

the babies responded to tetracosactrin even if their baseline concentrations of cortisol were low. By contrast three babies out of eight tested by Arnold *et al* with low baseline concentrations of cortisol did not respond appropriately at initial testing but had normal responses one month later.² We would presume that babies with ongoing problems are less likely to respond normally and that in such infants baseline cortisol concentrations should be assessed at times of additional stress, at least for the month or so after cessation of dexamethasone. Babies without ongoing problems appear likely to have normal responses and baseline cortisol concentrations may be expected to be normal.

References

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- 2 Arnold JD, Leslie GI, Williams G, Rack P, Silink M. Adrenocortical responsiveness in neonates weaned from the ventilator with dexamethasone. *Aust Paediatr J* 1987;23:227-9.

G J REYNOLDS
Regional Neonatal Intensive Care Unit,
Kirwan Hospital for Women,
Queensland 4817
V Y H YU and J DOERY
Monash Medical Centre,
Victoria, Australia

Immunoreactive trypsin in Shwachman's syndrome

Sir,

Dr Dossetor and colleagues report finding low serum immunoreactive trypsin in two children with Shwachman's syndrome.¹ Their observation, however, together with the suggestion that a low serum immunoreactive trypsin may obviate the need for invasive tests of pancreatic exocrine function, hardly seems novel. Low serum immunoreactive trypsin (ogen) concentration has previously been described in Shwachman's syndrome and low values are known to correlate with low output of trypsin in response to stimulation testing of the pancreas.^{2,3} As cystic fibrosis is the only cause of pancreatic insufficiency more common than Shwachman's syndrome in young children and is associated with a raised serum immunoreactive trypsin, it is evident that a low serum concentration is likely to point to the diagnosis of Shwachman's syndrome. Through screening large numbers of children the authors have shown that a low serum immunoreactive trypsin as a test for pancreatic exocrine insufficiency has a high specificity, but apart from this, isn't this report more a case of reinventing the wheel?

J W L PUNTIS
Institute of Child Health,
Francis Road,
Edgbaston,
Birmingham B16 8ET

Drs Dossetor and Heeley comment:

The initial title of our paper was 'Immunoreactive trypsin in Shwachman's syndrome in early infancy', but this was shortened in revision for publication. Unfortunately this has resulted in Dr Puntis missing the point of our paper, which was to show the value of the immunoreactive trypsin test in the investigation of an infant with malabsorption. In the paper of Durie *et al*,² the age of the patients is 2.25 to 18 years and in that of Moore *et al*,³ the mean age of the patients is 5.9 years (although in this paper there may have been one infant with Shwachman's syndrome, but it is not made clear).

Also a serious flaw in these two publications lies in their control values. In the 1981 paper the mean immunoreactive trypsin in controls under 2 years is 7 µg/l and over 3 years 13 µg/l²; but in the 1986 paper, the mean immunoreactive trypsin in controls has arisen to 31.4 µg/l with no change in the methodology.³ In patients with pancreatic steatorrhea, a mean value of 4.9 µg/l is found, so that certainly the authors show low values in pancreatic disease. We, however, showed undetectable concentrations in two infants with Shwachman's syndrome against a larger number of controls at different ages of infancy, establishing beyond doubt the diagnostic value of the test.

We feel the value of the test is insufficiently known to general paediatricians. With the spread of screening for cystic fibrosis, the immunoreactive trypsin test is now generally available. The diagnosis of significant pancreatic acinar deficiency is as easy as diagnosing iron deficiency with this test. We could, however, agree with Dr Puntis on one point, that in the investigation of an infant with malabsorption, the immunoreactive trypsin test ranks in importance with the discovery of the wheel.

References

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- 3 Moore DJ, Forstner GG, Largman C, Cleghorn GJ, Wong SS, Durie PR. Serum immunoreactive cationic trypsinogen: a useful indicator of severe exocrine dysfunction in the paediatric patient without cystic fibrosis. *Gut* 1986;27:1362-8.

The thermal environment in which 3-4 month old infants sleep at home

Sir,

Dr Wailoo and colleagues have provided valuable data in an area that has hitherto received little attention but may be of considerable clinical relevance.¹ It would be helpful to have more information on two points. First, in calculating the total insulation of clothing and bedding did they make allowance for the proportion of the baby covered by each item? For example, a cardigan and a duvet