**P200**

***Lodderomyces elongisporus* fungemia in a late post-operative patient with ventricular septal defect: case report**

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Objectives: To report a case of *Lodderomyces elongisporus* fungemia in a late post-operative patient with the ventricular septal defect.

Methods: Informed consent was obtained from the parents of the child. Clinical history was collected. Routine biochemical tests were conducted. Blood samples were sent to the bacteriology and mycology laboratory for culture. Radiological examination of the head was done to ascertain the cause of neurological manifestations.

Results: An 11-year-old boy, previously diagnosed as a case of ventricular septal defect (VSD) and severe aortic regurgitation, had undergone VSD closure in December 2010 and aortic valve replacement in January 2011. He was discharged on oral anticoagulants. However, he did not follow up.

In August 2018, he presented with fever and right-sided hemiparesis. Hemogram was within normal limits except for decreased hemoglobin. Bacteriological blood culture was sterile, but I.V. antibiotics were administered empirically. However, the patient started to have epileptic attacks and therefore was intubated and antiepileptics were administered. An NCCT of the head revealed a large intraparenchymal bleed. Echocardiography revealed intra-cardiac vegetation measuring 8 × 7 mm and moderate aortic regurgitation.

Fungal blood culture inoculated in BACTEC Mycosis IC/F bottle flagged positive after 5 days of incubation. A smear and Gram stain from the same revealed budding yeast cells. Sub-culture was done on Sabouraud dextrose agar and HiCromeTM *Candida* Differential Agar, and blue-tinged colonies were observed on the latter. The isolate was identified as *L. elongisporus* when subjected to MALDI-TOF analysis. Identification was confirmed by sequencing the internal transcribed spacer (ITS) region of the ribosomal DNA.

Antifungal susceptibility test was performed by broth microdilution as per CLSI guidelines. Antifungal therapy was initiated with liposomal amphotericin B, but he continued to have fever even after 1 week and consequently developed status epilepticus. CT scan of the brain revealed massive intracranial hemorrhage. Parents were advised neurosurgery, but they requested discharge against medical advice. The patient was lost to follow-up.

Conclusions: *Lodderomyces elongisporus* is a rare cause of invasive bloodstream infections and should not be ignored as a contaminant when isolated from sterile sites. It is often misidentified as *Candida parapsilosis* by conventional methods and commercially available systems but can be distinguished from it using chromogenic culture media and MALDI-TOF-MS. The current case report highlights the significance of *L. elongisporus* as a rare cause of invasive fungal infections, the difficulties faced in the identification of this pathogen, and the importance of newer diagnostic methods in identifying it.

**P201**

***Medicopsis romeroi*: an emerging cause of subcutaneous infections**

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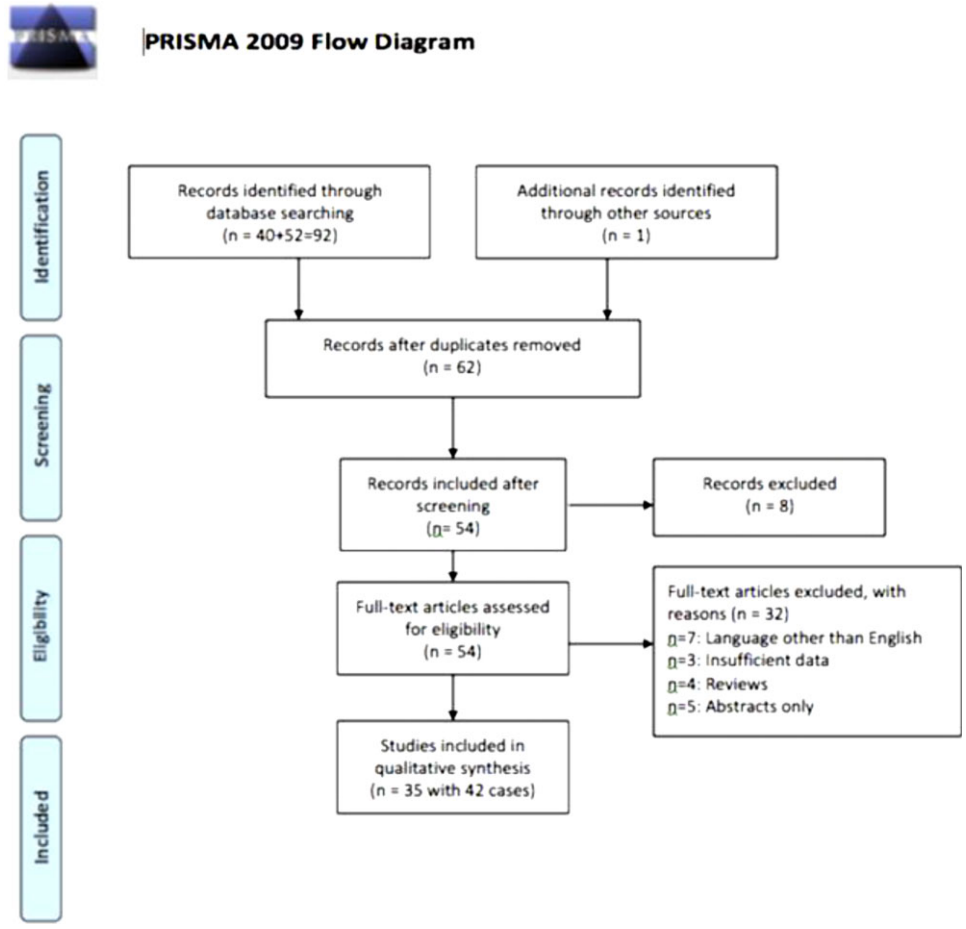
Objective: *Medicopsis romeroi* is one of the emerging dematiaceous fungi implicated in subcutaneous human infections. Despite advances in diagnostics, identification of this agent still remains delinquent owing to poor sporulation necessitating molecular modalities. Data on clinical and management profile of *M. romeroi* are available as case reports. In the present study, we describe an index case of *M. romeroi* infection and clinical risk factors and management profile of 74 cases of *M. romeroi* cases from India ($n = 32$) and those reported in the literature ($n = 42$) till date.

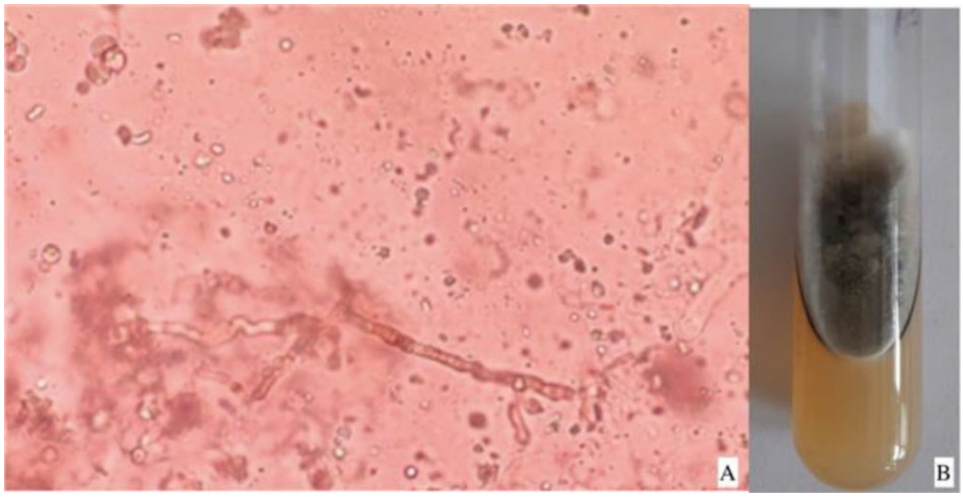
Methods: A detailed history was obtained from the index patient after informed consent. Aspirated fluid was subjected to microbiological investigations. Identification of isolate was done by molecular technique using Sanger's sequencing. All isolates stored at the National culture collection of pathogenic fungi as *M. romeroi* were retrieved and identity confirmed by ITS sequencing. Demographic and management details were retrieved. We also conducted a systematic literature review of *M. romeroi*, as per PRISMA guidelines (Fig. 1).

Results: Index case history: A 59-years-old diabetic female presented with lobulated swelling and sinuses on dorsum of the right hand for 10 months. A provisional diagnosis of mycetoma was made. Calcofluor-potassium hydroxide mount of aspiration fluid revealed dematiaceous septate hyphae and Sabouraud dextrose agar grew non-sporulating greyish black aerial mycelia after 3 days of incubation at 25°C and 37°C (Fig. 2). Molecular identification confirmed isolates as *M. romeroi* and patient was started on itraconazole with surgical excision. A total of 32 cases of *M. romeroi* infection from India were included. Mean age of patients was 47.2 years with male:female ratio of 1.3:1. Most common predisposing factors were post-renal transplant (46%) and farming (24%). All the patients presented with nodular or cystic swellings, with frequent involvement of lower limbs (56%). Most of the patients were managed using itraconazole (46%), followed by amphotericin B. All the patients except one responded well to treatment.

Literature review: A total of 42 cases have been reported till date, of which 29% are from India. The mean age was 52.3 years, with male:female ratio of 1.4:1. Most common predisposing factors were post-renal transplant (28.5%) and farming/gardening (16.67%). The mean duration to infection in post-transplant cases was 3.26 years and the mean duration to diagnosis in all the cases was 31 months. The noteworthy finding was the absence of predisposing factors in 21.45% cases. A total of 62% presented with skin nodules on the foot, 21.5% on lower limbs, and 11.8% with ocular affliction. Identification was done using molecular modalities in 80% cases. A total of 34% cases were managed using both surgical excision and antifungals, whereas 21% were merely with surgical excision. Another remarkable finding was spontaneous resolution in 5% cases. Antifungals used include itraconazole (25%), followed by voriconazole (21%). MICs of all antifungals showed wide variation (0.25-8 $\mu$g/ml for AMB). All the patients except two responded well to treatment and 3 had residual disease.

Conclusion: *Medicopsis romeroi* is an emerging cause of subcutaneous infection in India. The present study underlines the significance of molecular tests in the identification of this dematiaceous fungus due to its poor sporulation, hindering the phenotypic characterization.




**P203**

**Chronic pulmonary aspergillosis (CPA) in post tuberculosis sequele— aclinical experience from tertiary care**

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Introduction: Chronic pulmonary aspergillosis (CPA) is a spectrum of illnesses clinically presenting as a persistent cough, dyspnea, hemoptysis, fatigue, and weight loss and radiologically can range from single aspergilloma, *Aspergillus* nodule, or chronic cavitary pulmonary aspergillosis (CCPA) which can progress to chronic fibrosing pulmonary aspergillosis if left untreated.[1] CPA has high morbidity, burden in India estimated to be in a 5-year prevalence of 24/100 000.[2] The commonly used criteria for diagnosing CPA include cough or hemoptysis for 1 month, raised *Aspergillus*-specific IgG, absence of positive GeneXpert test for Mycobacterium tuberculosis and either paracavitary fibrosis or a fungal ball on imaging of the thorax or progressive cavitation (either new cavitation or deterioration of pre-existing cavitation) on serial chest radiographs. Pulmonary tuberculosis (PTB) is the important predisposing risk factor for CPA,[3] India being an endemic country, incidence of CPA may be underestimated or it may be misdiagnosed as smear-negative tuberculosis. Microbiologically, diagnosis by direct confirmation of *Aspergillus* spp infection (microscopy or culture from respiratory samples) may not be always positive, in such a scenario the immune response to *Aspergillus* spp. by measuring *Aspergillus* specific Immunoglobulin Ig G in clinically suspected cases may be used for diagnosis of CPA.

Method: This is a cross-sectional conducted in a tertiary care hospital, New Delhi, India. The patients with previous history of pulmonary tuberculosis who presented with symptoms of cough, hemoptysis, fever, shortness of breath, chest pain, and weight loss of >12-week duration were enrolled in the study. Relevant investigations including blood tests, chest imaging, sputum examination for bacterial infections, fungal (KOH mount), and tuberculosis (AFB smear, CBNAAT, mycobacterial cultures) were done. Microbiological evidence included a positive *Aspergillus*-specific IgG (cut off > 8 units/ml) or positive serum galactomannan index (GMI) (cut off >1 according to EORTC/MSG guidelines) or KOH mount on sputum showing branching