

Management of Pneumonia in Immunosuppressed States : Malignancies & HIV Infection

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Abstract

The lungs are a common site of infection in patients with cancer and HIV infection. The presentation and management of pneumonia is influenced by factors related to the disease as well as those related to the host. The type of malignancy (solid organ vs. haematological), its status (controlled vs. uncontrolled) and its treatment (administration of chemotherapy and/or radiotherapy) are some of the important malignancy related factors. Host factors include age of the patient, performance status, functional status of body organs and past history of infection. Considering all the above factors, a net risk assessment (NRA) is made in a given patient for determining the overall state of immunosuppression and hence choosing the best form and duration of treatment. In human immunodeficiency virus (HIV) infected individuals, CAP has a 6-25 fold higher incidence. HIV infected patients have higher rates of bacteremia, infection with opportunistic bacterial and non-bacterial pathogens, unusual radiographic abnormalities, complicated parapneumonic pleural effusions/empyema and recurrence. Optimization of anti retroviral therapy, administration of polyvalent pneumococcal vaccine and co-trimoxazole prophylaxis are other adjunctive measures that may be considered for reducing the morbidity and mortality associated with CAP in the setting of HIV infection.

Key Words: Pneumonia, malignancy, net risk assessment, human immunodeficiency virus, *Streptococcus pneumoniae*