Dr McEnery and Seakins comment:

Certainly, healthy breast fed babies may have frequent loose stools. While it is difficult to define pathological diarrhoea, this infant's diarrhoea was sufficient to get him admitted to hospital despite the adequate weight gain. Both the mother and experienced ward staff felt that the infant's diarrhoea was excessive, despite my attempts to reassure them. Reducing substances were identified in the stools repeatedly, at a concentration of 1%. The diarrhoea immediately resolved on changing to a succession of two other milks (Pregestimil and SMA), and has never returned since. If the baby had continued to be breast fed we do not know whether he would have thrived adequately. His mother declined my suggestion to resume breast feeding. In these circumstances, I believe, it is reasonable to assume that the milk oligosaccharides were responsible for the troublesome diarrhoea (associated with perianal soreness) and that he benefited by the change of milk.

Our observations do not contradict those of Whyte et al but underline the importance of diet in the interpretation of analytical findings and of collecting samples before dietary or other therapeutic manipulations.

Withdrawal of iodinated disinfectants at delivery decreases the recall rate at neonatal screening for congenital hypothyroidism

Sir,

We recently reported transiently raised serum concentrations of thyroid stimulating hormone during early postnatal life in infants born to mothers whose skin had been disinfected with povidone-iodine (PVP-I) at delivery for epidural anaesthesia or caesarean section. This transient impairment of the thyroid function was particularly severe in breast fed infants with a 25 fold increase in the recall rate at neonatal screening for congenital hypothyroidism, and was attributed to iodine overload due to the appreciably raised iodine content of breast milk in women treated with PVP-I.

Therefore, PVP-I was replaced in obstetrics by a non-iodinated skin disinfectant (chlorhexidine 0.5% in isopropanol 70% (CHL)). We compared the frequency distributions of serum thyroid stimulating hormone concentrations at the time of screening in our whole population of healthy breast or bottle fed full term infants, before (n=4745) and during six months after (n=1178) replacement of PVP-I by CHL. We considered separately infants born to mothers without (group 1) or with (group 2) skin disinfection. The table shows that the replacement of PVP-I by CHL entirely abolishes the differences between groups 1 and 2 in: (a) the frequency distributions of neonatal thyroid stimulating hormone concentrations and (b) the recall rate at neonatal screening under suspicion of congenital hypothyroidism (serum thyroid stimulating hormone concentration >50 mU/L) after the type of feeding (levels of significance as compared with group 1: p<0.01). Except for the type of skin disinfectant used in the mothers, the two newborn populations studied presented with identical epidemiological characteristics; consequently, our observations further support the view that iodine overload and transient subclinical hypothyroidism in breast fed infants resulted from the use of PVP-I in the mothers.

In conclusion, iodine overload is a significant and often unrecognized cause of very transient hyperthyrotropinaemia ('false positive') at screening. Therefore, PVP-I should be carefully avoided in the neonatal period whenever possible, especially in areas like Belgium where, because of a rather low iodine supply in the population, the newborns are particularly sensitive to the antithyroid effects of iodine excess.

References

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Table  Comparison of povidone-iodine (PVP-I) with chlorhexidine in isopropanol (CHL) for skin disinfection

<table>
<thead>
<tr>
<th></th>
<th>Frequency (%) of serum thyroid stimulating hormone concentration (mU/l)</th>
<th>% Of serum thyroid stimulating hormone concentration &gt;50 mU/l (recall)</th>
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<tbody>
<tr>
<td></td>
<td>&lt;10</td>
<td>10-50</td>
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<td>PVP-I:</td>
<td></td>
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<tr>
<td>Group 1</td>
<td>97-2</td>
<td>2-7</td>
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<tr>
<td>Group 2</td>
<td>79-9*</td>
<td>17-6*</td>
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<td>CHL:</td>
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<tr>
<td>Group 1</td>
<td>94-4</td>
<td>5-6</td>
</tr>
<tr>
<td>Group 2</td>
<td>94-0</td>
<td>5-7</td>
</tr>
</tbody>
</table>

*p<0.01.

References


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Staff changes

We thank Professor ED Alberman, Dr JMH Buckler, and Professor JO Forfar who have completed their periods of office as members of the Editorial Committee, for their conscientious and meticulous work for the Journal.

We welcome the following as new members of the Editorial Committee. Professor JK Lloyd, Nuffield Professor of Child Health at the Institute of Child Health, London, and President of the British Paediatric Association; Dr IA Hughes, Reader in Paediatric Endocrinology in Cardiff; Professor POD Pharoah, Epidemiologist of the University of Liverpool; and Dr L Polnay, Senior Lecturer in Community Paediatrics at the University of Nottingham.

Dr Michael Silverman, who has been a member of the Editorial Committee for two years, has been appointed Associate Editor. Eleven years ago, he was appointed Senior Lecturer and more recently has been Reader at the Royal Postgraduate Medical School, Hammersmith Hospital, London. He has been convenor of the Respiratory Group of the British Paediatric Association. His extensive research of the physiology and pathology of respiratory disease has included both preterm infants and older children.