Objective: *P. norvegicus* is increasingly isolated from hospital settings, especially from immunocompromised patients. Understanding the rare pathogens, including its emergence and distribution, is crucial for accurate diagnosis and infection prevention. We studied the genetic diversity of a large collection of clinical *P. norvegicus* isolates obtained from Dutch hospitals along with a set of non-Dutch clinical and environmental isolates.

Methods: Clinical (n = 236; 90.9%) and environmental (n = 24; 9.1%) *P. norvegicus* isolates were subjected to Amplified Fragment Length Polymorphism (AFLP) fingerprinting and a novel six-loci microsatellite typing panel. Data were analyzed with BioNumerics and Structure. We applied a novel marker typing assay to determine the MAT type and pseudocellulosic.

Results: AFLP fingerprinting separated the *P. norvegicus* isolates into three main clusters. Two clusters fully consist of clinical isolates, the third represented a mix of clinical and environmental isolates. By microsatellite typing, the overall genetic diversity was low (Heterozygosity = 0.99); due to a large number of Dutch clinical isolates with similar sequences. Minimal spanning tree analyses showed that Dutch clinical isolates fell into two clusters. Environmental and non-Dutch isolates were more distantly related. Structure analysis showed the presence of four genotypes, with signs of genetic admixture between geographic locations and environmental/clinical isolates. Nearly all isolates harbor the MATa mating-type allele.

Conclusions: The *P. norvegicus* isolates obtained from Dutch hospitals appeared to be largely clonal, independent of geographic origin and isolation date. The observed clonality is supported by the common number of MEAs isolates. Microsatellite typing indicated potential admixture between clinical and environmental isolates.

P209 First report of Mycetoma due to Madurella fahalii from India

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Objective: To describe the first case report of Madurella fahalii from India.

Methods: A 70-year-old non-alcoholic man from Bhubaneshwar who worked as a soldier in past came to us with a history of pus discharge containing black grains of the size of pulse seeds from multiple lesions in the posterior aspect of the thigh for last 3 years. He had been operated twice before for the same complaints, however, finding no relief he treated us. On examination, a deformed benign tumor measuring 10 × 10 cm, containing 4-6 grains which discharged pus yellow colored pus containing black grains measuring 0.7-1 cm was found on the posterior aspect of the thigh. The lesion was painless, doughy in consistency, and associated with enlarged and non-tender and non-inflamed lymph nodes measuring 2 × 2 cm. General physical examination and routine hematological laboratory examination revealed no abnormalities. Serological tests did not reveal the presence of HBV, Hepatitis B, or Hepatitis C infection. A clinical diagnosis of black grain mycetoma was made and the patient was sent to mycology laboratory for fungal culture. Black hard grains were found on KOH mount and culture on inhibitory mold agar grew a brown colony which diffused a brown pigment into the medium after 15 days of incubation. LPRC examination showed brown non-sporulating mold. DNA was extracted using phenol-chloroform-isooctanol alcohol after grading the material into liquid nitrogen and subjected to PCR using ITS1 and ITS4 primers as described previously. The product was subjected to sequencer sequencing and subjected to BLAST and it showed 99.41% similarity to M. fahalii (MF98963). The patient was started on itraconazole in lieu of voriconazole as the patient could not afford the drug. While there is no reduction in the size of the lesion the patient reported symptomatic relief and is still on follow-up.

Conclusion: To the best of our knowledge this is the first case of Mycetoma due to M. fahalii from India.