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Poster Session V

Infections in immunocompromised patients

INCIDENCE AND CLINICAL OUTCOME OF MUCORMYCOSIS IN PAEDIATRIC CANCER PATIENTS

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Background and Objectives: Mucormycosis is a major problem of invasive fungal infection in immunocompromised patients. **The aim of the study:** To evaluate clinical characteristics and treatment outcome in pediatric oncology patients with mucormycosis in children cancer hospital 57357, Cairo, Egypt. **Methods:** A retrospective study during the period 2007-2013. Data analysis of the patients was done including demographic data, patient's diagnosis, possible risk factors, Diagnostic work up for mucormycosis, anti fungal treatment given and response . The diagnosis of mucormycosis was made according to EORTC/MSG criteria (2008). **Results:** During the study period , 28 patients developed proven mucormycosis. The mean age of patients was 8 years (range 2-17) , Male to female ratio 1:1. Diagnosis of mucormycosis was highest among patients with haematological malignancies. 12 cases acute myeloid leukemia (43%), 11 cases acute lymphoblastic leukemia (39%), and 1 case of NHL . Mixed infection with Aspergillosis was detected in(14 %) of patients . Main clinical forms of mucormycosis were: sinuses infection (57%), pulmonary infection (35%), cutaneous (18%) mixed rhinocerebral (11%) and gastrointestinal (6%). No disseminated infection was detected. Diagnosis was established by histopathological tissue examination in (86%) of patients while the rest was confirmed by microbiological blood and tissue cultures. . The isolated organisms were rhizomucor, mucor and rhizopus species. Liposomal amphotericin B was the mainstay of Antifungal treatment in all of the patients. Posaconazole was used in (21%) of cases as secondary prophylaxis. Surgical debridement was achievable in (46%)of cases. Complete response to anti fungal treatment was achieved in (85%) , while Mucormycosis related mortality was (15%). Morbidity outcome was (17%) (2 cases with disfigurement 1 case with pneumothorax ,1 case with perforated viscus and 1 case with perforated hard palate). **Conclusions:** Early diagnosis and suspicion of Mucormycosis infection, with rapid initiation of appropriate antifungal therapy and surgical intervention ,whenever feasible, are the back bone of decreasing mucormycosis related mortality and morbidity among pediatric cancer patients.