Abstracts of current literature on epidemiology, diagnosis, and treatment

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ADHERENCE TO ANTIRETROVIRAL MEDICATIONS

Adherence to antiretroviral therapy and reasons for nonadherence were evaluated in a group of HIV-infected patients receiving care at an urban hospital center using a confidential in-person interview and a voluntary, anonymous, self-administered questionnaire. In the interview, patients (n = 173) were asked about their adherence to antiretroviral medication regimens on the previous day and for the previous month; nonadherent patients were asked for their reasons. Of the 173 patients, 101 volunteered to participate in the questionnaire. In the confidential interview, 10 (6%) of the 173 patients reported nonadherence to at least one medication on the previous day compared with 27 (28%) of 96 respondents in the anonymous questionnaire. Nineteen (11%) patients reported nonadherence for the preceding month in the interview compared with 37 (39%) who reported nonadherence for the preceding month on the questionnaire. The most common reasons for nonadherence (accounting for > 75% of all responses) were forgetfulness, inaccessibility of medications, and perceived or actual toxicity. Researchers concluded that adherence to antiretroviral therapy is suboptimal in the population studied. Interventions to improve adherence should include efforts to make dosages easier to remember, guarantee continued supply of medications, and circumvent toxicities.

Weidle PJ, Ganea CE, Irwin KL, et al: Adherence to antiretroviral medications in an inner-city population. J Acquir Immune Defic Syndr Hum Retrovirol *1999;22:498–502*.

PNEUMONIA IN HIV-POSITIVE AND HIV-NEGATIVE IMMUNOCOMPROMISED PATIENTS

Data were extracted from medical charts of all patients treated for *Pneumocystis carinii* pneumonia (PCP) at a university hospital in Switzerland from 1983 to June 1998, and analyzed to compare clinical features of PCP in HIV-positive patients (n = 89) with HIV-negative immunocompromised patients (n = 32). Transplantation was the most common condition associated with immunosuppression. In terms of clinical presentation of PCP, HIV-positive patients were younger than the HIV-negative patients (mean age, 39 versus 48 years), and the time from onset of symptoms to diagnosis of PCP was longer for HIV-positive patients (23 versus 13 days). Pulmonary symptoms, fever, and weakness occurred with similar frequency in both patient groups. However, general symptoms (eg, sweating, weight loss, cachexia, thoracic pain) occurred more frequently in HIV-infected patients. Also, HIV-infected patients had higher hemoglobin, lower thrombocyte counts, and lower C-reactive protein values. Length of hospital stay was similar in both groups; however, a greater proportion of HIV-negative patients were admitted to the intensive care unit and required mechanical ventilation. None of the HIV-negative patients had received PCP prophylaxis. The study concluded that use of PCP prophylaxis, not only for HIV-infected patients but for transplant patients as well, would most likely decrease the incidence of PCP.

Nüesch R, Bellini C, Zimmerli W: Pneumocystis carinii *pneumonia in human immunodeficiency virus (HIV)–positive and HIV-negative immunocompromised patients.* Clin Infect Dis *1999;29:1519–1523.*

ADHERENCE AND RESPONSE TO PROTEASE INHIBITOR THERAPY

A study measured the response of HIV-positive veterans to antiretroviral therapy. Patients (n = 266) were offered combination therapy with a protease inhibitor (PI), indinavir, and at least two reverse transcriptase inhibitors (RTIs) if their CD4 count was < 200 cells/μL or if their HIV RNA viral load was > 10,000 copies/mL and they had attended two clinic appointments. The patient population was divided into four treatment groups: the adherent group consistently refilled prescriptions after therapy initiation; the nonadherent group failed to consistently refill the prescriptions; the RTI therapy (RTI-Tx) group was previously treated with nucleoside analogues and continued therapy without indinavir; and the no treatment (No-Tx) group filled no antiretroviral prescriptions during the study period of 1 year. Following therapy, the reduction in viral load of the adherent group was highly significant ($p < .0001$) compared with a marginally significant ($p < .05$) reduction in the nonadherent group. Changes in the viral loads of the RTI-Tx and No-Tx groups were not significantly different. In terms of lymphocyte count, the adherent group experienced a significant elevation of 403 ± 534 cells/μL whereas no significant changes in mean lymphocyte count occurred in the nonadherent or RTI-Tx groups; a significant decrease in lymphocytes (126 ± 422 cells/μL) occurred in the No-Tx group. Results of this study support the effectiveness of PI therapy in reducing viral burdens and limiting disease progression, the likelihood of increased benefit with early treatment, and the importance of adherence for treatment success.

Maher K, Klimas N, Fletcher MA, et al: Disease progression, adherence, and response to protease inhibitor therapy for HIV infection in an urban veterans affairs medical center. J Acquir Immune Defic Syndr Hum Retrovirol *1999;22:358–363.*

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