

Pneumocystis pneumonia in patients with acquired immunodeficiency syndrome

Abstract

Pneumocystis pneumonia (PCP) is a serious infection caused by a fungus called *Pneumocystis jirovecii*. The fungus is very common and healthy immune system can easily control it. However infection may occur in people with weakened immune systems, such as those with HIV/AIDS, bone marrow and organ transplantation. *Pneumocystis carinii* pneumonia, the most common presenting manifestation of the acquired immunodeficiency syndrome (AIDS), is a major and recurring cause of morbidity and mortality for persons infected with the immunodeficiency virus (HIV). PCP is still the most common opportunistic infection in people with HIV/AIDS. Before HIV medication was available, PCP occurred in 70% to 80% of HIV-positive people. The number of cases has decreased a great deal. This is due to highly active antiretroviral therapy (HAART) and PCP-preventive drugs. About 9% of patients with HIV/AIDS who are hospitalized have PCP. PCP are reported with high frequency in HIV-infected children in Africa. The mortality rate is between 5% and 40%, even with treatment. Clinical manifestations of PCP include fever, non-productive cough, shortness of breath, weight loss and night sweats, and pneumothorax is a well-known complication of PCP. Diagnostic methods of choice include sputum induction and bronchoalveolar lavage (BAL), Gallium 67 scans, histological identification and by PCR. Drug of choice for treatment and prophylaxis is trimethoprim-sulfamethoxazole, and corticosteroid as an adjunctive therapy.