neutropenia was related to an initially undetected clone of cells capable of suppressing myelopoiesis, which overtly presented 34 months later as ALL. Neutropenia should be regarded as a cytopenia which may rarely precede the onset of ALL.

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References

Comparison between Bactec and OXoid blood culture systems in a neonatal intensive care unit

For several years our laboratory has used the Bactec system for routine blood cultures from neonates. The predominant isolates are coagulase-negative staphylococci, and the rest of the isolates are group B streptococci, Staphylococcus aureus, coliforms, α-haemolytic streptococci, Pseudomonas spp. lactobacilli, and Candida spp. As clinically important anaerobes are only very rarely isolated from neonatal blood cultures from the Southmead special care baby unit, we felt justified in substituting an OXoid Signal bottle for the Bactec 7D (anaerobic) bottle.

The OXoid Signal is capable of detecting the range of blood culture isolates from the unit but has not been assessed using the small volumes of blood usually cultured from neonates, and concern has been expressed about its reliability in clinical use. The table shows the organisms isolated during the period when blood culture sets of one Bactec 6B (aerobic) and one OXoid Signal bottle were used. Coagulase-negative staphylococci and Candida were grown in both systems. Bactec failed to grow a group B streptococcus and two E coli, while OXoid Signal failed to grow three coliforms (Klebsiella oxytoca, Escherichia coli, Proteus mirabilis).

The clinical importance of the other isolates positive in only one system is more difficult to assess. False positive results were rare, being 3.9% with OXoid and nil with Bactec. When the same organism was isolated in both bottles, 85% (23/27) were positive on the same day, and the other four were positive in Bactec first. When organisms were isolated from only one bottle 17 of 25 OXoid Signal cultures and 16 of 20 Bactec cultures were positive at 24 hours, but both failed to grow isolates likely to be clinically important.

Reasons for the failure of both bottles to isolate likely pathogens may be related to contamination or the small volume of blood inoculated into each bottle. The preponderance of coagulase-negative staphylococci in neonatal cultures makes contamination rates difficult to assess, but it seems likely that the volume of blood cultures is important and the question arises as to whether the inoculum should be split between several cultures or committed to one. It may be that in the absence of blood volumes to fulfil adequately the manufacturer's protocol for a double bottle system (such as Bactec) it may be better to place all the blood available into a single bottle culture system. A further potential advantage of the use of single culture bottle regimen (OXoid) would be an approximate 25% saving in cost compared with a double Bactec system; unlike Roberts and Kaczmarski, we did not have many false positive signals with the OXoid system.

Letters to the Editor

Table: Organisms isolated from each blood culture system

<table>
<thead>
<tr>
<th></th>
<th>Positive in Bactec</th>
<th>Positive in OXoid</th>
<th>Positive in both</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 α-haemolytic streptococcus</td>
<td>1 α-haemolytic streptococcus</td>
<td>1 Candida</td>
<td></td>
</tr>
<tr>
<td>13 Coagulase-negative staphylococcus</td>
<td>16 Coagulase-negative staphylococcus</td>
<td>25 Coagulase-negative staphylococcus</td>
<td></td>
</tr>
<tr>
<td>1 E coli</td>
<td>2 E coli</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Klebsiella oxytoca</td>
<td>1 Group B streptococcus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ps paucimobilis</td>
<td>1 Streptococcus faecalis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 mixed cultures of Streplococcus faecalis with Proteus sp and Streplococcus sanguis with Coagulase-negative Staphylococcus</td>
<td>1 Lactobacillus</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 Propionibacterium</td>
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</table>

References

Improved blood free selective medium for isolating Campylobacter jejuni from faecal specimens

We confirm some of the observations made by workers in Preston on the efficacy of modified charcoal cefoperazone desoxycholate agar (modified CCDA) in isolating "thermophilic" campylobacters from human faecal specimens. We compared modified CCDA with Skirrow's medium which had been our standard selective medium. The Skirrow's medium was prepared from Columbia agar base (Oxoid CM 331), lysed horse blood, and Skirrow's selective supplement (Oxoid SR69) and modified CCDA prepared from Campylobacter blood free selective agar base (Oxoid CM 739) and a cefoperazone selective supplement (Oxoid SR125). Equal quantities of faeces were spread on each medium using a cotton tipped swab and the plates incubated microaerobically in anaerobic jars, evacuated to 550 mm Hg, before adding 10% carbon dioxide in nitrogen without a catalyst, and plates were examined after
The blood free and suppressing campylobacters superior overgrowth of coliforms grew on Yeasts pylobacter negative Skirrow's plates. Some ter negative not was of of CCDA than medium cultured. Nineteen were on incubation isolations stain Gram positive. Other organisms 203 were isolated on Skirrow's medium there after 2 hours' incubation no growth, compared with the modified CCDA medium.

Specificity problem of polyclonal rabbit antibody

We read with interest the report of the problem of antibody specificity in the immunohistochemical staining which was applied to the specimen from a patient with acquired immune deficiency syndrome. We agree with the conclusion.

We recently encountered a similar problem of antiserum contamination with undesirable antibodies. Some polyclonal antisera raised in a rabbit seemed to contain anti-Intermediate filament antibody, including anti-keratin antibody. Antisera to lysozyme, myoglobin, S-100 protein, a-lactalbumin, lactoferrin, and normal rabbit serum (all from Dako, USA) stained strongly the epidermis, and moderately the vascular endothelial cells (figure), fibroblasts, sweat glands, and arrector pili muscles of human skin. After absorption with the stratum corneum of a human sole the false positive reaction disappeared while the staining reaction of the positive control specimen remained unchanged. This suggested the contamination of anti-Intermediate filament antibody in rabbit antisera or the presence of common antigenic sites of the reactants against intermediate filaments.

It is important to know if contamination is present, or if a cross reaction has occurred in surgical pathology. A tumour which resembled a sarcoma showed a positive staining with anti-myoglobin antibody. The tumour was diagnosed as a poorly differentiated transitional cell carcinoma under electron microscopy. The specificity of antibody should thus always be investigated before use, especially when polyclonal antisera are used, due to possible contamination with anti-Intermediate filament antibody. The optimal method to purify such contaminated antibody is that of absorption. Most clinical histopathology laboratories, however, cannot do such a special immunological procedure. We applied the simple absorption method for naturally occurring anti-Intermediate filament antibody present in rabbit serum using the stratum corneum of human skin.

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References

1 Millard PR, Chaplin AJ, Heryet AR, McDougall AC. Factor VIII related antigen positive macrophages and acquired immune

![Figure: Epidermis showing strongly positive stain and vascular endothelial cells showing moderately positive stains for polyclonal rabbit anti-myoglobin antibody (1/400). (Immunoperoxidase-hematoxylin staining, trypsinised for 20 minutes.)](http://jcp.bmj.com/)
Improved blood free selective medium for isolating Campylobacter jejuni from faecal specimens.
A Griffiths and C D Ribeiro

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