Child abuse and paediatrics

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There have been many success stories in paediatrics, but finding a good way to deal with child abuse is not yet one of them; indeed, for this reason paediatricians in the UK are under fierce attack. From your superior knowledge of fifty years hence, dear reader in 2055, you may wonder how the specialty came to be in such a predicament. However, you should bear in mind that, as I write, hardly more than forty years have passed since child abuse entered the medical consciousness.

The troubled present and recent past

Paediatricians at present stand accused of both overdiagnosis and underdiagnosis of child abuse, and media coverage has taken inaccuracy to new extremes. Newspaper readers must have become bewildered recently by reading almost simultaneously of fatal cases of Munchausen syndrome by proxy and the 'fact' that no such form of abuse exists. One bizarre accusation is that, according to the rules of evidence-based medicine, child abuse itself may not exist. It is true that randomized controlled trials are lacking, but this is about as relevant as the failure of aviation medicine to perform randomized controlled trials on the life-saving efficacy of parachutes.¹

Public confidence in the ability of British paediatricians to distinguish abuse from accident or natural disease took its first serious hits with the overdiagnosis of abuse in Cleveland² and the false evidence from a paediatrician who claimed that sudden and unexpected death of infants could be prevented by the use of respiration monitoring.³ The use of covert video surveillance of mothers and babies in hospital, in order to prove intentional suffocation, caused great controversy and disquiet.^{4,5} Recent cases given immense publicity include Climbié (fatal abuse),⁶ Clark and Cannings (mothers jailed for murdering multiple infants but subsequently freed on appeal)⁷ and Patel (acquitted of murdering three infants). The selective nature of the media coverage is reflected by the massive publicity concerning paediatricians who allegedly overdiagnose abuse compared with the negligible attention given to a specialist (now off

the Medical Register) who was in the habit of diagnosing brittle bone disease despite clear evidence of physical abuse.

As a result of widespread alarm regarding the Clark, Cannings and Patel cases, the Attorney General reviewed all cases in which a parent or carer had been convicted in the past 10 years of killing a child under 2 years of age. The review was published in December 2004.⁸ Of the 297 cases of past convictions that were reviewed, the Attorney General considered there was cause for concern that the conviction had been unsafe in 28 (9%), and his doubts were relayed to the Criminal Cases Review Commission, the Court of Appeal and the defence solicitors. Of these 28 cases, 3 were sudden infant death and the rest showed detectable injuries. This was a serious attempt to identify miscarriages of justice, and an error rate potentially as large as 9% is clearly unsatisfactory.

One consequence of the public consternation is that many paediatricians are now reluctant to engage in child protection work. In 2004 the Royal College of Paediatrics and Child Health reported that, of 3879 paediatricians involved in child protection, 536 had been subject to complaints (of whom 71 had been reported to the General Medical Council). The College found that 20–30% of posts for child-protection-designated doctors were vacant and 10–15% of hospitals had no named doctor for child protection.

The future

Over the next half-century we can confidently expect improvements in the expertise of community health workers, social workers, lawyers and judges. Within paediatrics itself, the challenge is to do better in recognizing and responding to child abuse.

One of the most positive developments in paediatrics in the UK has been the emergence of nurse specialists. In diabetes, cystic fibrosis, asthma and gastrointestinal disorders, the introduction of nurse specialists has transformed the care of ill children; and soon to come are nurse practitioners (who can diagnose and treat) and nurse consultants. In the hospital where I work, an important and promising innovation is the provision of a child protection nurse specialist service, which offers a focal point for contacts and information. In the USA, another type of nurse specialist is the sexual assault nurse examiner (SANE), who conducts forensic medical examinations in women but also children suspected of having been sexually

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abused; though SANE programmes have experienced teething troubles, they do indicate that these nurses can provide a skilled input into assessment and treatment.

It is in the assessment and reporting of suspected abuse that room for improvement is greatest. Some simple practical suggestions⁹ are:

- Before providing a report, ensure that all the child's medical records have been studied. Resist requests to prepare reports without access to the child's medical records
- Even if the injury has healed or resolved, consider the need to examine the patient, to find evidence of an underlying medical condition that has been overlooked
- This type of work demands great care; there is no place for short cuts. Consider taking a fresh history from the parent or carer. Previously taken histories may be incomplete, or taken by an inexperienced junior doctor. 'Paperwork exercises' in which the paediatric expert sees neither the child nor the parents have been described as 'hearsay squared'. The main pitfall in history-taking, in cases of suspected abuse, is that the history provided may be deliberately misleading
- When looking at colour photographs of injuries, do not accept laser colour photocopies or prints but insist on good-quality large glossy prints of original photographs
- Attempts to gauge the age of bruises from their colour are fraught with difficulties. The time course of the appearances may vary with the location, depth, extent and nature of a bruise. The only established fact is that the presence of a yellow colour within a bruise indicates that it is at least 18 hours old^{10,11}
- A normal blood 'clotting screen' excludes only the commonest conditions that may cause spontaneous bleeding or serious bleeding following trauma. If there are pointers to a coagulation disorder (such as a history of a bruising or bleeding tendency in the patient or the family), referral to a haematologist is required
- In view of the importance of the diagnosis, radiographs (original films not copies) should be seen by a paediatric radiologist
- In the absence of controlled studies to study the effects of injuries on children, it is wise to exercise caution and avoid firm statements about the extent of the force required. The *terra firma* is that, in an infant with healthy bones, normal handling and normal activities do not produce fractures, and domestic accidents (such as short falls) seldom produce serious injury
- Assumptions about the likely severity of ongoing pain occurring after a fracture based on the reports of adults with complete fractures (e.g. of a rib) may not apply to infants with stable and incomplete fractures, in whom ongoing pain may be undetectable

- Try to avoid bias. A mother may have failed to bring a child to three hospital appointments, but if so it is only fair to also record details of the (say) fifteen appointments that *were* kept
- If involved in research, one should be conscious of (and avoid) the natural tendency to promote one's own findings
- When coming to a conclusion in a report, it is essential to include existing material that does not support one's conclusion
- In cases of suspected Munchausen syndrome by proxy (also known as fabricated and induced illness), it is helpful to focus on the actual evidence of harm. Was the history of epilepsy true or false; were the child's symptoms caused by the administration of medication (e.g. drowsiness caused by phenobarbitone); did the blood in the urine come from the child's kidneys or had it been added to the urine sample? Profiling of a parent to see if the profile fits a described pattern is no substitute for direct evidence of harm (e.g. poisoning or suffocation) or potential harm (false reporting).

At present, paediatricians dealing with suspected abuse are handicapped by a dearth of paediatric pathologists, forensic pathologists, paediatric neuropathologists, ophthalmic pathologists and paediatric radiologists. In due course, most of these deficiencies can be put right. Let me close with an anecdote.

Having diagnosed a non-accidental injury, I was required to attend court to give evidence. The case concerned a young infant who had been healthy until a parent left the child in the care of another adult. A few hours later the child collapsed and died. A post-mortem demonstrated fresh subdural haemorrhage, massive brain injury, particularly extensive retinal and optic nerve sheath haemorrhages accompanied by traumatic retinal folds, multiple rib fractures and bruising to the chest wall and abdomen. On my way out of the court I was taken aside by one of the lawyers and thanked for my 'bravery' in being willing to make a diagnosis of child abuse.

Will we see bravery awards for paediatricians? I think not. Dealing with suspected child abuse has never been popular, but child protection is emerging as a specialty in its own right. An encouraging development is systematic review of existing knowledge.^{12,13} Things can only get better.

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