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## Talking points in child abuse

The incidence of child abuse is difficult to assess and must vary considerably with geographical, social, and cultural factors. Ascertainment of all forms of child abuse is never likely to be complete and will vary from district to district. A Select Committee of the House of Commons reporting in 1977 estimated that about one in 10 000 children would be killed each year and 10 times as many severely injured.<sup>1</sup> In some "problem" families the frequency of injury may reach horrifying proportions. In north east Wiltshire, for instance, there were 41 deaths under the age of 8 and 513 abused children out of a total of 560 children born into 147 families over 21 years.<sup>2</sup>

Future child abuse may possibly be predictable in the maternity unit, but experience in Bradford has been disappointing in so far as the provision of extra support to the families did not appear to influence poor patterns of parenting in a high risk group.<sup>3,4</sup> In South Glamorgan between 1972 and 1982 the reported annual number of severe injuries to children fell from 11 to three, although the number of moderate (soft tissue) injuries rose from eight to 56.<sup>5</sup> These changes were attributed to increased professional and public awareness, but the fall in severe injuries might have been due to better management of families in whom moderate injuries had occurred. The decrease in severe injuries may, however, have been misleading since only four such children had been reported in 1970, and the ascertainment of severe injury has always been fairly complete.

The diagnosis of child abuse often gives scope for dispute, and a doctor with experience of the problems, usually a paediatrician, should be brought in early. Certain patterns of injury always suggest the diagnosis. For instance, retinal haemorrhages in an infant with convulsions are almost diagnostic; multiple fractures of different ages, and especially metaphyseal chip fractures, are also well recognised pointers. Skull fracture is a common presenting feature, and a recent report from Leeds has pointed out that accidental fractures are usually linear, simple, and most often confined to the parietal bone.<sup>6</sup> Wide or depressed fractures, those in bones other than the parietal bones, or those which spread across several bones are more likely to be a feature of child abuse. Fractures of the ribs are also a common finding, but their origin may be uncertain if the child has been subjected to external cardiac massage during resuscitation (but an American report has claimed that rib fractures are uncommonly caused by resuscitation in children and that their

presence is suggestive of non-accidental injury<sup>7</sup>). In Nottingham the patterns of injury found in 84 abused children were compared with those in 40 normal children.<sup>8</sup> More than a third of the normal children had evidence of recent minor injury, usually bruising. Lesions of the head and neck were common in abused children at all ages but uncommon in normal children, except in those aged between 9 months and 3 years, of whom about 12% had such bruising. Injuries to the lumbar region were common in normal schoolchildren (14%) but before school age were found predominantly in abused children. Bruising at any site was uncommon in normal young babies.

The sexual abuse of children has been the subject of reports mostly from North America, though the problem undoubtedly exists in Britain and is the subject of increasing concern.<sup>9,10</sup> A special clinic set up in the department of psychiatry at the Hospital for Sick Children, Great Ormond Street, London, aimed at ameliorating the psychological trauma suffered by the children and their families has had 100 referrals in two years.<sup>11</sup> Abuse is reported more often in girls than boys, and the offender is usually either a member of the family or someone well known to them. The risk of venereal disease should be remembered.<sup>10,12</sup>

A form of abuse, of which much has been learnt recently as a result of Meadow's work, is the fabrication of illness in children by their parents.<sup>13</sup> In Meadow's series the most common presentations were neurological abnormalities, especially fits, and abnormal bleeding (haematuria, haematemesis).<sup>14</sup> The children were often subjected to investigations and treatment which caused suffering, pain, and danger. Meadow lists nine warning signals for clinicians, chief among which are an inexplicable illness or a very rare and uncertain diagnosis, a mother who refuses to leave the child at all or who seems less worried by her child's illness than are the professional staff, and symptoms which do not occur in the absence of the mother. A variation of the syndrome in which the mothers wrongly believe their children to be suffering from severe allergy has recently been described.<sup>15</sup>

A mistaken diagnosis of child abuse will inevitably cause much distress but the possibility often arises since the diagnosis is almost always based on probability rather than on proof. Tests for a bleeding disorder should be performed whenever bruising is the presentation,<sup>16</sup> and doctors should be aware of the possible diagnostic traps presented by such conditions as impetigo,<sup>17</sup> Mongolian blue spot,<sup>17</sup> erythema

multiforme,<sup>18</sup> or Ehlers-Danlos syndrome.<sup>19</sup> Nevertheless, such diagnostic problems rarely present much difficulty. More often the crux of the matter is to decide whether demonstrable trauma was caused by accident or not. Inevitably mistakes will be made in both directions. The case conference with all relevant professional workers, including doctors, nurses, social workers, health visitors, nursery staff, and often police, is aimed at serving the best interests of the child, sharing the burden of professional responsibility, and trying to minimise the scope for error; but where serious doubt remains after full consultation and there is concern for the safety of the child the ultimate arbiter must be society as a whole as represented in a court of law.

Child abuse has a twofold relation with cerebral palsy: brain damage may be the consequence or the precursor of inflicted injury. Among 86 children with cerebral palsy attending one centre in a deprived area of Chicago there were eight whose brain damage resulted from abuse and eight who were abused after the diagnosis of cerebral palsy was made.<sup>20</sup> A further 12 were thought to be at serious risk of abuse. Such figures cannot be taken to be representative. In Liverpool physical abuse appeared to be much less common both before and after the diagnosis of cerebral palsy,<sup>21</sup> but paediatricians should try to practise prevention by providing help which is readily available when needed for the parents of young children.<sup>22</sup>

The outcome for children who have been seriously abused is often poor. In a socially deprived inner city area of Liverpool 50 children were taken into the care of the local authority after being abused. Twenty five of them were later returned to their parents, and the outcome was considered satisfactory in seven.<sup>23</sup> Five suffered further abuse. In the 25 who were not returned to their parents the outcome was thought to be satisfactory in 17. Factors tending to an unsatisfactory outcome were increasing age when first taken into care, increasing length of time in care before returning to the parents, and multiple placements while in care. The children who did best were those for whom an early decision was made to sever contact with the parents and to place the child with a substitute family.

No controls were used in the Liverpool study, but an Australian study compared the personality development of abused children with that of controls matched for age, sex, ethnic group, and social class.<sup>24</sup> When examined several years after the abuse the study children were found to have fewer friends, less ambition, lower self esteem, and more behaviour disturbance than the controls. The personality traits of abused children justify concern about their development of parenting skills when they reach adulthood—and the likely repetition of the cycle of deprivation and abuse. Professional intervention must be aimed at breaking this cycle.

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## Ketoconazole: a reappraisal

The recent letter from the chairman of the Committee on the Safety of Medicines to doctors in Britain about oral ketoconazole and hepatotoxicity has aroused widespread concern. This imidazole antifungal drug is available for both oral and topical use and so has wide potential clinical applications. Serious adverse effects have been rare, though symptoms such as gynaecomastia related to androgen blocking activity<sup>1</sup> and anaphylaxis have been reported in addition to hepatotoxicity.<sup>2</sup> The effect of ketoconazole on the liver ranges from asymptomatic transient abnormalities of the enzyme activities to potentially fatal acute hepatic necrosis.<sup>3</sup> In view of these findings clearly the risks of using the drug need to be weighed against the likely benefits to the patient. Fortunately, considerably more information is now available on the clinical uses of ketoconazole than when it was first reviewed in the *BMJ*.<sup>4</sup>

Many superficial fungal infections are best treated with topically applied antifungal agents. In dermatophytosis (ringworm) oral treatment should be reserved for infections of the scalp or nails and for widespread disease. Though ketoconazole is effective in dermatophytosis, comparative studies have shown that it has no real clinical advantages over griseofulvin<sup>5</sup> except in some specific or resistant cases such as intractable tinea corporis.<sup>6</sup> In particular, both drugs produce similar responses in nail infections (which are notoriously difficult to treat).<sup>7</sup> Ketoconazole may be effective in some fingernail infections which have failed to respond to adequate treatment with griseofulvin.

In the second main group of superficial infections, candidiasis, topical antifungals are also generally effective. In vaginal candidiasis, for instance, one large study found no difference in response rates to topical clotrimazole and oral ketoconazole, though patients preferred the latter.<sup>8</sup> In persistent and distressing superficial candidal infections, however, and in particular in chronic mucocutaneous candidiasis<sup>9</sup> ketoconazole appears to offer the best chance of clinical recovery. Generally the alternative drugs are satisfactory for the superficial fungal infections, and ketoconazole may be reserved for specific indications.

Deep fungal infections present different problems in view of the risk of severe incapacity or even death in untreated patients. Ketoconazole is effective in the tropical sub-