Acremonium-Associated CLABSI in a Multiple Myeloma Patient: Pitfalls in Diagnosis: A Rare Case Report

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Acremonium species are hyaline hyphomycetes that are ubiquitous environmental contaminants occasionally involved in infections, including onychomycosis, keratitis, or even mycetoma. However, aggressive use of newer medical technologies like potent chemotherapy protocols and invasive central-line catheters and newer diseases like HIV infection have resulted in Acremonium and other hyaline molds being increasingly reported as the cause of fungemia. We present a case report of a catheter line–related bloodstream infection (CLABSI) caused by Acremonium in a 53-year-old African American man who was diagnosed with multiple myeloma 14 years previously. During that time, the patient had received chemotherapy that required a Port-A-Cath (Smiths Medical, St Paul, MN). About 6 months prior, the patient was hospitalized owing to some complications associated with disease relapse and was restarted on chemotherapy. On the fourth hospital day, he developed a persistent spiking fever of 38.9°C for which 3 sets of blood cultures (both peripheral and line-draw) were collected. The first blood culture was reported initially as positive for gram-positive rods, and the patient was started on antibiotics. However, the second and third cultures were reported positive for fungal elements for which he was placed on voriconazole, and the Port-A-Cath was removed. The fungal elements seen in the blood took 6 days to grow in our laboratory and repeat Scotch tape examinations of the positive culture plate initially were misinterpreted as Candida and then Fusarium before being finally identified as Acremonium species after slide culture examination. This genus was confirmed subsequently by a commercial reference laboratory. The patient meanwhile responded favorably to the antifungal and became afebrile. Isolation of Acremonium species in the laboratory can be problematic and prone to misinterpretations. Also, as our case revealed, Acremonium infection can sometimes occur without any accompanying neutropenia or localizing signs in patients on chemotherapy.

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