
OUTBREAK OF ASPERGILLUS USTUS INFECTIONS AMONG TRANSPLANT RECIPIENTS, SEATTLE, 1999-2003.

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Background: *Aspergillus ustus* is a mould, that rarely infects humans with only 10 cases reported to date. We report the first outbreak of *A. ustus*, an important infection control issue as this fungus exhibits decreased susceptibilities to multiple antifungal drugs. **Methods:** We conducted a descriptive study of *A. ustus* infections among hematopoietic stem cell transplant recipients at the Fred Hutchinson Cancer Research Center in Seattle from 1999 to 2003; three infections occurred during 1999 and four infections occurred between the months of March and September 2003. Molecular typing using randomly amplified polymorphic DNA (RAPD) and antifungal drug susceptibility testing were performed on clinical and environmental isolates. **Results:** As defined by MSG/EORTC criteria, we identified 7 cases of *A. ustus* infections. Six (85.7%) were male. The median age was 59 (range: 29-63). Five (71.4%) developed graft-versus-host disease and all were co-infected with opportunistic pathogens. Three patients (42.9%) died. Multiple patients had prior treatment with other antifungal drugs. RAPD analysis revealed genetically distinguishable isolates between patients, but similarity within multiple isolates from the same patients.

Conclusion: *Aspergillus ustus* is an emerging pathogen that can cause disseminated disease in the immunocompromised host. Our findings suggest a common source acquisition based on the clustering of cases in space and time that is not excluded by the lack of similar isolates by molecular typing between different patients and the environment.