in the Criminal Division of the Court of Appeal is not usually carried out by doctors or even groups of eminent doctors. In the March issue of this journal, Richards *et al* have attempted an analysis of R v Harris,[1] and, with respect to them, have fallen into many errors. Given that their article may leave readers with the impression that the veracity of the "triad" now bears the Imprimatur of the Court and that in itself might influence opinion or diagnosis, it may be of assistance to consider these four appeals, the questions posed, and the judicial opinions which actually were expressed.

After briefly reviewing the proceedings, Mr Richards poses a question: "So where does this leave shaken baby syndrome?" The answer, we are told: "the triad of encephalopathy, subdural haemorrhages, and retinal haemorrhages as an indicator of head injury has withstood the test of time and it has not been undermined by these proceedings". That is the truth. It is not the whole truth. The Court was never asked to rule on whether the triad was an indicator of head injury. The Court was concerned with the sole issue of whether the convictions were safe. In turn that depended on the central assertion by the Crown and its witnesses that, given the existence of the triad, there had to follow the conclusive diagnosis of shaken baby syndrome (SBS), which in turn meant that there had to be trauma as a result of violence which, of itself, indicated an intention to do harm or serious harm.

The initial question was whether the triad alone was diagnostic of shaken baby syndrome.

That was the essential question and, as one can divine from the judgement, the answer definitively was in the negative (judgement para 175):

> "We turn then to the inferences which it is proper to draw. We do so with great caution, mindful both of the gravity of the matter and that (as already underlined) the mere presence of the 'triad' does not automatically or necessarily lead to a diagnosis of NAHI and/or a conclusion of unlawful killing. All the facts of the individual case must be taken into account."

This was a landmark judgement, of great significance to those involved in these sorry cases. Rather than considering how it was that their lordships suggested that "SBS" should be abandoned in favour of "NAHI" (non-accidental head injury) (with its careful abandonment of "shaking"), one needs to put into context the history of the SBS hypothesis. In his conclusions, Mr Richards correctly asserts: "the separation of therapeutic and investigative aspects of the condition may be advantageous to all". These sentiments are to be applauded as they touch on one of the core objections to the SBS theory as it stood and was used in court prior to these appeals. The theory crossed the line between the therapeutic and investigative. Time after time, in cases in which there was no evidence of trauma other than the "triad", it was asserted that: (a) the triad was diagnostic of trauma by shaking; (b) such shaking had to be extremely violent and sustained (thus evidencing malevolent intent); and finally, in fatal cases, (c) if the child became ill while in the sole charge of a carer, that carer was responsible.

There can be no doubt that in many, many cases severe trauma was demonstrated conclusively by reference not only to the triad, but also to other injuries, or even evidence of events to support violence as the cause. Nevertheless, any reasoned view would accept that while the guilty may protest innocence, the protestation of innocence is not in itself an indicator of guilt. The problem with the triad/SBS theory could be encapsulated in the logic that, if shaking, or even shaking with impact was the only possible explanation of the triad, anything other than shaking/impact had to be a lie, or put another way, itself an indicator of guilt. Any alternative explanation of the triad, anything other than impact/shaking was deemed unacceptable. This was said to be so even if the triad itself was the only "evidence" of trauma.

For a number of years there was no serious challenge to what had become an established doctrine, even though, as the Court noted, the "triad itself is a hypothesis" (judgement para 69). Mr Richards notes that eventually challenges were made in the papers now widely known as Geddes I, II, and III.[2–4] From the perspective of a practising lawyer, the effect of Geddes I and II was that the Crown no longer made the bold assertion of "extreme and repeated violence". Rather on the basis that axonal damage is extremely uncommon in infants with NAHI, it was suggested that "little violence need be involved". One may observe that, even in the appeals, no one challenged the veracity of the conclusions reached in Geddes I and II.

Geddes III provoked much debate. Whether Dr Geddes herself ever gave evidence on the paper prior to the appeal is unknown. However, on the appeal itself, she accurately recorded that like SBS theory, Geddes III "itself is a hypothesis". The Court examined the hypothesis (despite the fact that it applied to only one of the four cases before it) and found it wanting. Dr Geddes herself had conceded that it was meant to stimulate debate, that refinement was needed. She regretted the fact that it may have been put forward as fact. Quite rightly, without further research and refinement, never again will Geddes III be advanced by way of explanation.

But what of the triad hypothesis? To paraphrase Mr Richards' question, "where does that leave us?" The question was whether the triad was diagnostic of shaking/impact and the court held that it could not be (judgement para 70):

> "Whilst a strong pointer to NAHI, on its own we do not think it possible to find that it must automatically and necessarily lead to a diagnosis of NAHI."

That leads to the impression that the court considered there sometimes may be explanations for the triad other than NAHI, as it is now to be known. Careful consideration of the rest of the judgement demonstrates that this impression indeed is correct.

Mr Richards notes: "Two appeals were upheld on the grounds of process, not medical evidence" and "two appeals were upheld largely on the basis of presentation of the medical evidence rather than medical facts". Regrettably, this is a fundamental error and misunderstanding of the legal process. In fact these two appeals centred on "fresh evidence". In each case, the defence argued that their fresh medical evidence might explain the findings other than by shaking/impact. This was no question of "process", it was a question of "medical fact".

One may forgive Mr Richards' error. In order to allow the appeals, the court did not require to decide the fresh medical issues before it. (Indeed, on more than one occasion, their lordships indicated that they themselves could not resolve issues between experts of repute.) Rather they were concerned to address other well defined questions: (a) Was this evidence which was not reasonably available at trial? (b) Was this evidence capable of belief? (c) Could this evidence have affected the decision of the jury? In this regard one must remember that in a criminal trial, questions of fact, including medical fact are for the jury.

In each of the successful appeals the defence argued that there was evidence, medical evidence, which explained the findings other than by way of shaking/impact. The court had to decide if that evidence, tested in cross examination before them, was *capable of belief*. As a matter of law, had their lordships concluded that the defence evidence was not capable of belief or that the scientific assertions were untenable and could not be found to be persuasive (and thus affect the jury's decision), the appeals all would have been dismissed.

The appeals were upheld.

So where indeed does all that leave us? Firstly, no one should consider that the triad is conclusive of abuse by shaking/impact or indeed any other form of abuse. Alone, it may be an indicator of NAHI, not diagnostic of it. Secondly, each case is to be decided on its own facts. Such facts include matters such as history given by the carer, which should not routinely be discounted (judgement para 149):

> "The clinical history is perhaps the most important clinical tool available to the clinician and to reject the carer's version of events in favour of another requires the highest possible level of medical evidence. After all, the Doctor is effectively accusing the carer of lying."

Finally, as Dr Jaspan reminded their lordships, there can never be absolute certainty in these matters (judgement para 159):

> ''Because in medicine there is never a hundred per cent certainty. So, if I was asked is there a hundred per cent certainty that it could happen, I would have to be honest and say no, there must be almost the freak situation where that could happen.''

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Competing interests: Michael Mackey is a criminal defence lawyer, who had no involvement with the cases subject to this appeal, but has conducted the defence in other ''shaken baby'' cases.

References

1 **Richards PG**, Bertocci GE, Bonshek RE, *et al*. Shaken baby syndrome. *Arch Dis Child* 2006;**91**:205–6.
2 **Geddes JF**, Vowles GH, Hackshaw AK, *et al*. Neuropathology of inflicted head injury in children. II. Microscopic brain injury in infants. *Brain* 2001;**124**(pt 7):1299–306.
3 **Geddes JF**, Hackshaw AK, Vowles GH, *et al*. Neuropathology of inflicted head injury in children. I. Patterns of brain damage. *Brain* 2001;**124**(pt 7):1290–8.
4 **Geddes JF**, Tasker RC, Hackshaw AK, *et al*. Dural haemorrhage in non-traumatic infant deaths: does it explain the bleeding in 'shaken baby syndrome'? *Neuropathol Appl Neurobiol* 2003;**29**:14–22.

The code on competing interests of the ACP

We are very interested in the debate recently published in *Archives* regarding the relationships between paediatricians and infant formula milk companies.[1 2] In 1998 our Association, whose main aims are providing continuing medical education, promoting primary care research, and protecting children, launched an initiative to develop a code on competing interests.[3] This was based on the principles of the code of the International Pharmaceutical Manufacturers' Association and the international code for the marketing of breast milk substitutes. The code was intended as a list of recommendations for members without any intention to punish violations. Since then our Journal (*Quaderni Acp*) and our National Congress have been free from sponsorship by infant formula milk companies.

We think that the relationship with manufacturers must obviously continue, but it must be based on the ethical principles of transparency and independence, keeping in mind that the most important beneficiary is the patient.

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References

1 **Wright CM**, Waterston AJR. Relationships between paediatricians and infant formula milk companies. *Arch Dis Child* 2006;**91**:383–5.
2 **Weaver LT**. Relationships between paediatricians and infant milk formula companies. *Arch Dis Child* 2006;**91**:386–7.
3 http://www.acp.it/codiceacp.htm.

Life threatening hypernatraemic dehydration in breast fed babies

We have read with great interest the article by Shroff *et al*.[1] Weight loss up to an acceptable degree (<10%) is a physiological event unless a negative imbalance occurs between weight loss and milk production. We have recently shared our experiences related to risk factors for excess weight loss and hypernatraemia in exclusively breast fed infants.[2]

Data were prospectively obtained from exclusively breast fed healthy term neonates at birth and from healthy mothers with no obstetric complication to determine risk factors for excess weight loss and hypernatraemia in exclusively breast fed infants. Thirty four neonates with a weight loss >10% were diagnosed between April 2001 and January 2005. Six of 18 infants who were eligible for the study had hypernatraemia. Breast conditions associated with breast feeding difficulties ($p < 0.05$), primiparity ($p < 0.005$), less than four stools ($p < 0.001$), pink diaper ($p < 0.001$), delay at initiation of first breast giving ($p < 0.01$), birth by caesarean section ($p < 0.05$), extra heater usage ($p < 0.005$), extra heater usage among mothers who had appropriate conditions associated with breast feeding ($p < 0.001$), mean weight loss in neonates with pink diaper ($p < 0.05$), mean uric acid concentration in neonates with pink diaper ($p < 0.0001$), fever in hypernatraemic neonates ($p < 0.02$), and the correlation of weight loss with both serum sodium and uric acid concentrations ($p < 0.02$) were determined.

Excessive weight loss occurs in exclusively breast fed infants and can be complicated by hypernatraemia and other morbidities. Prompt initiation of breast feeding after delivery and prompt intervention if problems occur with breast feeding, in particular poor breast attachment, breast engorgement, delayed breast milk ''coming in'', and nipple problems will help promote successful breast feeding. Careful follow up of breast feeding dyads after discharge from hospital, especially regarding infant weight, is important to help detect inadequate breast feeding. Environmental factors such as heaters may exacerbate infant dehydration.

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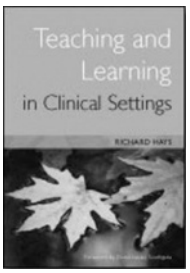
References

1 **Shroff R**, Hignett R, Pierce C, *et al*. Life-threatening hypernatraemic dehydration in breast-fed babies. *Arch Dis Child* 11 May 2006. doi: 10.1136/adc.2006.095497.
2 **Caglar MK**, Ozer I, Altugan FS. Risk factors for excess weight loss and hypernatremia in exclusively breast-fed infants. *Braz J Med Biol Res* 2006;**39**:539–44.

BOOK REVIEWS

Teaching and learning in clinical settings

Edited by Richard Hays. Oxford: Radcliffe Publishing Ltd, 2006, pp 168, £24.95 (US$45 (approx.); €35 (approx.)) (hardback). ISBN 1857757513



Clinical teaching is at last no longer see one, do one, teach one. With this insight from the medical profession comes (not before time) a plethora of books on teaching.

This book by Richard Hays is a practical tome. Primarily about teaching medical students, it establishes right from the start that one doesn't have to be an educationalist to be a good teacher. It is only the minority of clinicians that undergo any formal educational training, but conversely, formal training does not produce a good teacher. This book sends the message that teaching well is not a skill that everyone has, or even has the potential to acquire, but one that we can all improve.

This book is said to be a primer for clinical teachers. It is divided into three parts: the first gives information on being a clinical teacher, the second provides practical advice on the how to teach, and part three is the theory section.

The first part of this book serves as an insight into the difficulties and challenges faced in the development of a medical curriculum, and although interesting, is not very relevant to the jobbing clinician. The section ends with a useful and concise section on common principles of clinical teaching.

The second part of the book is excellent, relevant, and practical. It is divided into four chapters, each using scenarios to ensure relevance in one's day-to-day practice. It starts by presenting a series of clinical teaching skills: some expected, such as lectures and small group teaching; and some that the reader may not have previously thought about, such as dealing with academic performance and personal problems. It uses scenarios to present a teaching method and to illustrate the pitfalls and difficulties faced with that method. Each example is concluded with a clear and concise top tips section. The author encourages active participation by the reader in asking him to write down his thoughts on the learning processes described.

The following chapter presents teaching strategies in common clinical settings, such as in the operating theatre and in outpatients. It allows readers to explore ways of extracting the most educational benefit from a range of settings. Following this is a chapter concerned with the assessment of learners. It starts by looking at the strengths and weaknesses of assessment within the clinical setting and then moves on to commonly used methods. This section of the book concludes with a chapter on evaluating clinical teaching and learning. The author gives a practical approach to the evaluation of

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Notes