

SAFETY AND IMMUNOGENICITY OF HEPATITIS A VACCINE IN HIV-INFECTED PATIENTS

Investigators assessed the safety and immunogenicity of hepatitis A virus (HAV) vaccination in 133 HIV-positive, HAV-seronegative adults and examined whether vaccination affected the clinical course of HIV. Patients were stratified based on CD4+ cell counts and were randomized to either 2 doses of HAV vaccine or placebo at 0 and 6 months. Ninety-nine patients completed the study. In patients with baseline CD4+ cell counts of 200–499/mm³ or ≥ 500 /mm³, seroconversion occurred in 53% and 73% at month 7 and 69% and 67% at month 9, respectively. Seroconversion frequency in the < 200 cells/mm³ group was significantly lower at 7 months (11%; $P = .023$) and at 9 months (9%; $P = .004$). Subjects with higher baseline CD4+ cell counts had significantly higher geometric mean anti-HAV titers at both 7 and 9 months. No significant changes in signs, symptoms, or new infections were reported within 4 days of either vaccine dose, and severe vaccine-related adverse effects were uncommon. Occurrence of HIV-related events was similar between groups. HAV vaccination did not affect the course of HIV infection and was well tolerated, but the frequency of seroconversion and magnitude of resulting antibody titer varied significantly depending upon initial CD4+ cell count.

Kemper CA, Haubrich R, Frank I, et al. Safety and immunogenicity of hepatitis A vaccine in human immunodeficiency virus-infected patients: a double-blind, randomized, placebo-controlled trial. J Infect Dis 2003;187:1327–31.

TUBERCULIN SKIN TEST VERSUS T-CELL-BASED ASSAY

Researchers hypothesized that if the enzyme-linked immunospot (ELISPOT) assay is a more sensitive and specific test for latent tuberculosis infection than the tuberculin skin test (TST), then it would correspond better with degree of *Mycobacterium tuberculosis* exposure and would be independent of BCG vaccination and of environmental mycobacterial exposure status. A representative sample of 535 students attending a school where a tuberculosis outbreak resulted from 1 infectious index case in Leicester, UK, were tested with TST and ELISPOT and were stratified into 4 categories of increasing exposure to the index case. ELISPOT correlated significantly better with increasing exposure across the 4 groups than did TST ($P = .03$). Both tests positively correlated with home tuberculosis contact (36 students). Only TST results were significantly associated with birth in a country with higher exposure to environmental mycobacteria. ELISPOT results showed no significant correlation with BCG vaccination status ($P = .44$). Of the 128 students presumed

to have latent tuberculosis infection on the basis of a positive TST result, 97 (76%) tested positive with ELISPOT. TST and ELISPOT agreement was high, with concordant results in 475 (89%) of students. However, an isolated positive ELISPOT result (ie, one associated with a negative TST result) was a strong indicator of *M. tuberculosis* exposure, whereas an isolated positive TST result was not, suggesting that ELISPOT results are more likely to be true positives than are TST results.

Ewer K, Deeks J, Alvarez L, et al. Comparison of T-cell-assay with tuberculin skin test for diagnosis of Mycobacterium tuberculosis infection in a school tuberculosis outbreak. Lancet 2003;361:1168–73.

RISK PREDICTORS OF CORONARY HEART DISEASE IN HIV-INFECTED PATIENTS WITH LIPODYSTROPHY

Ten-year coronary heart disease (CHD) risk estimates for 91 HIV-infected patients (65 men and 26 women) who had lipodystrophy were compared with CHD estimates for 271 age-, sex-, and body mass index–matched subjects from the Framingham Offspring Study. Thirty HIV-infected patients without lipodystrophy also were compared with 90 matched Framingham subjects. In a substudy, the waist-to-hip ratio (WHR) of all HIV-infected patients was compared to matched Framingham subjects. CHD risk estimates were significantly higher among HIV-infected patients with lipodystrophy compared to control subjects (7.4% \pm 0.6% versus 5.3% \pm 0.3% for all subjects [$P = .002$]; 9.0% \pm 0.7% versus 6.5% \pm 0.3% for men [$P = .001$]; 3.4% \pm 0.8% versus 2.2% \pm 0.3% for women [$P = .19$]). However, when control subjects were further selected according to WHR, the CHD risk estimate was no longer significantly elevated. Subanalysis of the lipodystrophy group revealed that subjects who had primary lipoatrophy demonstrated the highest 10-year CHD estimates. HIV patients without lipodystrophy did not have an increased CHD risk compared with control subjects, and matching by WHR did not change these results. Controlling for CHD (particularly in men) is recommended because nearly 30% of this population had a 10% or greater chance of developing CHD in 10 years.

Hadigan C, Meigs JB, Wilson PWF, et al. Prediction of coronary heart disease risk in HIV-infected patients with fat redistribution. Clin Infect Dis 2003;36:909–16.

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