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An outbreak of *Absidia corymbifera* infection associated with bandage contamination in a burns unit

Sir,

Absidia spp. are filamentous fungi, ubiquitous in nature. They are found worldwide in soil and decaying vegetation, and can be isolated from food and the indoor air environment. Of the genus *Absidia*, *A. corymbifera* is the only species pathogenic for humans. This fungus is a relatively rare cause of human zygomycoses and has been involved in colonization and infection in immunocompromised patients.¹

From May to September 2004, *A. corymbifera* was isolated from routine surveillance cultures of burn wounds in seven patients during their stay in a burns unit. This facility is a six-bed unit and a total of 27 patients were admitted during this period, which means an attack rate for colonization and infection by *A. corymbifera* of 25.9 per 100 admissions. Five of these seven patients developed infection with *A. corymbifera* and the two others had skin colonization. Colonization was defined as isolation of *A. corymbifera* from a patient in the absence of signs or symptoms of infection. Infection was diagnosed when the organism was isolated from tissue biopsies and/or if the patient received antifungal therapy depending on the clinical presentation. Three of the five infected patients died.

With the aim of identifying the source or reservoir of *A. corymbifera*, during the outbreak, environmental sampling (air, surfaces and water) was performed three times in the room occupied by three affected patients, in the operating theatre and in the bathroom of the unit. However, *A. corymbifera* was not isolated from any of the environmental samples.

Other sources of contamination were investigated, and a new brand of non-sterile elastoplast bandages, introduced into the hospital in spring 2004 and in use for burns patients, was cultured. One or two colonies of *A. corymbifera* were recovered per cm² of these bandages, as

well as numerous *Bacillus* spp. The *Absidia* spp. were not obvious because in primary culture from the bandages, they only grew on malt agar with added chloramphenicol and not on other media such as Sabouraud-chloramphenicol agar.

Following these findings, the infection control team recommended the exclusive use of sterile bandages for the outer dressing of burns. This decision was also justified by the fact that European regulations have no microbiological requirements for non-sterile medical items such as bandages.

This outbreak of *A. corymbifera* infection is the first to be described in a burns unit. Although contamination of bandages with *Absidia* spp. has been noted,² no outbreak has been associated with this. There have been some reports of sporadic cases of cutaneous mucormycosis related to predisposing skin lesions and contact with contaminated material, such as adhesive bandages and tongue depressors placed close to intravenous catheter insertion sites.³

This outbreak suggests that microbiological specifications should be introduced for a subgroup of non-sterile medical items such as bandages. Meanwhile, the exclusive use of sterile bandages should be recommended for the outer dressing of burns or any other extensive wound.

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