In the study, among 379 cases with high Aspergillus IgG and 477 controls (normal Aspergillus IgG), no inter-group difference was evident in the median age at presentation (49 [IQR: 40–58] vs 50 [IQR: 42–55]) or gender (proportion female: 45.5% vs 51.1%). Among the cases, 80.17% (41) had histocytary changes, compared with 16.47% (2.9%) of the controls (P < 0.001). Radiologically evident aspergillosis was present in 89% (448/50) of the cases with histocytary sarcoidosis. Evidence of fibrocavitary transformation was associated with higher overall mortality (60% vs 9.1% in the non-fibrocavitary subgroup, P < 0.001), and poorer median survival (Fig. 1). The median age at death was lower where there was fibrocavitary disease, and even lower with high Aspergillus IgG, and this was statistically significant. These cases also had poorer lung function compared to non-fibrocavitary disease (Fig. 2). Mean % predicted forced vital capacity (FVC) 71.3% vs 95.4% (P < 0.001), and in the controls: 69.9% vs 84.6% (P = 0.1). A similar trend was observed in % predicted TLco amongst the fibrocavitary cases: 45.6% vs 64.2% non-fibrocavitary (P < 0.001) and in the fibrocavitary controls: 39.7% vs 39.9% non-fibrocavitary (P < 0.001). Comparing only those with fibrocavitary, neither the percentage predicted FVC (71.3% vs 69.9% predicted, P = 0.8) nor the percentage predicted TLco (45.7% and 39.7% predicted, P = 0.16) differed between cases and controls.

Conclusions: Fibrocavitary sarcoidosis is associated with worse lung function and poorer median survival. In this group, elevated Aspergillus IgG highlights a greater incidence of aspergillosis.

Implications: Fibrosing transformation of pulmonary sarcoidosis highlights symptom burden, predispose to chronic Aspergillus infection, and is prognostically important particularly when there is supervening fibrocavitary lung destruction. Sensitivity stratification of such patients for the long-term outcomes may help identify particular individuals for earlier and more focused therapeutic intervention.

Sources:
1. Uzunhan et al., Chronic pulmonary aspergillosis complicating sarcoidosis, European Respiratory Journal 2017:49. 1 602 396; DOI: 10.1183/13993003.02396-2016

PS21

Disseminated Histoplasmosis in a Ghanaian HIV Patient: Role of Urine Histoplasma Antigen Testing in Rapid Diagnosis

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Background: The inhalation of the thermally dimorphic fungus Histoplasma capsulatum, may result in a wide spectrum of clinical manifestations, ranging from asymptomatic to acute or chronic pulmonary infection to disseminated infection. Systemic infections usually occur with high-level exposures or in immunocompromised patients mainly people with HIV. Despite the improved access to antiretroviral therapy, HIV-associated histoplasmosis remains a significant opportunistic infection in endemic regions including Africa. Unfortunately, histoplasmosis is rarely on the diagnostic radar of clinicians in several African countries such as Ghana due to insufficient awareness, inadequate epidemiological data, and poor fungal diagnostic capacity. Herein, we present a case of disseminated histoplasmosis in an HIV/AIDS patient in a tertiary hospital in Ghana.

Case Presentation: Clinical history: A 43-year-old female was referred to the Dermatology Unit of the Komfo Anokye Teaching Hospital (KATH) with symptoms of fever, cough, and anemia. She had a history of a skin rash six weeks prior, which initially began on her face and later spread to the trunk and extremities. She was a known HIV/AIDS patient on antiretroviral drug (EFV, TPC, TMC) with no other chronic conditions. She was atomic with a previous hemoglobin level of 7.6 g/dl. Initial diagnostic workup for cutaneous bacterial or viral infection detected no abnormality.

Examination: She was semi-conscious, and her nostrils were clogged with crust. The patient appeared pale, warm, and anemic. The face, trunk, and extremities (including palms) were covered with maculopapular eruptions, ulcers, multiple papular plaques, and nodules. Examination of the cervix revealed the presence of lymph nodes.

Investigations: A fungal diagnostic workup was done to rule out candidiasis or disseminated mycosis particularly cryptococcosis which was previously captured as a differential diagnosis. Serum cryptococcal antigen lateral flow assay (LEA) (CAG LEA, IMM) and Aspergillus galactomannan (GM) (sensitivity Aspergillus GM LEA, IMM) were both negative, but urine Histoplasma GM enzyme immunoassay (EIA) (clarius Histoplasma GM EIA, IMM) test was positive with a very high optical density indicating high fungal burden were also detected. A skin biopsy was also sent for histopathology and fungal culture. Histopathology analysis revealed the presence of yeast cells with round central nuclei and cytoplasmic clearing. Special staining with Periodic acid-Schiff (PAS) confirmed the presence of yeast cells suggestive of histoplasmosis. Fungal cultures were however negative after 8 weeks of incubation. A diagnosis of disseminated histoplasmosis was made.

Treatment and outcome: The patient was administered 200 mg bid of itraconazole. Few weeks after treatment, most of her skin lesions and ulcers were healed. The patient was discharged on itraconazole after the disappearance of some of her lesions.

Follow-up: One month later, the patient was advised but died due to complications of anemia.

Conclusion: Disseminated histoplasmosis in HIV may be a relatively common but largely unrecognized condition in Ghana. This case report highlights the need to improve awareness of histoplasmosis among clinicians in Ghana and enhance laboratory capacity to provide timely simple contemporary fungal tests for rapid diagnosis and prompt initiation of effective antifungal agents.
P252
A rare case of fungal liver abscess in an immunocompetent patient from India
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Objective: To report a case of hepatic abscess caused by Candida albicans, which is a low common cause of hepatic abscesses in a non-auto-immunohematologic population. Fungal infections represent <2% of the total isolates in pus from hepatic abscesses in patients without oncology-hematologic malignancies.

Methods: A 68-year-old male diabetic patient came with complaints of fever with chills and rigor and right upper abdominal pain and yellowish discoloration of eyes and urine. His LFT, PT-INR, SO2 were deranged. CBC report shows anemia and Leukocytosis. His CECT showed irregular multiloculated hypoechoic lesions in segment V, VI, VIII of liver. Direct and mycological and bacterial culture examination was performed.

Results: Direct examination of pus sample showed budding yeast cells with pseudohyphae and in SDA culture at 37°C it showed white puffy colonies. The species was identified by VITEK 2 system as C. albicans. The MBCs obtained of antifungals were: (μg/mL) fluconazole ≤0.06, voriconazole ≤0.12, caspofungin ≤0.12, micafungin ≤0.06, amphotericin B (1), flucytosine ≤5. The patient was started on caspofungin and improved symptomatically. The role of candida was ста and continued until the resolution of lesion on imaging during the follow-up.

Discussion: Colonization of the gastrointestinal tract is not thought to be the main origin of the dissemination of Candida endocarditis facilitates the spread of Candida from the gastrointestinal tract to the liver. The likely source of infection is GIT in this case.

Conclusion: We describe a case of fungal liver abscess in an immunocompetent patient caused by Candida albicans which was successfully treated with caspofungin.

P253
Features of Cryptococcosis in human immunodeficiency virus-negative patients, France 1985-2020
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Objective: HIV-negative individuals make up an increasing proportion of cases of cryptococcosis in France, but the features of disease and outcomes in this population have yet to be characterized. We describe the presentations and outcomes according to host factors underlying cryptococcosis in HIV-negative individuals in France.

Methods: The French National Reference Centre for Invasive Mycoses and Antifungals has implemented nationwide surveillance of cryptococcosis since 1985 with the denominators of the infecting serotype. We analyzed the characteristics of infection in HIV-negative patients diagnosed up to 2020. We also compared the demographic characteristics, presenting features, treatment regimes, and outcomes according to host factor and infecting serotype in patients diagnosed since 2005.

Results: The mean age of patients was 56.2 years, 60.5% were male, and 60.3% were born in Europe. Only 26 cases were due to Cryptococcus gattii, all others were caused by C. neoformans. Of the 1031 cases, 349 occurred in patients with malignancy (33.2%), including 268 patients with hematological malignancy, 63% of whom had lymphoid neoplasms, 201 occurred in solid-organ transplant (SOT) recipients (19.5%, including 147 kidney and 27 liver), and 298 occurred in patients with 'other' underlying factors (28.4%), including auto-immune disease (n = 86), end-stage liver or kidney disease (n = 475), sarcoidosis (n = 42), chronic pulmonary disease (n = 25), and diabetes mellitus (n = 16). A total of 19% of patients (n = 199) had no apparent underlying risk factors.

Among 632 patients diagnosed since 2005, there were significant differences according to the four major categories of risk factors (malignancy, SOT, others, and none) in terms of age, diagnostic methods, proportion of patients with positive cryptococcal antigen (CAG), antigen status, disease localization, treatment regimes, and 90-day mortality. In the diagnostic workup, a lumbar puncture and blood cultures were performed for 94.6% and 44.2% of patients, respectively, more frequently for immunocompromised patients than those with no underlying host factor (P < .05 and P < .001, respectively). SOT patients had more frequent central nervous system involvement (P < .001), and positive serum CAG detection with antigen titers >1:512 (P < .001). Patients with malignancy were significantly older (P = .0001) with more frequent meningitis (P < .007). Isolated lung infections (P < .002) and isolated skin lesions (P < .001) were more frequent in patients with ‘other’ conditions and in those with no underlying factor, respectively. Immunocompromised patients were more likely to receive combination antifungals including fluconazole (46.7%, 45.4%, and 42.2% for SOT, malignancies, and ‘other’ conditions, respectively) compared with patients with no underlying factor (33.3%, P < .01). Overall, all cause 90-day mortality was 27.0% (95% CI, 23.5-30.6%). Patients with malignancy had the highest 90-day mortality (37.5%, P < .001), compared with SOT recipients (23.7%), those with ‘other’ conditions (24.7%), and those without underlying conditions (13.9%). Compared with patients with cryptococcal infections, those infected with aspergillus had significantly younger (P = .004), more likely to be born in Africa (P < .001), to have isolated pulmonary disease (P < .001), and less likely to have isolated skin infections (P < .001).

Conclusion: HIV-negative patients with cryptococcosis are a heterogeneous group of patients encompassing different disease characteristics and outcomes. Management of cryptococcosis in HIV-negative patients should be tailored to underlying host factors, disease localization, and infecting serotype.

P254
Clinical and mycological spectrum of invasive trichosporonosis from a tertiary care institute in India
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Introduction: Trichosporonosis has emerged as an opportunistic pathogen causing invasive infections in immunocompromised patients. Trichosporon species can colonize many parts of our body and hence it is important to differentiate between colonization and infection for appropriate management of the patient.

Objective: To understand the clinical and epidemiological features of infections caused by Trichosporon spp.

Methods: All patients with clinically significant isolation of Trichosporon spp from various samples during a period of one year from January 2018-December 2019 were included in the study.

In the present retrospective study demographic data, risk factors, clinical features, mycological data, treatment, and the outcome of patients with invasive trichosporonosis were analyzed.

All the cases were processed by standard mycological procedures. Identification and susceptibility were done by VITEK 2. The isolates were sent to NCPCR, PGIMER Chandigarh for identification by MALDI-TOF. As no clinical breakpoints for Trichosporon spp. have been established by CLSI and ECAFT, antifungal susceptibility results were interpreted as suggested by Lane et al.

Results: There were 14 cases of trichosporonosis during the study period. The predominant age group was 60-70 years and the male:female ratio was 4:5.1.