

attributed to the same substances does not invalidate the asthmatic response that has been shown.

All the children were born in this country, but cultural influences may still prevail. I maintain that this particular folklore is based on fact.

References

- 1 Wilson NM. Food related asthma. A difference between two ethnic groups. *Arch Dis Child* 1985;**60**:861-5.
- 2 Wilson NM, Dixon C, Silverman M. Increased bronchial responsiveness caused by ingestion of ice. *Eur J Respir Dis* 1985;**66**:25-30.
- 3 Wilson NM, Vickers H, Taylor G, Silverman M. Objective test for food sensitivity in asthmatic children: increased bronchial reactivity after cola drinks. *Br Med J* 1982;**284**:1226-8.

Problems facing women who seek a career in paediatrics

Sir,

As the pair of successfully matched job sharing doctors mentioned in Dr C Rees's annotation¹ we have encountered many of the difficulties she lists. We would still like to emphasise, however, the hopeful side of the future for women in paediatrics.

In September 1984 the proportion of female consultants in post was 17%; between 1978 and 1983, 20% of new consultants and senior registrars were women.² Around 1968, when these new consultants finished medical school, the proportion of women graduating was 24%.³ Women are, therefore, relatively well represented in paediatrics. We are certainly more fortunate than those in other acute specialties; for the same period, only 4% of new consultants and 7% of new senior registrars in general medicine were women.

As the proportion of female graduates entering paediatrics increases the requirements for part time work will rise. There are also men who would appreciate a period of part time work, either for writing up research or seeing more of their young families. Is it not time that the British Paediatric Association set up its own job share register?

References

- 1 Rees C. Problems facing women who seek a career in paediatrics. *Arch Dis Child* 1985;**60**:900-1.
- 2 Department of Health and Social Security. Medical and dental staffing prospects in the NHS in England and Wales, 1984. *Health Trends* 1985;**17**:45-53.
- 3 Day P. *Women doctors*. Choices and constraints in policies for medical manpower. London: King's Fund Centre, 1982:20.

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Dr Chambers, secretary of the British Paediatric Association, comments:

This is now being done: enquiries to Dr Rosamond Jones, 15 Fairfield Lane, Farnham Royal, Bucks.

Risk and pertussis vaccine

Sir,

During the current epidemic of whooping cough many parents are reconsidering pertussis immunisation for their infants, and paediatricians are being asked about risks and benefits. The National Childhood Encephalopathy Study (NCES)^{1,2} conducted with the close cooperation of paediatricians in 1976-79 was designed to help answer their questions, and we are often asked about the interpretation of our results.

The NCES was a case control study in children admitted to hospital with acute neurological problems, in which we compared the histories of immunisation shortly before onset in cases with similar histories in controls. The first report included only 1000 of 1182 children notified to the study,¹ though inclusion of the remaining children did not materially alter our findings.³ Our analysis included *all* children without regard to any alternative explanation apart from pertussis immunisation. This epidemiologically essential approach is not always understood and has led some to believe that the study shows the risks of pertussis vaccine to be greater than they are. It has also been suggested that our estimate of risk is too low due to bias in case reporting, but, as explained in our report, this is unlikely to have materially affected the results.

We reported two types of risk estimate:

- (a) Relative risk. There was a small but significant excess risk of children having had DTP vaccine in the seven days before onset of a serious neurological disorder. Most of this excess was in the first 72 hours. Fortunately, most recovered quickly and were apparently normal when followed up at least a year later. No recognisable 'post pertussis immunisation syndrome' was found.
- (b) Attributable risk. The attributable risk of these events was about one in 140 000, but the central estimate of risk of death or permanent damage comes to around one in a third of a million doses of DTP vaccine in children who were assumed (but not proved) to have been previously fit neurologically. We stress that this figure must be interpreted with caution because the 95% confidence limits are very wide and it assumes all relevant cases were notified. In fact it is based on *only seven* children found in a three year period. Of these seven, two died, one with Reye's syndrome and one with an overwhelming viral infection. One child with major defects had Cocksackie B5 virus isolated from the CSF, which could have been the cause of illness. This leaves four children, only one of whom was severely handicapped when last seen, with no alternative explanation for their illness. The real cause of the handicap in these children remains in question—was it a reaction to vaccine or did they have some other undiagnosed problem? It must be remembered that pertussis immunisation is given at the very age when children are most likely to manifest serious neurological disorders. In the circumstances it is clearly unwise to attribute a causal connection in individual cases.

Our view remains, therefore, that the risk of death or brain damage attributable to pertussis vaccine, if it occurs

at all, is a very rare event and far less than the risk of death or damage due to whooping cough.³

References

- ¹ Alderslade R, Bellman MH, Rawson NSB, Ross EM, Miller DL. The National Childhood Encephalopathy Study. In: *Whooping cough: reports from the Committee on Safety of Medicines and the Joint Committee on Vaccination and Immunisation*. London: HMSO, 1981.
- ² Miller DL, Ross EM, Alderslade R, Bellman MH, Rawson NSB. Pertussis immunisation and serious acute neurological illness in children. *Br Med J* 1981;**282**:1595-9.
- ³ Miller DL, Ross EM, Wadsworth J, Diamond J. Risk factors for acute neurological illness in children. In: *Proceedings of the Fourth International Symposium on Pertussis*. Geneva 1984. (In press).

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Inguinal hernias are common in preterm infants

Sir,

We read the paper by Boocock and Todd with great interest;¹ although the higher incidence of hernias in preterm children is generally accepted, accurate figures are difficult to obtain.

The risk percentages stated in the above mentioned article, however, are based on retrospective analysis of cases, surgically treated during the first six months of life, and, therefore, might still be an underestimation.

To clarify this issue we analysed the data on inguinal hernias that have been collected in the course of a nationwide project in The Netherlands, concerning live-born preterm (<32 weeks) and/or very low birthweight (<1500 g) infants.² The study included 1338 liveborn infants (mean gestational age 30.3 weeks, 1095 infants <1500 g, 52% boys). Preliminary results show that of the 978 surviving infants, 94 infants had inguinal hernias

Table Number of infants with inguinal hernia under the corrected age of 6 months

	Total			Surgically treated		
Unilateral:	61			45		
Boys		42			36	
Girls			19			9
Bilateral:	33			28		
Boys		31			26	
Girls			2			2
Total	94 (7%)	73 (10%)	21 (3%)	73 (5%)	62 (9%)	11 (2%)

before the corrected age of 6 months; 73 (78%) of those have had a herniotomy during that period. In our material a predominance of boys was found as well, whereas unilateral hernias outnumbered bilateral ones both in the total number of hernias and in the surgically treated ones (Table).

For calculation of the incidences, we used as a denominator the total number of liveborn infants in a category and not the number of surviving infants. In agreement with Boocock and Todd the incidence is thus independent from the neonatal and postneonatal mortality. Otherwise, differences in mortality may cause considerable differences in incidence of later morbidity such as hernias, resulting in incomparability.

In our study the high incidence of inguinal hernia in preterm and very low birthweight infants is confirmed; even if the cases that were not yet surgically treated are included, however, the incidence is clearly lower than in Boocock and Todd's study.

References

- ¹ Boocock GR, Todd PJ. Inguinal hernias are common in preterm infants. *Arch Dis Child* 1985;**60**:669-70.
- ² Verloove-Vanhorick SP, Verwey RA, Ruys JH, Brand R, Bennebroek Gravenhorst J, Keirse MJNC. Neonatal mortality risk in relation to gestational age and birthweight: results of a national survey of preterm and very low birthweight infants in The Netherlands. *Lancet* (in press).

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