Short reports

Overturning the diagnosis of child abuse

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SUMMARY Three cases, one of bullous impetigo, one of a Mongolian spot, and one of constriction of the toe by a hair, were mistakenly diagnosed as cases of child abuse. The diagnosis of child abuse is not usually simple and requires a careful evaluation of the injuries and the family if cases are not to be either overlooked or overdiagnosed.

The diagnosis of child abuse is rarely a black and white issue. Most cases fall into the grey area and a judgement has to be made based on the pattern of injury, the degree of consistency between the injuries observed, the explanation given, and the characteristics of the parents. After a period of lack of awareness of child abuse up to the 1960s there is now widespread knowledge of the condition among many, but not all, medical practitioners, paramedical groups, and members of other professions. It has been suggested that the pendulum of suspicion has at times swung a little too far, perhaps over compensating for former tardiness in recognising the syndrome. This report describes three cases referred as child abuse where the initial diagnosis was incorrect.

Case reports

Case 1. A four year old child was referred from a country hospital with a diagnosis of child abuse because a lesion, said to be a cigarette burn, had been found on the anterior aspect of his forearm. Examination showed a circular lesion of diameter 1 cm which had a raw surface and ragged edge. There was a slight discharge of serous fluid. Further examination showed a slightly smaller, similar lesion on the anterior aspect of the upper arm. When the child’s arm was flexed at the elbow, these two lesions came into direct contact with each other, suggesting an infective cause with the lesion spreading to the upper arm as a result of contact during elbow flexion. Examination of a sibling showed several similar lesions in other parts of the body. Both children were then treated for bullous impetigo.

Case 2. A phone call was received from a social worker in a country town to say that she had notified the statutory authority of a case of child abuse in which a 2 year old part-aboriginal child was found to have extensive bruising on the back and buttocks. As the child had been seen in an outpatient clinic of the Royal Alexandra Hospital for Children two weeks earlier with a respiratory infection, the social worker had telephoned the hospital to see if any evidence of abuse or neglect had been noted on that occasion. A review of the outpatient notes showed that the child had been noted to have an extensive Mongolian spot on the back and buttocks precisely in the area where the ‘bruising’, which had led to the recent diagnosis of child abuse, had been found.

Case 3. A 6 week old baby was admitted to hospital from the casualty department with a diagnosis of suspected child abuse. The parents were young, unmarried, and unable to explain the two lesions on the child’s foot. The terminal digits of the second and fourth left toes were swollen, engorged, and purple. Proximal to these swollen areas was a tight constriction. Closer examination showed that the constriction had been caused by hairs which had tightly wound around the toes. It was recalled that similar lesions had been reported due to threads from nylon mittens becoming wound around fingers. Inspection of the baby’s booties showed a strand of hair inside one of them. The hair was removed and the child had an uneventful recovery.

Discussion

These three cases highlight some of the hazards in making a diagnosis of child abuse—particularly when the diagnosis is made by non-medical or inexperienced medical personnel. The diagnosis of child abuse is often difficult to make. The prac-
Adrenaline and nebulized salbutamol in acute asthma

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SUMMARY The effects of injected adrenaline and nebulized salbutamol on acute asthma were compared in 46 children. The results showed that salbutamol had a significantly better bronchodilatory effect than adrenaline. Nebulized salbutamol is recommended as a primary method of treatment of asthmatic attacks in childhood.

Although adrenaline is still frequently used for the treatment of acute asthma in children, the short duration of its bronchodilatory effect and the pain of injection are definite disadvantages. Its use is further restricted by the increased heart rate caused by beta_1 stimulation. Selective beta_2 agonists have a good bronchodilatory effect with minimal side effects; the bronchodilatory effect is even greater if the drug is inhaled into the lungs. In this study we