2. Reid IR, Wallis WE. The chronic and severe meningitis due to
A. cantonensis are very familiar with eosinophilic men-
ingitis due to A. cantonensis, and we see several cases per year. Indeed, 1 of the series of cases mentioned by Lo Re and Gluckman was evaluated and reported by our neurological colleagues at Auckland Hospital [2]. We do not, in general, find diagnosis of eosinophilic meningitis due to A. cantonensis to be “a major challenge,” because the condition has a characteristic clinical symptomatology with an appropriate epidemiological history (even without the presence of CSF or peripheral blood eosinophilia, as initially was the case for the woman described by Lo Re and Gluckman [1]) and is familiar to those of us in the fields of infectious diseases and neurology in this part of the world. Having said all that, we acknowledge that the ultimate proof of diagnosis was achieved by the Bangkok group mentioned in the article by Lo Re and Gluckman [1].

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References

Prolonged Candidemia in Patients with Cancer

Sir—We observed 4 cases of recurrent candidemia in patients with neoplastic disease who had central venous catheters. These cases were especially instructive because they were assessed both by antifungal susceptibility studies and by genotyping analysis performed using a randomly amplified polymorphic DNA (RAPD) technique described elsewhere [1, 2].

Case patient 1 was a 47-year-old woman with a myelodysplastic syndrome who was neutropenic after receiving chemotherapy and who had 3 blood cultures that were positive for Candida glabrata (1 isolate was recovered on day 0 [the day that the first blood culture positive for Candida was performed], and 2 isolates were recovered on day 9) (table 1). Both susceptibility testing and RAPD analysis revealed that the isolate recovered from peripheral blood on day 0 was different from the isolates recovered from central venous catheter blood and peripheral blood on day 9 (figure 1). On day 22, a different urine isolate was identified by susceptibility testing and RAPD analysis revealed that the isolate recovered from peripheral blood on day 0 was different from the isolates recovered from central venous catheter blood and peripheral blood on day 9 (figure 1). On day 22, a different urine isolate was identified by susceptibility testing, although it was genetically related to the initial yeast isolate (as determined by RAPD analysis). The patient died on day 23.

For case patient 2, the 3 Candida para-

<table>
<thead>
<tr>
<th>Source of specimen</th>
<th>Day that blood culture was performed</th>
<th>Flu</th>
<th>Itr</th>
<th>Ket</th>
<th>AmB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peripheral blood</td>
<td>0*</td>
<td>64</td>
<td>16</td>
<td>14</td>
<td>0.25</td>
</tr>
<tr>
<td>Peripheral blood</td>
<td>9</td>
<td>64</td>
<td>2</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>CVC blood</td>
<td>9</td>
<td>64</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Catheter urine</td>
<td>22</td>
<td>0.5</td>
<td>0.03</td>
<td>&lt;0.03</td>
<td>0.25</td>
</tr>
</tbody>
</table>

NOTE. AmB, amphotericin B; CVC, central venous catheter; Flu, fluconazole; Itr, itraconazole; Ket, ketoconazole.

* Day that the first blood culture positive for Candida was performed.

Table 1. Antimicrobial susceptibility profile of Candida glabrata isolates recovered from case patient 1.
had the same organism isolated 4 times during periods of 12 days (for *C. albicans*) and 18 days (for *C. lusitaniae*). Both patients survived, and *C. lusitaniae* remained susceptible to amphotericin B [4].

We conclude that yeast isolates recovered from blood should be tested for susceptibility to commonly used antifungal agents just as bacteria are tested for susceptibility to antimicrobials. This report indicates that in highly susceptible granulocytopenic individuals, different strains and/or species may appear during prolonged episodes of hematogenous candidiasis.

**Figure 1.** Randomly amplified polymorphic DNA analysis of 3 bloodstream isolates and 1 urine isolate of *Candida glabrata* recovered from case patient 1. The 2 primers used were 5′-AAC GCG CAA C-3′ and 5′-GAG GGT GGN GGN TCT-3′. Genetic relatedness among yeast isolates was determined by dendrogram analysis (Molecular Fingerprinting Plus software; Bio-Rad Laboratories). Band positions between 100 and 3000 bp (DNA molecular-weight marker XIV; Roche Diagnostic) were computed using an area-sensitive similarity coefficient ($S_{ab}$) with 1.0 optimization. An $S_{ab}$ of 100 denotes identical strains, and an $S_{ab}$ of 0.0 denotes no match. *C. glabrata* isolates recovered from peripheral blood samples on day 0 and day 9 had an $S_{ab}$ of <83.3, or a 6-band disparity. An $S_{ab}$ of 75.9, or a 7-band difference in position, was noted for 2 isolates recovered on day 9. An $S_{ab}$ of 62.1, or an 11-band difference, was noted for isolates recovered from central venous catheter blood samples on day 0 and day 9, whereas the initial *C. glabrata* isolate recovered on day 0 and a urine yeast isolate recovered on day 22 had a high probability of genetic relatedness ($S_{ab}$, 97.1 [1-band difference]). C-blood, central venous catheter blood; P-blood, peripheral blood.

References


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