Evaluation of the quality of life associated with zidovudine treatment in asymptomatic human immunodeficiency virus infection. The AIDS Clinical Trials Group.

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Comment in:

Abstract

BACKGROUND: Zidovudine therapy is recommended for asymptomatic patients infected with the human immunodeficiency virus (HIV) who have fewer than 500 CD4+ cells per cubic millimeter. An analysis of the quality of life associated with therapy that integrated both the effects of adverse events and the benefits of delayed disease progression might influence this recommendation.

METHODS: We applied a survival analysis adjusted for the quality of life to data from a randomized trial conducted by the AIDS Clinical Trials Group. The trial compared treatment with 500 mg of zidovudine per day, 1500 mg of zidovudine per day, and placebo (Protocol 019) in 1338 asymptomatic HIV-infected patients.

RESULTS: The average time with neither a progression of disease nor an adverse event (symptom or laboratory finding) was 15.7, 15.6, and 14.8 months for patients receiving placebo, 500 mg of zidovudine, and 1500 mg of zidovudine, respectively. The incidence of severe symptoms was 13.8 percent in the placebo group, 15.2 percent in the 500-mg group, and 19.9 percent in the 1500-mg group (P = 0.038). After 18 months, the 500-mg group gained an average of 0.5 months without disease progression, as compared with the placebo group, but had severe adverse events an average of 0.6 months sooner. The 500-mg group had more quality-of-life--adjusted time than the placebo group only if the time lived after the progression of disease was considered by a patient to have less value than the time after the occurrence of a severe symptom.

CONCLUSIONS: For asymptomatic patients treated with 500 mg of zidovudine, a reduction in the quality of life due to severe side effects of therapy approximately equals the increase in the quality of life associated with a delay in the progression of HIV disease.