Correspondence

amounts of which would have given highly misleading results.

No antibiotic regimen currently available provides total
coverage against the wide range of neonatal pathogens,
although in our experience ceftazidime has distinct advan-
tages over the alternatives bearing in mind that among our
patients four of 30 bacteremia were due to pseudomo-

Colonisation with faecal streptococci occurs, and if
ceftazidime treatment is to continue for more than five
days it is our practice to add ampicillin to the prescription.

To condemn its use in neonates because it failed to treat
infections that had previously not responded to treatment
with other antibiotics, or where initiation of treatment had
been delayed, is to apply quite unrealistic demands on any
antibiotic. If treatment is started promptly ceftazidime is a
very appropriate antibiotic for the initial blind treatment of
neonatal sepsis.

J DE LOUVOIS AND A B MULHALL
Queen Charlotte's Maternity Hospital,
London W6 0XG

Dr Low and co-workers comment:

Drs de Louvois and Mulhall's wide experience using
ceftazidime will be useful, when published, in improving
the evaluation of this antibiotic.

Reasons for ceftazidime's ineffectiveness against the
case of Escherichia coli meningitis and one of the cases of
group B streptococcal sepsis were acknowledged in our
paper. Without going into great details about the case of
Enterobacter cloacae/ enterococcal infection, this was not a
matter of penicillin and gentamicin failing—this course of
antibiotics had been stopped as the baby was well. He then
became unwell with organisms resistant to ceftazidime.

The point about cerebrospinal fluid being contaminated
with blood is well taken. There was some blood in the
samples from cases 2, 11, 12, 35, and 42 and these results
may be falsely high.

We find it inconsistent to state that ceftazidime is inap-
propriate for confirmed cases of group B streptococcal
and Staphylococcus aureus infection, two of the com-
monest neonatal pathogens, while at the same time
advocating its use for initial blind treatment. McCracken
has recently written that most group B streptococcal
meningitis is sterilised within 24 hours using ampicillin and
gentamicin. Unless this can be stated confidently about
ceftazidime, surely there must be reservations about its
usage.

References

1 Pollock I, Mulhall A, de Louvois J. Ceftazidime in the treatment
2 de Louvois J, Mulhall A. Ceftazidime in the blind treatment of
3 Low DC, Bissenden JG, Wise R. Ceftazidime in neonatal
4 McCracken EH. New developments in the management of
children with bacterial meningitis. Pediatr Infect Dis 1984:

Toxic shock syndrome

Sir,

We read with interest the recent description of toxic shock
syndrome by Buchdahl et al. We have recently seen a
case, also within the London area, which fulfills the
diagnostic criteria, and which confirms the potentially
lethal nature of the condition. A previously well 3 year old
boy of Indian origin was admitted to hospital comatose,
after a convulsion. There was a two day history of pyrexia,
diarhoea, and vomiting. On examination he was unres-
ponsive to all stimuli. Rectal temperature was 42°C.

There was an erythematous-purpuric rash on the legs,
which subsequently spread to the trunk and arms. He was
severely shocked, with a systolic blood pressure of 60 mm
Hg and poor peripheral perfusion. Biochemical abnormali-
ties included severe metabolic acidosis, hyponatraemia,
hypocalcaemia, and raised blood urea (9 mmol/l) and
transaminases. He was anaemic (haemoglobin 7 gm/dl)
and thrombocytopenic (platelet count 47×10⁹/l). The
prothrombin and thrombin times were prolonged and fibrin
degradation products were raised, indicating dis-
seminated intravascular coagulation. Despite instituting all
the intensive support measures outlined by Buchdahl et al,
and the administration of intravenous penicillin, chloram-
phenicol, and cefuroxime, he died within 12 hours of
admission. Staphylococcus aureus, sensitive to chloram-
phenicol and cefuroxime, was subsequently isolated from
blood cultures.

In severe cases of toxic shock syndrome it may be
difficult to distinguish the effects of toxin production from
those of overwhelming septicaemia, and antibiotics should
be given in addition to supportive measures. In young
children meningococcaemia is the commonest cause of
fulminant illness with a purpuric rash, and appropriate
antibiotics are given before the availability of culture
reports. Should further reports confirm the impression of
an increasing incidence of toxic shock syndrome in
children, perhaps antistaphylococcal treatment should also
be considered in these circumstances.

Reference


T GERRARD, D J MANNING, AND G J A I SNODGRASS
The London Hospital,
Whitechapel,
London E1 1BB

Dress of infants in health and illness

Sir,

I read with interest the paper by Eiser et al. While
working in Leicester I carried out a small survey with local
health visitors to find out how infants were dressed and
wrapped for sleeping and how mothers adjusted clothing
and wrapping if the infant was ill. An unselected group of
74 mothers with infants of 6 months or less were questioned. Details of our findings are summarised below.

This summary was also prompted by the reported links between overheating and illness (including febrile convulsions) and death.

It confirms the findings of Eiser et al that most infants sleep in babygros made of synthetic material rather than the traditional nightie. The amount of clothing or wrapping, or both, was not related to prematurity or previous illness in the infants. The most 'dressed' infant was a well term baby who slept in vest, babygro, mittens, boots, and fleecy sleeping bag. The 17% of mothers of term infants and 42% of mothers of preterm infants who said they would increase their infants' wrapping during illness, were likely to have been acting inappropriately. Even those who specified that they would alter response depending upon whether the infant felt hot or cold could well have been misled. Peripheral temperature is a poor guide to central temperature during illness. The high percentage of mothers of preterm infants who would have increased the infants' wrapping in response to illness is particularly important in view of the preterm infants' poor defences against overheating.2

These results support the view that there is a need for further education of mothers of young infants. I would like to take this opportunity to thank all the health visitors in and around Leicester who kindly helped with the compilation of this survey. Health visitors are, of course, the most able health workers to assist paediatricians, GPs and mothers with education in this field.

**Table 1** Clothing and heating of infants

<table>
<thead>
<tr>
<th></th>
<th>Term infants</th>
<th>Preterm infants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of infants</td>
<td>62</td>
<td>12</td>
</tr>
<tr>
<td>Asian origin</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Mean postnatal age (weeks)</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Male:Female</td>
<td>31:31</td>
<td>11:1</td>
</tr>
<tr>
<td>Number readmitted to hospital</td>
<td>2 (3%)</td>
<td>4 (33%)</td>
</tr>
<tr>
<td>Clothing for sleeping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Babgro</td>
<td>73</td>
<td>80</td>
</tr>
<tr>
<td>Nightie</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Fleecy sleepsuit/</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>sleeping bag</td>
<td>0</td>
<td>17+</td>
</tr>
<tr>
<td>Heating in bedroom</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central heating</td>
<td>70</td>
<td>75</td>
</tr>
<tr>
<td>No heating</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>Additional heaters</td>
<td>14</td>
<td>17</td>
</tr>
</tbody>
</table>

**Table 2** Changes in wrapping or clothing when infant is ill (%)

<table>
<thead>
<tr>
<th></th>
<th>No change</th>
<th>Increase</th>
<th>Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>59</td>
<td>17</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>58</td>
<td>42</td>
<td>8</td>
</tr>
</tbody>
</table>

(Overlap is due to mothers who said they would increase or decrease wrapping depending upon whether the infant felt hot or cold.)

References


Valerie Harpin
John Radcliffe Hospital, Oxford OX3 9DU