

The profession was connected closely with the men's population. Because of the frequency of illness (1-36/100.000) in the Mediterranean region the brucellosis should always be considered in the differential diagnosis of prolonged fever.

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Intravascular Device-related Infections in Neurosurgical Patients: Incidence and Predictors

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Introduction: The rate intravascular device-related infection varies widely depending most of the times in factors such as- the nature of the procedure, the patient's diagnosis, the patient status, the nursing comorbidities and other risk factors.

Objective: The objective of our study was to find the frequency of the colonization of intravascular catheters in neurosurgical patients.

Materials and Methods: During a five-year period (2002-2007) cultures of the cotton swabs and tips of 150 catheters were done by qualitative and semiquantitative methods.

Results: The mean colonization rate of the catheter tips was 15, 5%. The most frequent isolates were Gram-positive *Staphylococcus aureus*, *Staphylococcus epidermidis*, CNS etc and Gram-negative *Pseudomonas aeruginosa*, *Acinetobacter baumannii*, etc.

Conclusions: Intravascular catheters are frequently colonized. These types of infections are a major problem in neurosurgical patients'. The collaboration between neurosurgeons and laboratory medical staff is necessary for the best final result.

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The Susceptibility Analysis of Fungal Strains to Posaconazole *in vitro* Isolated from Clinical Specimens of Patients Hospitalized in Warsaw Medical University Central Clinical Hospital

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Introduction: The increasing resistance of fungal strains to antifungal agents is the main reason of research on the new antifungals.

Objectives: The susceptibility analysis of fungal strain isolated from patients hospitalized in Warsaw Medical University Central Clinical Hospital in 2007 to Posaconazole *in vitro*.

Materials and Methods: The clinical material was consisted of: blood samples 33 (43.4%), respiratory tracts specimens (23.7%), wound swabs 16 (21%), urine samples 4 (5.3%) and other 5 (6.6%). Strains were cultured on Sabouraud and CHROMagar media and identify by ID32C tests. The susceptibility analysis to Posaconazole was done according to E-tests.

Results: From the total number of 76 positive samples we cultured 87 of fungal strains. The following species were cultured *C. glabrata* 41 (47%), *C. albicans* 12 (14%), *C. krusi* 10 (11.5%), *C. parapsilosis* 6 (7%), *C. inconspicua* 4 (4.5%), *Saccharomyces cerevisiae* 4 (4.5%), other 10 (11.5%). We isolated 83 strains of the yeast like fungi (95% out of all isolates) and two species of molds (5% of all isolates): *Aspergillus fumigatus* 2 strains and *Fusarium incarnatum* 2. Our results were analyzed according to ARTEMIS Program. The final Posaconazole concentration was 0,008 to 32ug/ml. In our study the break point was 1 ug/ml and it was established as the agent

activity. Posaconazole was active for 83 isolates (95% casus) and it had the break point 1 ug/ml. The all resistant isolates were from the same species of *C. glabrata*. Posaconazole had not been active for 4 (5%) of isolates.

Conclusions: 10% of *C. glabrata* isolates were Posaconazole resistant. Posaconazole was active for 95% of isolated strains.

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Fungiscope – a Global Registry for Rare Fungal Infections

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Background: The incidence of invasive fungal infections increases worldwide, and rare fungi - neither belonging to the genera *Aspergillus*, *Candida*, *Pneumocystis* or *Cryptococcus*, nor being endemic, is increasingly identified as causative pathogens.

Methods: We are coordinating a global registry for cases of rare invasive fungi. Our objective is to broaden the knowledge on epidemiology, to determine the clinical pattern of disease, to describe and improve diagnostic procedures and therapeutic regimens, as well as to facilitate exchange of clinical isolates among the contributors. Entry of retrospective data occurs via a web-based registration system (MACRO) that focuses on demographic information, underlying diseases, risk factors, details on the infection, therapy and outcome. Inclusion criteria include cultural, histopathological, antigen, or DNA evidence of invasive fungal infection. Infection due to *Aspergillus spp.*, *Candida spp.*, *Cryptococcus neoformans*, *Pneumocystis jiroveci* or any endemic fungal infection, as well as mere colonization or other non-invasive infections are exclusion criteria. For evaluable patient documentations, authorship positions in resulting publications will be available and a compensation of €100 each will be paid. If the documentation workload is too high, centers are encouraged to ask the study office for personnel to be sent to the site. For isolates made available to the central laboratory an additional €50 will be paid. Plasma levels of all common antifungals can be determined from serum, liquor, and other tissue samples. This service is provided for free to all participating investigators.

Results: By now, 20 cases of rare invasive fungal infections have been identified, including *Mucoclares corymbifera*, *Cunninghamella bertholletiae*, *Penicillium marneffeii*, *Rhizomucor pusillus*, as well as *Acremonium spp.*, *Fusarium spp.*, *Coccidioides spp.*, and *Trichoderma spp.* Clinical results are partly pending. Most patients were in an immunocompromised state as a result of their underlying disease, chemotherapy or transplantation.

Discussion: The clinical relevance of invasive fungal infections by rare fungi is increasing steadily. In a short period of time, actual cases from Germany, Austria, Italy and the United Kingdom could be documented, showing the broad spectrum of pathogens. Further investigators and coordinators are cordially invited to contribute to the success of Fungiscope.

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A 61-year Old Immunocompromised Man with Disseminated Cryptococcosis

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Background: Cryptococcosis is rare and occurs mainly in immuno-