Invasive yeast infection - Complication in critically ill surgical patient

Jana Simonova
Pavoj Jozef Safarik University, Slovak Republic

Statement of the Problem: Invasive yeast infections are serious systemic infections associated with high mortality. Candidiasis is currently a problem of intensive medicine where its incidence is rising. In large faculty hospitals, candidiasis is the fourth most common infection in the blood stream. Data from Slovakia confirm an increase in the incidence of candidiasis, with the current incidence at 2.16/100,000 habitants per year. Compared to the last published national epidemiological study, the ratio of *C. albicans* and *non-C. albicans* candidiasis has also changed in favour of *non-C. albicans* strains of yeast. The greatest increase was recorded for *C. parapsilosis* and *C. glabrata*. Acute necrotizing pancreatitis is a life-threatening illness and proper timing of antimicrobial and antifungal treatment is one of the key therapeutic approaches used to treat it., because these patients are at high risk of developing an invasive yeast infection. According to ECIL-6 and IDSA recommendations, echinocandins and liposomal amphotericin B are the first-line drugs in the initial and first-line treatment of candidiasis in both neutropenic and non-neutropenic patients.

Methodology: An case report of a 31-years-old woman admitted to the 1st Department of Anaesthesiology and Intensive Care in septic shock after surgical intervention – because of CT verified acute necrotizing pancreatitis.

Findings: Using the MALDI Bio Typer system *C parapsilosis* from the blood was obtained. Despite the fact, that MIC of anidulafungin was 0,38ug/ml (Table 1), treatment with anidulafungin was ineffective, *C .parapsilosis* was repeatedly detected in the blood. Then lipid form of amphotericin B was included in the treatment. After its inclusion at a dose of 400 mg i.v. daily, together with targeted antibacterial therapy, a gradual decrease in inflammatory parameters was registered, blood culture has become sterile.

Conclusion & Significance: Lipid form of amphotericine B was effective in the treatment of invasive candidiasis without warsening of renal function.

Table MIC of antifungal agent

Antimycotic	MIC ug/ml
Anidulafungin	0.380
Micafungin	0.380
Caspofungin	1.500
Itraconazole	0.047
Fluconazole	2.000
Voriconazole	0.125
Amphotericin B	0,500

Biography

Jana Simonova deals with the issue of bacterial and fungal infections in intensive patients at the University Hospital L. Pasteur and at the Medical Faculty of the Pavol Jozef Safarik University

jana.simonova@unlp.sk

Notes: