Itraconazole as Salvage Therapy in Invasive Pulmonary Aspergillosis Occurring during Amphotericin B Therapy in Neutropenic Patients

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Key Words  
Itraconazole  
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Abstract  
Amphotericin B is commonly used as prophylactic therapy in addition to broad-spectrum antibiotics in febrile neutropenic patients with leukaemia. Despite amphotericin B therapy, invasive pulmonary aspergillosis commonly occurs in such patients. This abstract reports 15 cases of invasive pulmonary aspergillosis occurring in neutropenic patients previously treated with intravenous amphotericin B, 0.89 mg/kg/day (range, 0.5-1.5 mg/kg/day) for a mean of 16.1 days (range, 5-70 days). The results are summarized in table 1. Seven patients achieved a complete haematological response with chemotherapy, and 8 patients did not achieve a complete haematological response and were considered to have progressive haematological disease. Deaths from invasive pulmonary aspergillosis occurred in 2/7 patients with a complete haematological response and 3/8 patients with progressive haematological disease. Of 13 patients treated with itraconazole, 300-600 mg/day for a mean duration of 138 days (range, 74-225 days), 10 (77%) were improved. Among these 13 patients, the mean duration of neutropenia had a prognostic value for the outcome of itraconazole treatment failure (* p = 0.05, Mann-Whitney non-parametric test; see table 1). Itraconazole thus seems to be an effective treatment for invasive pulmonary aspergillosis in neutropenic patients, even after failure of amphotericin B.

Table 1. Results of therapy for invasive pulmonary aspergillosis

<table>
<thead>
<tr>
<th>Treatment</th>
<th>(n)</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Itraconazole</td>
<td>(a-3)</td>
<td>Treatment success with itraconazole (n-LO)</td>
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</tbody>
</table>
Mean duration of neutropenia < 0.5 g/l, days
Amphotericin B before invasive pulmonary aspergillosis, mg/kg/day
Total dose of amphotericin B before invasive pulmonary aspergillosis, mg
Mean duration of neutropenia < 0.5 g/l before invasive pulmonary aspergillosis, days
Number of chest infiltrates (radiology)
Mean duration of therapy, days
Mean survival, days
Patients with progressive haematological disease

Prognostic value for failure of itraconazole treatment, p = 0.05.

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