P108 Epidemiology of human fusariosis in Greece: results from a 16-year nationwide multicenter survey
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Poster session 2, September 22, 2022, 12:30 PM - 1:00 PM

Objectives: Fusariosis in humans comprises a vast array of rare but serious and difficult-to-treat infections, ranging from keratitis and onychomycoses in immunocompetent hosts to life-threatening systemic infections in immunocompromised patients such as those with hematologic malignancies. We aimed to assess the disease burden and baseline epidemiology of fusariosis in Greece.

Methods: From 2004 through 2020 a prospective, autonumerate, multicenter survey took place. Demographic and clinical data of fusariosis cases were recorded. Fusarium strains isolated were identified to species level with molecular methods and/or MALDI-TOF MS, and tested for amphotericin B susceptibility in vitro with the Etest®/antibody.

Results: A total of 54 cases were registered. The most frequent infection was keratitis (n = 21, 39%), followed by bloodstream infections in patients with hematologic malignancy (n = 12, 22.2%). Other infections involved the respiratory tract (n = 5, 9.3%) and brain (n = 5, 9.3%) in immunocompromised patients, soft tissue after trauma (n = 1, 1.9%), or diabetic foot (n = 2, 3.7%), and onychomycosis (n = 1, 1.9%). The estimated incidence of invasive Fusarium infections was 2.9 cases/100,000 inhabitants (103275 cases/500’000 population). The most frequently isolated fungal species were S. albopictus complex (SC) (n = 13, 24%), F. oxysporum SC (13, 24%), F. fuligineum SC (n = 12, 22.2%), of which F. verticillatus and F. oxysporum, respectively, median values 2, 4, 8, mg/l, respectively. Fusarium and the echinocandins showed no activity (MIC > 32 mg/l). The most frequently used antifungals were amphotericin B and voriconazole, usually in combination. Treatment failure in keratitis was 38.8%. In patients with hematologic malignancy the study mortality rate was 71.4%, usually related to the underlying disease. Soft tissue infections complicating diabetic foot or trauma were treated surgically, with favorable outcomes.

Conclusions: Fusariosis infections in Greece are rare but with considerable morbidity and mortality in the immunocompromised. Early diagnosis and initiation of the appropriate treatment were critical for a successful outcome in keratitis cases, despite moderate high MICs of the antifungals used.

P163 Monitoring of candida colonisation in the respiratory tract of COVID-19 cases
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Poster session 2, September 22, 2022, 12:30 PM - 1:00 PM

Objectives: Opportunistic yeasts potentially cause infection or colonization in the lower respiratory tract. Candida albicans is a common agent of yeast infections but other species such as non-albicans Candida are important as resistant fungi to antifungal drugs. The predisposing factors for the overgrowth and invasion by Candida species include compromised terothermia, long-time hospitalization, antibiotic therapies, and primary infections by Mycobacterium tuberculosis and viral agents. The screening of Candida colonisation in the lower respiratory tract of the cases with a history of COVID-19 was performed in this study at a great training hospital in Northeast of Iran.

Methods: During the pandemic COVID-19, about 441 cases with severe COVID-19 hospitalized and used dexamethasone were investigated for Candida infections and colonization by the laboratory data of the medical Daytime Microbiology Center, UMS University, Iran. Our subjects were patients, bronchi-asthmatics and bronchial stenoses. Candida elements including pseudo-pseudo hy and Histo-spores macroscopically were investigated. Differential cultures and PCR-REFL were used for the identification of Candida yeasts as the level of species.

Results: Totally, 54 samples were cultured in the clinical specimens including Candida albicans 28 (51.8%), non-albicans Candida species 24 (44.4%) and a case of Penicillium jenose. All of the cases with Candida detection were COVID-19 positive. Moreover, two cases of rhino-cerebral mucosporiosis, two cases of TB, two cases of aspergillosis, and one case of cystic fibrosis were included.

Conclusions: As a conclusion, fungi especially Candida species be considered as the potential pathogens in cases with a history of severe COVID-19 and compromised therapy during stay at the hospital.

P194 Candida auris candidemia in COVID-19 and post-COVID-19 patients in a tertiary care hospital in India
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Poster session 2, September 22, 2022, 12:30 PM - 1:00 PM

Introduction: Candida auris accounts for 70%-80% of invasive bloodstream fungal infections. It is most commonly spread in long-term care facilities, caring for people with severe medical conditions. Patients hospitalised for COVID-19 are at risk for healthcare-associated infections like Candida auris is an emerging, multidrug-resistant, healthcare-associated fungal pathogen. Candida auris is currently one of the most common fungal pathogen causing nosocomial infection.

Due to its higher drug-resistance rate, Candida auris is more difficult to treat, requires longer hospitalisation periods, and results in higher morbidity and mortality than other Candida species.

Aim and Objectives: To analyse the risk factors associated with C. auris candidemia in COVID-19 and post-COVID-19 patients at tertiary care centre.

Material and Methods: We prospectively analysed all positive blood samples which were received in the Microbiology department at SGPGI, Lucknow for a period of 1 year (March 2020-February 2021). Blood samples were inoculated and cultured in BACTEC Bottle (BD) and incubated for 5 days at 37°C. The broth which flagged positive, Gram’s stain was performed and were sub-cultured on SDA for isolation of colonies. Isolated yeast 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: Candida auris candidemia continues to be a threat in hospitalised patients. This study shows prevalence of C. auris candidemia in COVID-19 and post-COVID-19 patients with 47% mortality. Candida auris 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.