
Drs Edwards, Halse, and Waterton comment: The three points made by Drs Porter and Skuse cover the genetic influence on growth, the diagnostic validity of persistent centile deviation, and the need for additional criteria for psychosocial disadvantage. Definitive answers are not yet available on any of these points. Smith's paper indeed discussed length rather than weight, but the key statement we extracted from this work is that 'Those infants “catching up” after birth usually do so in early infancy’ (3-6 months) whereas those “growing down” tend to do so in mid-infancy (3-6 months). We have provided the evidence in our paper for the 4-8 week centile being a better predictor of future growth than the birth centile.

Our findings show that babies whose weight deviates downwards according to our definition are distinctly different in the second year from those who do not. They are not only lighter, but also shorter and thinner. We therefore believe that we have identified a different population of babies and suggest that these children may be regarded as vulnerable and worthy of psychosocial assessment. We believe that these findings demonstrate the value of regular weighing of children. Concerning the meaning of the term ‘failure to thrive’, we agree with the Lancet that this term, with its connotations of emotional poverty, would be better abandoned and replaced by ‘failure to gain weight appropriately’. However, the definitions of failure to thrive which relate to growth below the 3rd or 10th centile do not take into account the growth trajectory, and are clearly unsatisfactory. We think that ours is a considerable advance, if still in need of further refinement.

Ischaemic brain lesions diagnosed at birth in preterm infants

STR.—The observation by Sinha et al, that nine out of 232 newborn babies showed periventricular echogenicity two hours after birth requires clarification if inferences are to be drawn with regard to the timing of the condition, which leads to periventricular leucomalacia.1 Confusion will exist as long as paediatricians continue to use the terms echogenicity, ischaemia, periventricular leucomalacia, and perhaps other terms as though the terms were synonymous.

Echogenicity from the authors' own observations is reversible, as is ischaemia, for at least some patients. Periventricular leucomalacia with or without cyst formation is as permanent as the disability which it may cause. Periventricular leucomalacia is a particular form of cerebral infarction which becomes cystic only after a few days when sufficient numbers of dead cells have been removed for a cavity to be detectable. Precisely how long this interval is before a cyst is seen is something of an imponderable but is probably of the order of 10 days. It comes as no surprise that there were nine infants whose brain pathology may have been initiated in the intrapartum or immediate postnatal period. Changing the supply of oxygen from placenta to lungs is bound to be intrinsically hazardous. A more interesting question is how many babies sustained cerebral infarction from a hypoxic insult days before the mother's confinement.

Cavitation, as opposed to echogenicity, of the infant brain at two hours postnatal age would be convincing in that respect. The reader is not informed.

Baby Check score card

STR.—The series of articles by A J Thornton, C J Morley, and S J Green et al on the Baby Check score card make very interesting reading and represent a timely attempt to provide parents with a diagnostic tool to grade their infant's severity of illness.1-4 As a general practitioner I must admit to some reservations a parent's capa-

icity (particularly with first children) to document accurately their children's symptoms. I am frequently presented, as are my colleagues, with children whose parents have cheerfully reported that they have vomited everything they have been fed for the last 48 hours or longer, haven't passed urine for the last 24 hours, and are drowsy all the time ('He definitely isn't feeling too well'). A set of symptoms belied by the fully hydrated and cheerful infant sitting in a wet nappy in the surgery (He must have just done it'). This lack of reliability in parents' impressions of their children's symptoms is supported by a letter by Francy Pillo-Blocka et al from the Hospital of Sick Children in Toronto.5 They reported on the subject of mothers of infants with gastro-oesophageal reflux and their estimates of the quantity of fluid spilled on a baby's wash cloth. A spillage of 5 ml in volume produced a mean estimate of spillage of 35 ml (range 3-120 ml) and a 10 ml volume produced an estimate mean of spillage of 77 ml (range 7-240 ml). Of the 58 mothers tested, only one accurately assessed both volumes and the result was independent of age or the mother. The authors advised caution in accepting parental impression of vomiting as a result.

I accept this finding only affects a small subsection of the Baby Check, but I would welcome a more generalised application of the score card before more work is done on the accuracy of parental assessment of individual signs and symptoms included in the score card.

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Dr Morley comments: I would like to thank Dr Sowden for his interest in Baby Check. I understand his reservations about parents' ability to report their children's symptoms accurately. However, when mothers exaggerate their baby's symptoms one should consider whether they are really capable of reporting the symptoms accurately or whether they perceive that the doctor is disinterested in their baby's illness unless presented with florid and overt symptoms.

Dr Sowden uses mothers' lack of reliability at assessing the amount of fluid on a wash cloth as an indication of their inability to assess their baby's symptoms. This is a notoriously difficult thing to assess and I would be surprised if doctors could do better. When assessing if a baby is sick one first thing all doctors should do is ask the mother about the baby's symptoms. It is very difficult to come to an accurate diagnosis without some knowledge of symptoms. However, information obtained is more useful if the mother is asked questions she is likely to be able to answer. For example in Baby Check the mother is not asked the volume of the vomit but, 'Has the baby vomited at least half of the feed after each of the last three feeds?'

The research project, from which Baby Check was developed, set out to find the symptoms (reported by mothers) and signs (seen by the assessors) which could be used to grade the severity of a baby's illness. Interestingly, out of all the possible factors which might be considered important and useful, seven of the 19 factors selected by the analyses were symptoms. Despite any inaccuracy in the way these might have been reported by the mothers they were found to contribute significantly to the assessment of illness.

Although we were concerned that mothers might not be able to use Baby Check two field trials showed that they had few problems with the interpretation of the symptoms or signs. Most people who used Baby Check in our studies found it helpful, particularly if they were inexperienced at assessing babies' illnesses. I would like to suggest that Dr Sowden thinks the Baby Check score card might be pleasantly surprised to find how well mothers can assess their babies when given a new tool for a difficult task.