

LEČENJE INVAZIVNIH GLJIVIČNIH INFEKCIJA- NAŠE ISKUSTVO

TREATMENT OF INVASIVE FUNGAL INFECTIONS - OUR EXPERIENCE

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SAŽETAK

Uvod: Invasivne gljivične infekcije (IGI) su značajan uzrok morbiditeta i mortaliteta kod pacijenata u jedinicama intenzivne lečenja (JIL) i nakon transplantacije solidnih organa i hematopoetskih matičnih ćelija (TMHC). Dijagnoza IGI pre smrti uspešno se postavlja kod samo 12% pacijenata. Broj pacijenata sa invazivnom aspergilozom (IA) je u porastu, posebno u JIL, i ona je vodeći uzrok smrti među IGI. Druga IGI koja je u porastu u našoj zemlji je invazivna mukormikoza i praćena je visokim mortalitetom. Cilj: Cilj rada je da se prikažu kliničke karakteristike, primenjena terapija i komorbiditeti kod ne-neutropeničnih pacijenata sa IA i IM. Metode: Ukupno 57 ne neutropeničnih pacijenata sa invazivnom aspergilozom, prosečne starosti 56 godina (26 žena, 31 muškarac) lečeno je u Klinici u periodu od 2008. do 2022. godine. Dijagnoza IA postavljena je na osnovu radioloških procedura, biološkog materijala, seroloških testova i histopatoloških nalaza. U istom periodu kod 2 muškarca i 1 žene, prosečne starosti 59 godina, histopatološki je dijagnostikovana invazivna mukormikoza u plućima, rinoorbitalnom području i mozgu. Rezultati: Plućna IA je pronađena kod 46 (80,7%), rino-orbitalna cerebralna IA kod 4 (7,0%), IA paranazalnih sinusa kod 5 (8,7%) i IA kože kod 2 (3,51%) pacijenata. Kod ovih pacijenata pronađene su različite komorbiditete (tumori, bronhiektazije, IgA imunodeficijencija, terapija kortikosteroidima, dijabetes melitus i druge). Lečenje je sprovedeno itrakonazolom, vorikonazolom ili ehinokandinima, a 31 (54,4%) pacijent je imao hirurške zahvate. Do početka 2023. godine, 18 (31,58%) pacijenata je umrlo. Od bolesnika sa IM, jedan je imao zahvaćena pluća i faktor rizika diseminovan karcinom prostate. Druga dva su imali rinoorbitalnu i rinoorbitocerebralnu formu bolesti kao posledicu neregulisanog dijabetesa. Primenjena je sistemska terapija liposomalnim amfotericinom B uz hirurški tretman kod 2 bolesnika, koja su i preživela. Zaključak: Dijagnoza i terapija IA kod ne-neutropeničnih bolesnika, moraju biti praćene testovima na malignitet i/ili imunodeficijenciju. Moguće je povećati stopu preživljavanja kod ovih pacijenata redovnim kliničkim, mikrobiološkim i morfološkim praćenjem. Kod IM neophodno je uz sistemske antigljivične terapije primeniti hirurški tretman zahvaćenog organa.

ABSTRACT

Introduction : Invasive fungal infections (IFIs) are a significant cause of morbidity and mortality in patients in intensive care units (ICUs) and after solid organ and hematopoietic stem-cell transplantation (HSCT). The diagnosis of IFIs before death is successfully established in only 12% of patients. The number of patients with invasive aspergillosis (IA) is increasing, especially in the ICU, and it is the leading cause of death among IFIs. Another IGI that is increasing in our country is invasive mucormycosis (IM) and is accompanied by high mortality. Objective: The aim of the paper is to present the clinical characteristics, therapy applied and comorbid conditions in non-neutropenic patients with IA and IM. Methods: Total of 57 non-neutropenic patients with IA, average age 56 years (26 women, 31 men) were treated in Clinic in the period from 2008-2022. The diagnosis of IA was established on the basis of radiology procedures, biological material, serology tests and histopathological findings. In the same period, 2 men and 1 woman, with a mean age of 59 years, IM was diagnosed histopathologically in the lungs, rhinoorbital area, and brain. Results: Pulmonary IA was found in 46 (80.7%), rhino-orbital cerebral IA in 4 (7.0%), IA of the paranasal sinuses in 5 (8.7%) and IA of the skin in 2 (3.51%) patients. In these patients various comorbidities were found (tumors, bronchiectasis, IgA immunodeficiency, corticosteroid therapy, diabetes mellitus and others). The treatment was carried out with itraconazole, voriconazole or echinocandins, and 31 (54.4%) patients had surgical procedures. By the beginning of 2023, 18 (31.58%) patients had died. Of the patients with IM, one had lung involvement and a risk factor of disseminated prostate cancer. The other two had the rhinoorbital and rhinoorbitocerebral form of the disease as a consequence of unregulated diabetes. Systemic therapy with liposomal amphotericin B was administered along with surgical treatment in 2 patients, who survived. Conclusion: Diagnosis and therapy of IA in non-neutropenic patients must be accompanied by malignancy and/or immunodeficiency tests. It is possible to increase the survival rates for these patients with regular clinical, microbiological and morphological monitoring. In the treatment of IM, it is necessary to apply surgical treatment of the affected organ along with systemic antifungal therapy.

Keywords: invasive aspergillosis, invasive mucormycosis, diagnosis, treatment, risk factors