

**P2244 Invasive infections by *Geotrichum* species: a 15-year retrospective study from tertiary care centres in the Middle East**

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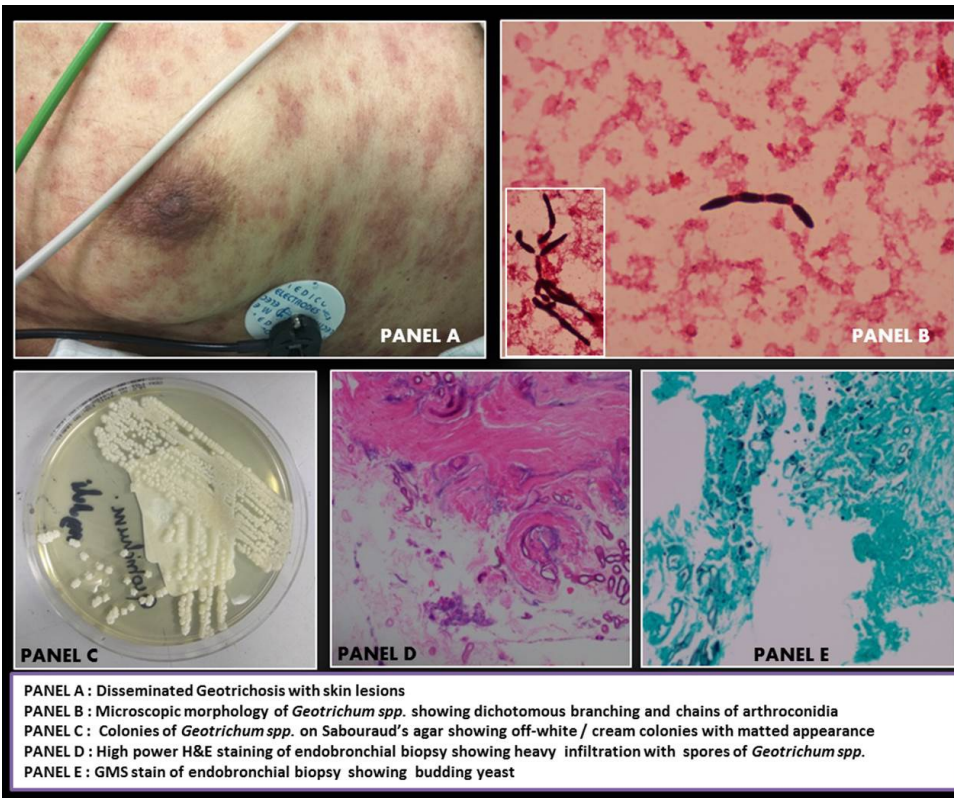
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**Background:** *Geotrichum* species are rare causes of invasive fungal disease in humans. They can also be occasionally isolated from non-sterile site cultures without any associated clinical disease. We herein report 15-year experience from the State of Qatar, including mycological characteristics, clinical features, and outcomes.

**Materials/methods:** The study was conducted retrospectively using an electronic microbiology database and patients' clinical records. All patients with cultures yielding a growth of *Geotrichum* spp. over the period between January 2003 to December 2017 were included. Those who did not fulfill EORTC-MSG criteria for probable or definite fungal infection were excluded. Demographic characteristics, clinical details, treatment regimens, and antifungal susceptibility results were extracted. Data were summarized and descriptive statistics were generated using Microsoft Excel 2016.

**Results:** A total of 35 patients were identified, of whom 6 had either probable (1/6) or definite (5/6) invasive *Geotrichum* spp. infection. The majority were males (5, 83.3%) with an overall median age of 52.5 years (IQR 45.5 – 57.2) and median Charlson co-morbidity score of 6 (IQR 5 – 7). All included patients had one or more immunosuppressive conditions (3 active neoplastic diseases, 1 renal transplant recipient and 4 diabetes mellitus). *Geotrichum* spp. were isolated from cultures of blood and skin biopsy (1 patient), urine (1 patient), bile (1 patient), bronchial biopsy and pleural fluid (1 patient), pleural and mediastinal tissue (1 patient) or oesophageal biopsy (1 patient) (Figure). Based on CLSI *Candida* spp. breakpoints, all tested strains (n = 4) were susceptible to Voriconazole and Posaconazole, but 1 was resistant to Fluconazole, 3 were resistant to Caspofungin and 1 was resistant to Amphotericin B. A variety of systemic antifungal regimens were used for a median of 31 days (IQR 16.5 – 48.5). Four patients (66.7%) died within 90 days.

**Conclusions:** Invasive Geotrichosis is an exceedingly rare infection in Qatar. All affected patients are immunocompromised, with diabetes mellitus being notably prevalent amongst those with active infection. Clinical outcomes are poor, despite systemic antifungal therapy.



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