

DERMATOLOGIC MANIFESTATIONS IN HIV-INFECTED PATIENTS

A systematic survey examined the dermatologic manifestations of HIV-infected patients ($n = 95$) who presented for initial primary medical care at Boston City Hospital (Boston, MA). Patients received a physical and full-body skin examination; a medical history was also taken. Diagnosis of dermatologic lesions was based on clinical appearance. In the patient population, the median CD4 cell count was $0.325 \times 10^9/L$; 41 patients (44%) presented with a CD4 cell count of $0.2 \times 10^9/L$ or lower. Fifty-one (54%) of the 95 patients were seeking HIV-related primary care for the first time. Eighty-two patients (86%) had one or more notable skin manifestations; dermatophytosis, oral hairy leukoplakia, and folliculitis were the most common clinical skin findings. Skin ulceration, herpes zoster, psoriasis, and Kaposi's sarcoma were also found. Patients with oral candidiasis had lower CD4 cell counts than the rest of the patient population. Oral hairy leukoplakia was not associated with lower CD4 cell counts. Patients with folliculitis had significantly higher mean CD4 cell counts, $0.419 \times 10^9/L$ compared with $0.281 \times 10^9/L$ in the rest of the patient population. No statistical significance between the number or types of skin manifestations and the patient's status of HIV care (ie, initial primary care or reestablishment of primary care) was found. The study concluded that careful examination of the skin in HIV-infected patients may facilitate optimal delivery of medical care.

Samet JH, Muz P, Cabral P, et al: *Dermatologic manifestations in HIV-infected patients: a primary care perspective*. Mayo Clin Proc 1999;74:658-660.

ENTERIC INFECTIONS AND DIARRHEA

A prospective cohort study investigated enteric pathogens associated with diarrhea and compared the results of a standardized stool examination with the findings of an endoscopic evaluation. The incidence of acute and chronic diarrhea, risks associated with diarrhea, and the impact of diarrhea on patients' survival were also assessed. Consecutive patients who were examined at an HIV outpatient clinic during a 45-month period because of diarrhea were included in the study. Diarrhea was defined as two or more fluid stools or three or more soft stools per day. A diarrheal episode was evaluated if it lasted for at least 3 days; the episode was considered acute if it lasted less than 4 weeks and chronic if it lasted for 4 weeks or longer. A total of 560 diarrheal episodes were evaluated: 212 episodes of acute diarrhea and 348 episodes of chronic diarrhea. The incidence of diarrhea was 14.2 per 100 person-years. Diarrhea was found to be an independent negative predictor of survival. Other negative risks included low CD4 cell counts, opportunistic compli-

cations, older age, and intravenous drug use as the mode of HIV acquisition. In terms of enteric pathogens, the presence of cryptosporidial oocysts or microsporidial spores in stool specimens was strongly associated with diarrhea. Among 949 patients without diarrhea at study entry, cryptosporidia were detected in seven (0.7%) and microsporidia in four (0.4%). The study concluded that diarrhea and intestinal pathogens were particularly associated with a large burden of disease in patients with CD4 cell counts below $0.05 \times 10^9/L$.

Weber R, Ledergerber B, Zbinden R, et al: *Enteric infections and diarrhea in human immunodeficiency virus-infected persons*. Arch Intern Med 1999;159:1473-1480.

HIV INFECTION, ANEMIA, AND SURVIVAL

An article reviewed studies linking anemia and early death, evidence suggesting that recovery from anemia reduces this excess risk of death, and the use of recombinant human erythropoietin (r-HuEPO) as an alternative to transfusion for the treatment of anemia in HIV-infected persons. Studies have consistently found anemia to be associated with reduced survival, independent of other prognostic factors. In addition, recovery from anemia substantially reduces the excess risk of death. Recovery from anemia has been associated with an increased median length of survival and a decreased risk of death regardless of CD4 cell count. One study showed that in most CD4 cell count categories, mortality rates among those patients who recovered from anemia were similar to rates among patients who had never developed anemia. In conditions in which the natural erythropoietin response is inadequate, studies have demonstrated that supplementation with r-HuEPO can overcome anemias caused by a variety of underlying diagnoses, including anemia in HIV infection, anemia of chronic diseases, and drug- and neoplasm-induced anemias. In another study, patients with low endogenous erythropoietin levels at baseline who received r-HuEPO demonstrated a greater increase in hematocrit, decreased need for transfusions, and an improved quality of life compared with patients who received placebo. No toxicity related to r-HuEPO therapy and no increase in the risk of opportunistic infection were observed. Further studies are necessary to strengthen the link between r-HuEPO therapy and reduction of death risk among HIV-infected patients with anemia.

Moore RD: *Human immunodeficiency virus infection, anemia, and survival*. Clin Infect Dis 1999;29:44-49.

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