

phosphatase being a chance finding. However when we reviewed the cases reported in the medical literature between 40–60% did actually have symptoms of failure to thrive or gastrointestinal disturbance.^{1–4} This therefore appears to be a common clinical association.

In all our cases radiology and other liver function tests were normal. Isoenzymes were measured in six cases and all but one showed either a mixture of liver and bone activity or bands between the two, typical of THI.¹ There was a tendency for our cases to cluster during the autumn and winter months; this has been previously documented.⁴ Although the aetiology of THI remains unclear it may be the end result of different insults (infective or otherwise) in different children³; rotavirus was found in one of our cases and adenovirus in another. The importance of the diagnosis currently is its recognition, and in the avoidance of extensive investigations. Other diseases associated with such raised alkaline phosphatase would have clinical correlates such as deranged liver function tests, or abnormal wrist or hand radiographs. A family history of familial study would detect the rare familial type of raised alkaline phosphatase.⁴

We suggest that the isolated finding of a massively raised alkaline phosphatase in an infant is assumed to be THI unless clinical circumstances suggest otherwise. Isoenzyme analysis and other investigations of bone and liver need only be undertaken after eight weeks if the alkaline phosphatase has not begun to fall. Finally as between a half and three quarters of cases present with the related symptoms of diarrhoea, malabsorption or failure to thrive, we suggest that THI should no longer be considered as a pure biochemical phenomenon but rather a condition that does appear to have definite clinical associations.

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Dual marker one day pancreolauryl test

EDITOR,—Dr Green and colleagues present interesting data relating to a novel 'tubeless' test of pancreatic exocrine function.¹ However, their claim that this will greatly simplify the investigation of pancreatic exocrine dysfunction in childhood seems as difficult to swallow as 200 ml of mannitol solution and 500 ml of clear fluid! None of the controls were children and those patients with cystic fibrosis ranged up to 25 years of age. For various reasons some tests which perform well in adults turn out to be less useful in young children.² As paediatricians, it is likely to be

the infant with diarrhoea and failure to thrive whom we wish to investigate. As pancreatic insufficiency is relatively rare compared with other causes of this presentation, an investigation with high specificity is essential. As the authors have yet to produce any data on this crucial aspect of their test, may I recommend a simple, cheap, sensitive, specific, and repeatable alternative for which patients are generally only too happy to provide specimens – faecal chymotrypsin measurement.³ The dual marker pancreolauryl test is promising but needs further evaluation; I hope it has not been patented prematurely.

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Epilepsy in children and the risk of drowning

EDITOR,—Drs Kemp and Sibert raised the issue of death by drowning in children with epilepsy.¹

We recently had a patient aged 10 years who had had epilepsy for four years and who was on treatment with sodium valproate. He had initially presented with frequent absences and these lasted only for a few seconds at a time. He had no other neurological problems. Before his death he had had no fits for the previous three weeks and had never had any generalised tonic-clonic seizures. He was found by his parents drowned in his bath having been in the bath for 5–10 minute period; he was resuscitated and was admitted to this hospital to the intensive care unit. On admission he was comatose, his pupils were fixed and dilated. He was treated by intermittent positive pressure ventilation, fluid restriction, and anticonvulsants. He developed further seizures the next morning, associated with hyperthermia and hypertension, and died 14 hours after the initial drowning episode. Postmortem examination showed presence of cerebral oedema and a few anoxic changes within his brain.

His history is a little similar to subject 1 in Kemp and Sibert's paper, that is, a child with normal intellect and no neurological signs who had had only a fairly minor form of epilepsy and no major motor problems. His death underlines the importance of supervision in the situation where drowning is a potential problem. All these cases support the view that all parents who have children, even if they have minor seizures, must either arrange for supervision of their children while they are in the bath or as suggested by Kemp and Sibert use a shower in an unlocked room.

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Injury epidemiology: emerging statistics and strategy

EDITOR,—Recent articles in this journal are not only in tune with the World Health Organisation (WHO) message of the year 'handle life with care; prevent violence and negligence', but also have added significance to Third World readers.^{1–3} International trends¹ in pedestrian injury mortality support the view that strategies directed towards upgrading the environment pay more dividends than educational awareness programmes.⁴ However such conclusions may unwittingly convey to developing countries that these strategies are mutually exclusive. For instance, in a symposium on injury prevention and social responsibility organised in this institute on WHO day, the delegates were equivocal in their emphasis on the environment and education. We think that these approaches are interdependent and reflect the dynamics of socioeconomic and political processes of a particular society. Improvements in the environment cannot come about without society demanding it, and this later phenomenon of peoples' assertion is unlikely to come from populations who lack awareness and education.

In the epidemiology of injury the conventional classification of children's mortality statistics into an age group 5 to 14 years fails to differentiate and delineate the prevention of risks peculiar to distinct lifestyles of children who are aged less than 9 and those who are older. Instead, for the epidemiology of injury children should be subdivided into 5–9 and 10–14 year age groups. This would encourage a better epidemiological understanding of age related problems and facilitate effective interventions in the hazardous host-agent-environment relationship. For example, children under the age of about 9 years do not have the necessary perceptual abilities to assess all the sensory inputs of the accident scenario such as traffic signals, etc, and hence they are unable to make a quick decision to avoid the accident. For this particular age group education of the parents and environmental changes play a major part compared with education aimed at modifying the behaviour of children. This latter strategy impinges upon the normal development of children by suppressing their natural instincts and curiosity for exploring their environment. On the other hand children older than 9 may benefit from educational programmes to boost the effects of environmental measures.

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Pressure reduction of intussusception

EDITOR,—In this January's issue of the journal you published a paper from this centre