caused by susceptible Gram-positive bacteria, including methicillin-resistant *Staphylococcus aureus* (MRSA). Clinical data in pediatric patients is limited.

**Methods:** A retrospective chart review of pediatric patients (<18y) who received >2 doses of daptomycin between 8/2003 and 11/2006 was performed.

**Results:** Eleven infections [9 Gram-positive bacteremias (GPB) and 2 SSTIs] in 10 patients (7 male, 3 female) were treated with daptomycin (eight received 6 mg/kg/day and three – 4 mg/kg/day). Seven patients had hematological malignancies (5 ALL, 1 AML, 1 CML) and all were allogeneic transplant recipients. Two patients had solid tumors (neuroblastoma-1 and lung cancer-1). Median age was 11 years (range, 2–18). Eight infections occurred during neutropenia and four during corticosteroid therapy. Of the nine bacteremias, all were catheter related (6 CVC, 3 im- planted port). Organisms isolated were coagulase-negative *Staphylococcus* (CoNS): 5; *Enterococcus faecalis*: 2, and 2 polymicrobial infection – CoNS + *E. mundii*, CoNS + Lactobacillus. Two infections were SSTIs including leg abscess: 1, cellulitis: 1. Eleven infections had failed standard antimicrobial therapy (vancomycin for >4 days in 8 episodes; linezolid for >3 days in 2 episodes; and quinupristin–dalfopristin – 21 days in 1 episode) and had persistently positive blood cultures (8 episodes) and/or fever (7 episodes) prior to initiation of daptomycin. Although susceptible, 4 CoNS had vancomycin MICs of 2.0 μg/mL and 3 had MICs of 3.0 μg/mL. The linezolid MIC of one *E. faecalis* rose from 1.5 to 4.0 μg/mL while on daptomycin therapy. Median duration of daptomycin therapy was 10 days (range, 4–15). Outcomes included clearance of blood cultures and defervescence within 72 h in 7 episodes, 1 – grew *E. faecalis* on daptomycin, 1 – persistently febrile and resolution of both SSTIs. No drug related adverse events were documented.

**Conclusion:** Daptomycin appears to be a promising antimicrobial agent for the treatment of GPI in pediatric cancer patients and merits further clinical evaluation.

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**115 Mortality Rates for Breakthrough Invasive Fungal Infections in a Multicenter Trial of Posaconazole vs Standard Azole Prophylaxis**


**Background:** Patients with acute myeloid leukemia (AML) or myelodysplastic syndrome (MDS) undergoing induction chemotherapy are at high risk for invasive fungal infections (IFIs). In a multicenter, randomized study of AML/MDS patients, posaconazole (POS) prophylaxis prevented significantly more breakthrough IFIs than standard azole (fluconazole [FLU] or itraconazole [ITZ]) prophylaxis.

**Objectives:** We evaluated mortality rates and causes of death in patients from this study who developed a breakthrough IFI during POS or standard azole prophylaxis.

**Methods:** Patients with AML or MDS and chemotherapy-induced neutropenia (<500 cells/mm³) were randomly assigned to POS oral suspension 200 mg tid or oral standard azole prophylaxis (FLU suspension 400 mg qd or ITZ solution 200 mg bid) with each chemotherapy cycle for <12 weeks. All patients were closely monitored for IFIs by current culture, serological, and radiographic methods. Primary endpoint was the incidence of proven/probable IFIs during the treatment phase (from randomization to 7 days after last dose), as determined by a blinded expert panel using EORTC/MSG criteria. Survival information was collected at 30 days after last dose of study drug or 100 days after randomization, whichever occurred later. Cause of death was investigator-determined.

**Results:** 602 patients were enrolled (304 POS; 298 standard azole [240 FLU, 58 ITZ]). Significantly fewer IFIs occurred among POS patients (POS, 7 [2%] vs standard azoles, 25 [8%]; P = 0.0009). Aspergillosis was the most common IFI in both groups, but significantly fewer cases occurred in the POS group (POS, 2 [1%] vs standard azoles, 20 [7%]; P = 0.0001). Overall mortality was n = 49 (16%) and n = 67 (22%) for patients in the POS and standard azole groups, respectively (P = 0.048).

Of patients who developed a breakthrough IFI, 1 of 7 (14%) POS patients and 11 of 25 (44%) standard azole patients died during the study (table). The mortality rates for patients without proven/probable IFIs were 48/297 (16%) and 56/273 (21%) for POS and FLU/ITZ, respectively.
Kaplan–Meier analysis of time to death from any cause showed significant survival benefit in favor of POS (P = 0.035).

Deaths among patients with probable or proven breakthrough IFI during prophylaxis

<table>
<thead>
<tr>
<th>Patients with IFI</th>
<th>POS (n=7)</th>
<th>FLU/ITZ (n=25)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total deaths, n (%)</td>
<td>1 (14)</td>
<td>11 (44)</td>
</tr>
<tr>
<td>Cause of death, n (%)</td>
<td>Progression of IFI</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>AML/MDS</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Intercurrent illness</td>
<td>1 (14)</td>
</tr>
</tbody>
</table>

Conclusions: In this study, among 32 AML/MDS patients with IFIs, mortality rates were high (44% in the standard azole group and 14% in the POS group). An early intervention strategy such as POS prophylaxis, which significantly decreases the incidence of IFI, may be more effective than waiting to treat established IFI.

116 Scopulariopsis spp. Invasive Infection in Immunocompromised Patients

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Background: The most common disease association of the mould Scopulariopsis is onychomycosis. However, in addition, there now exists a small but increasing number of reports of invasive infections, with high associated mortality, in immunocompromised patients receiving therapy for malignancies or in receipt of bone marrow or solid organ transplants.

Objectives: To describe an unusual case of infection by Scopulariopsis brevicaulis in a paediatric patient with acute lymphoblastic leukaemia (ALL) and review the literature on invasive infection by Scopulariopsis spp. in immunocompromised patients.

Methods: Case report and literature review. Antifungal MICs were determined at the HPA Mycology Reference Laboratory, Bristol, UK. Case: A 10-year-old girl receiving maintenance chemotherapy after relapse of ALL following bone marrow transplantation was admitted with fever and a dry cough. Her CRP level was 141 mg/L and her absolute neutrophil count was 2.1×10⁹/L. Blood cultures at this time were negative. A CT scan revealed multiple pulmonary lesions suggestive of fungal pneumonia. AmBisome was added to empirical antibiotic therapy. Bronchial lavage was not performed. Blood cultures taken 10 days later yielded S. brevicaulis. Voriconazole was added but blood cultures remained intermittently positive. Antifungal susceptibility results were then received (amphotericin B MIC: 1 mg/L, voriconazole: 8 mg/L, itraconazole: 16 mg/L, caspofungin: 4 mg/L and terbinafine: 0.5 mg/L). The addition of oral terbinafine was associated with microbiological response and complete resolution of fever. AmBisome was later discontinued and the patient discharged. To date, she remains asymptomatic and apyrexial on oral voriconazole and terbinafine. However, some pulmonary lesions remain.

Results/Conclusions: Review of the literature indicates that isolation of Scopulariopsis spp. from blood cultures is rare and resistance or reduced susceptibility to antifungal agents compromises therapy of infection. However, in the case presented here, blood cultures were positive on 5 occasions, allowing definitive identification and antifungal susceptibility testing, which guided subsequent therapy. In addition, neutrophil counts of >1.0×10⁹/L throughout the period of fungaemia probably influenced the clinical outcome, which was superior to that of the majority of reported cases of Scopulariopsis spp. invasive infection in immunocompromised patients.

117 Safety of 70% Ethanol as an Antiseptic Catheter-lock Solution for Tunneled Polyurethane Central Venous Catheters (CVC): Randomized Placebo Controlled Trial

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Background: Antibiotic-locks have been shown to prevent CVC-related bloodstream infection in pts with tunneled CVC. An ethanol-lock might be a good alternative because it has a broad antimicrobial spectrum and does not carry the risk of selection of antibiotic-resistant microorganisms.

Objectives: To evaluate safety and tolerability of 70% ethanol CVC-lock.

Materials & Methods: Hematology pts who had tunneled polyurethane CVC inserted during hospital stay for chemotherapy were randomized to 70% ethanol lock or placebo (NaCl 0.9%). Lumina were locked for 15 min/day during hospitalization and 1 ×/week otherwise. Ethanol/placebo was flushed slowly through the CVC afterwards. Liver enzymes (g-GT, ASAT) and MCV on d0 and d14 were measured and pts were asked to fill out a questionnaire on side effects. Recruitment of 440 pts is ongoing. This abstract reports on a planned