Results: Among total of 22 Schizophyllum commune cultures, 19 were isolated from lower respiratory samples, two from cervical scrapings, and one from the brain. Upon microscopic examination, the major identification features of this fungus, i.e., clamp connections and spicules were observed only in 8 (36%) isolates. The remaining 14 (64%) were identified up to species level using ITS sequencing. Basidiospores could be induced only in two isolates. 

Conclusion: Although rarely involved in human disease, Schizophyllum commune is being isolated from the clinical specimens. As microscopic identification is difficult and needs expertise, molecular identification is required for early diagnosis and treatment.

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A rare case of disseminated Blastomycosis in an immunocompetent host: A report from North India

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Objective: Blastomycosis is a serious life-threatening systemic infection caused by dimorphic fungi Blastomyces dermatitidis. Infection is acquired via inhalation of airborne conidia or traumatic inoculation. It may produce a spectrum of infections ranging from asymptomatic infections in immunocompetent patients to disseminated disease, including skin, bone, gastrointestinal tract, and central nervous system (CNS) involvement in immunocompromised patients. This fungal infection is very rare in India. We report a unique case of disseminated Blastomycosis in an immunocompetent patient.

Methods: A 37-year-old male patient from Kanpur, Uttar Pradesh presented with chief complaints of hematuria associated with passage of blood clots for 3 months. There was no history of dysuria, fever, or pain abdomen. When he was evaluated for gross hematuria, his UGS abdomen was suggestive of bilateral renal masses. To rule out bilateral renal cell carcinoma an FDG PET scan was done which was suggestive of FDG avid lesions in the bilateral kidneys. He also had enlarged left supraclavicular and left cervical lymph nodes. Multiple nodular and verrucous lesions were seen all over the face. He complained of pain in the left ankle, with a small wound opening on the medial malleolus of the left ankle.

Results: A skin biopsy was taken from one of the nodular and verrucous lesions over face. A total of 10% potassium hydroxide (KOH) preparation shows no spindled cells, plenty of pus cells, no RBCs, and plenty of thick-walled round yeast and some with broad-based budding yeast (8-12 microns) suggestive of Blastomyces species. Renal biopsies, percutaneous needle biopsy, and CT-guided biopsy from the nodular lesions of the left ankle also showed similar round yeast and some with broad-based budding yeast suggestive of Blastomyces species. Hence, a preliminary diagnosis of disseminated Blastomycosis was made.

Conclusion: Cultures were put in SDA at 25°C and 37°C and after a week, colonies appeared as white to gray-white glistening with reverse cream-coloured non-sporulating colony. On day 5, colony appears as a yellow glistening with beamish reverse with spore heads. PCR was done from the colony which showed thin septate hyphae with pedunculated and sessile spherical to pyriform and smooth walled macroconidia suggestive of Blastomyces dermatitidis. He was started on IV liposomal amphotericin B for 20 days. HCV RNA was detected incidentally and he had transaminases; therefore, he could not be started on itraconazole, he was started on fluconazole. His facial lesions cleared dramatically; his left ankle pain and swelling had resolved. At present, he was asymptptomatically better and was discharged on 200 mg fluconazole once daily and advised follow-up after 2 weeks.

Conclusion: Blastomycosis is a relatively uncommon geographically restricted chronic granulomatous disease that mainly occurs in the endemic regions. This fungus lives primarily in moist soil and decomposing matter, and inhabits the mid-west, south-central, southeastern United States as well as the boreal forests of Ontario and Quebec in Canada. Very little is known about the natural habitat and environmental distribution of Blastomyces species in India. This case is unique because the patient is immunocompetent and has no history of travel outside of India.