Postcrania1 and post-COVID-19 patients in a tertiary care hospital in India

Aai Kumar Din1, Rungmei S. K. Marak2, Chitra Bharayia, Ablal Arun3, Chinomyo Sahu, Shikha Tripathi1

1SGPGIMS, Lucknow, India
2SGPGIMS, Lucknow, India
3SGPGIMS, Lucknow, India

Postcrania2, September 22, 2022, 12:30 PM - 1:10 PM

Objectives: Postcrania is a new term coined for bone samples from post-COVID-19 patients. The purpose of this study was to analyze the risk factors associated with C. auris candidemia in COVID-19 and post-COVID-19 patients at tertiary care centers.

Material and Methods: We prospectively analyzed all positive blood samples which were received in the Microbiology department at SGPGI Lucknow for a period of 1 year (March 2020-March 2021). Blood samples were inoculated and cultured in BACTEC Bottles (BD) and incubated for 5 days at 37°C. The bottles which flagged positive, a Gram’s stain was performed and were sub-cultured on SDA for isolation of yeast colonies. Isolated yeasts were identified by phenotypic method and confirmed by MALDI-TOF MS. Demographic details of the patients were collected and recorded. The significant associated risk factors included the use of broad-spectrum antibiotics, intravenous catheterization, underlying respiratory illness, mechanical ventilation, use of steroids, and diabetes. A total of 46.6% (n = 21) mortality was seen with C. auris candidemia.

Conclusions: C. auris candidemia continues to be a threat in hospitalized patients. This study shows prevalence of C. auris candidemia in COVID-19 and post-COVID-19 patients with 47% mortality. C. auris candidemia is continuously reported from different departments in our institute, especially from intensive care units with high morbidity and mortality. An awareness, awareness and infection control practices by the healthcare personnel will help in early diagnosis and appropriate antifungal therapy and control the spread of C. auris.

P106

Diagnostic and Therapeutic Implications in an immunocompromised patient in a tertiary care center in North India

Akanksha Dubey1, Rungmei S.K. Marak2, Bishal Gupiya, Subash Yadav3, Ajai Kumar Din1, Shikha Tripathi1

1SGPGIMS, Lucknow, India
2SGPGIMS, Lucknow, India
3SGPGIMS, Lucknow, India

Poster session 2, September 22, 2022, 12:30 PM - 1:10 PM

Objectives: Histoplasmosis is a geographically restricted dimorphic fungal infection that causes disseminated infection in immunocompromised patients. Adrenal involvement is seen in disseminated disease but sometimes it may be the only site on which infection can be documented. Early diagnosis and treatment are needed to save the patient from fatal adrenal insufficiency. We present a case of bilateral adrenal histoplasmosis in immunocompetent patient.

Methods: A 63-year old male presented with his hospital with a history of insidious onset of febrile and unexplained weight loss for the last 6 months associated with generalized weakness. Patient had a history of cold to moderate intensity epigastric pain and discomfort which was intermittent in nature. Patient originally belongs to Agra, Uttar Pradesh, but he was residing in Kolkata for the last 6 months.

On the CECT abdomen it was found that there is an ill-defined hypoechoic enhancing lesion (72 × 52 × 51 mm) in eight right suprarenal region and bulki, necrotic 26 × 24 × 19 mm lesion in left suprarenal gland associated with multiple necrotic paramesentric and aorta calcific hypodensities. He also received empirical anti-tuberculosis therapy for 15 days in the form of ethambutol and levofloxacin.

Results: In all, 10% KOH wet mount of crushed smear of adrenal biopsy samples showed tissue debris and small narrow tubule building. Gomori stain shows few small building tubule. Culture was put in SDA at 25°C and 37°C and incubated. On day 12, growth of colony in 25°C appears as white cottony growth with yellow-orange reverse on 24-day colony appears as ball brown with yellowish brown reverse. ECPB was done from the colony showing presence of characteristic tubercle bacilli. A 14-am in diameter formed on short, brittle, undifferentiated conidia and production of pyrrolidines typical to pseudomycosporin (2-4-am in diameter), occurring on short branches and directly on the sides of the hyphae. Based on the direct microscopy and culture characteristics a diagnosis of Histoplasma capsulatum was given.

Conclusions: Symptomatic histoplasmosis is typically acquired through inhalation of microconidia or small hyphal elements in soil contaminated with bird or bat droppings leading to primary infection. This patient only manifested bilateral adrenal involvement with no systemic symptoms.
Paratracheal abscess by plant fungus Chondrostereum purpureum. First case report of human infection

Soma Dutta, Ujjwary Ray
Apollo Multispecialty Hospitals, Kolkata, Kolkata, India
Poster session 2, September 22, 2022, 12:30 PM - 1:30 PM

Objective: To identify the etiological agent of paratracheal abscess applying molecular techniques.

Methods: A 65-year-old male, plant Mycologist, who specially works with mushrooms presented to the OPD with hoarseness of voice and difficulty in swallowing for the last 3 months. CT scan demonstrated the presence of a right paratracheal abscess. CT-guided aspiration of the abscess was performed. The pus was sent for microbiological evaluation.

Results: The pus culture done on Sabouraud dextrose agar grew a creamy pasty colony with buff-colored pigmentation on reverse side (Fig. 1). On LCB mount preparation it was found to be a yeast-like structure with slender hyphae as shown in Fig. 2. The fungus could not be identified phenotypically, so it was sent to the ‘WHO Collaborating Centre for Reference and Research on Fungi of Medical importance’. It was identified as Chondrostereum purpureum by DNA sequencing. Patient was treated with oral voriconazole following drainage of the pus and the outcome was favorable. The patient denied having worked with such a plant pathogen but he confirmed that he was working with decaying material and other plant fungi for a long time as part of his research activities.

Conclusion: Silver leaf is a fungal disease of trees caused by the fungus plant pathogen Chondrostereum purpureum. The disease is progressive and often fatal for the plants. It is spread by airborne spores landing on freshly exposed sapwood. No human infection was reported till date. The case report demonstrates the crossover of plant pathogens into humans when working in close contact with plant fungi.