P357 Update on risk factors for Candida krusei-Fungemia
Julia C. Jansen, Hedda Luisa Verhaashei, Peter Michael Rath
University Hospital Essen, Essen, Germany
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Institute für Mikrobiologie der Universität Münster, Essen, Robert Koch Haus, Vochtor Straße 17, 41147 Essen, Germany
Objectives: Infection with Candida species have been an increasing threat to hospital patients worldwide. During the last decade research has shown high mortality rates associated with candidemia and progressing drug resistance to NAC (non-albicans Candida species). This study aims to identify risk factors for C. krusei fungemia.

Patients and Methods: We retrospectively analyzed patient data with at least one C. krusei or C. albicans positive blood culture at Essen University Hospital between 2008-2020.

Results: From 1380 patients who tested positive for Canadale spp. between 2008-2020, 40 were positive for C. krusei and 786 for C. albicans.

Candida albicans presented as the leading species (57.1%), followed by C. glabrata (23.5%), C. parapsilosis (18%), C. tropicalis (5.1%), and C. krusei (2.9%). A total of 67.6% of patients were located at ICU. Incidence rates for Candida positive blood cultures increased from 1.9% to 10.2%. Candida krusei was most common in patients 53-60 years of age.

In both groups, overall survival was identical (52.2% C. krusei/54% C. albicans). For C. krusei correlation between outcome and antifungal treatment was highly significant (P < 0.001). A total of 20% more C. krusei infected human-ontology patients declined than in the C. albicans group (62.5% C. krusei/60% C. albicans). In all, 60% of C. krusei patients on ICU died in the C. krusei group-all patients with CVC died and all patients without survived.

Conclusions: Candida-positive blood cultures increased from 1% in 2008 to 10% in 2020.

Three major risk factors for C. krusei fungemia were found: CVC, human-ontology malignancies, and leukopenia.

P358 Candida auris survival on common medical supply surfaces under different environmental conditions
Hossein Khodadadi1, Mohammad Taghibadi2,1, Kamrak Zomorodian3, Reza Naei3, Salar Hosseini2
1Shiraz University of Medical Sciences, Shiraz, Iran
2Tabriz University of Medical Sciences, Tabriz, Iran
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Background: Candida auris is an emerging multidrug-resistant pathogenic yeast. The increasing frequency of C. auris outbreaks is prompting alarm worldwide. This yeast survives and spreads on contaminated medical supplies, resulting in hospital outbreaks. To learn more about the yeast’s spreading behaviors and transmission, we studied its persistence and survival on a variety of medical/surgical surfaces under diverse environmental conditions.
Methods: A total of 106 Candida species, including C. auris, C. albicans, C. parapsilosis, and C. glabrata, were inoculated onto different 2 × 2 cm sheets of cotton textile, polyester, paper, aluminum, glass, latex, and sterile Sabouraud dextrose agar. Inoculated sheets were incubated at various temperatures and subjected to light and darkness at 1, 2, 7, 14, 30, 45, 60, and 120-day intervals. After culture of the sheets on Sabouraud dextrose agar plates, the viable CFUs of yeasts were counted.

Results: All four species remained alive on all surfaces for at least 1 week under ambient and refrigerated temperatures, darkness, and light exposure. However, only latex and polyester surfaces maintained viable C. auris and C. parapsilosis for a maximum of 50 days at ambient temperatures and darkness. C. auris survived on dried Sabouraud dextrose agar sheets for > 4 months.

Conclusions: Candida auris and other pathogenic yeasts can survive on a variety of medical surfaces for extended periods of time. Latex and polyester devices are the best medical matrices for yeast persistence. If C. auris has access to organic and nutritional components, its survival could be greatly increased. To prevent C. auris transmission, appropriate disinfection and decontamination methods should be considered.

P361 Demystifying the NIH grant application process for international investigators
Doru Lovc
National Institutes of Health, Rockville, USA
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The National Institutes of Allergy and Infectious Diseases (NIAID) funds one of the largest medical-mycology research portfolios. The portfolio includes the major human fungal pathogens and covers basic fungal biology and the more translational areas of therapeutics, vaccines, and diagnostics. NIAID utilizes many granting mechanisms that are open to US and international researchers. These include investigator-initiated applications (R01, R21, and R35) and targeted announcement mechanisms for fungal research. Additionally, NIAID has a suite of preclinical services supporting therapeutic, diagnostic, and vaccine development. These services are free and available to investigators in academia, not-for-profit organizations, industry, or governments worldwide. The NIH granting mechanisms can be complicated. Tips and tricks for navigating the NIAID application process and preclinical services will be discussed.

P362 Seasonal trend of funga flora in veterinary care hospital in North India
Monika Mahajan, Haremant Kaul, Shivprakash M Radamurthy, Manisha Biswal, Pallab Roy
Postgraduate Institute of Medical Education and Research, Chandigarh, India
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Objectives: The study was conducted to assess the seasonal variation of fungal flora in hospital wards of a veterinary care hospital in North India.

Methods: A total of 200 water samples from the main reservoir, overhead and underground tanks, and taps of critical care units of the hospital were collected. The water samples were filtered by membrane filtration technique (0.22 microns) and cultured on dextrose rich-Bengal chloramphenicol agar with and without bromite. The plates were incubated for up to 14 days and fungal colonies were sub-cultured on Sabouraud Dextrose Agar and identified by phenotypic methods. Yeasts were identified by Matrix Assisted Laser Desorption Ionization Time of Flight (MALDI-TOF-MS).

Results: Mycological fungi were isolated from 100% of the water samples which included Alternaria, Candida, Nigrospora, Penicillium, Aspergillus, Paecilomyces, Scirrulina, and Mycidae Aurelia depicted in Figure 1. Different fungi were prevailing in different water storage units like: Advance evy center, A. fumigatus, A. flavus, Pennpxer, Aurelia spp. Rhizos- pomia auris, Trichospores spp., meliaoclados, Trichosporön spp., Advance traena Center—Cladosporium spp., Alternaria alternata, Penicillium spp. A. fumigatus, A. nida, A. flavus, Penicillium spp., Rhizopus spp., Rhizopus sp., R. stolonifer. Nose membrane transplant units—Al- ternaria alternata, A. fumigatus, A. terres, A. nida, Cladosporium spp., Penicillium spp., Nigrospora, A. fumigatus, Penicillium spp., Rhizopus spp., Rhizopus sp., Trichosporön albus, The seasonal variation of fungal isolation was depicted in Figure 2. Isola- tion rate of Aspergillus spp. was 35% in winters, 31% in post-monsoon, 25% in summers. Isolation rate of Penicillium species was 19% in post-monsoon, 16% in winter and 11% in summers. Maximum number of dermatomycetes were iso- lated in summer season with isolation rate of 38% in summers as compared with 21.5% in post-monsoon and 19% in winters. Four yeast isolates were Rhizosporopsis, Trichospores and, Trichosporön. Macular isolates isolated rarely included Rhizopina, Antro, Syn- cephaliratrum, and Mucor species. Fungal colony forming units in the water samples ranged from 91 to 45 colony forming unit/100ml of water.

Conclusion: The distribution of fungi in hospital water showed diversity and seasonal variability. Aspergillus species were isolated in maximum number in the winter season, Penicillium species in post-monsoon season and dermatomycetes in the winter season. Water as a source of fungal infection in critical care units, remains a relatively neglected area. Water supply could be a source of nosocomial fungal infections. Improving the quality of water by regular testing for fungal contamination and appropriate action to reduce its burden may reduce the hospital-acquired fungal infections.
Introduction: The study aims to characterize the mycoflora diversity in water samples from households in Nairobi, Kenya, during the months of September 2019, September 2020, and September 2021, to understand the role of mycoflora in the household environment and its impact on human health. The study employed quantitative and qualitative methods for mycoflora isolation and identification. Results showed a high diversity of fungal species, primarily Aspergillus and Penicillium, with species such as A. fumigatus, A. flavus, and A. niger identified. The study highlighted the importance of monitoring mycoflora in household environments for public health and disease prevention.