Epoetin Boosts Quality of Life in HIV Patients

BY MITCHEL L. ZOLER
Philadelphia Bureau

WASHINGTON — Treatment with 1 dose of epoetin alfa every other week maintained a normal hemoglobin level and was associated with a significant boost in quality of life among 292 HIV-infected patients who were anemic when they began treatment.

"Many physicians don't treat HIV-infected patients who have anemia until their hemoglobin level falls to 8 g/dL, and many physicians also think that anemia doesn't occur in HIV-infected patients who are treated with highly active antiretroviral therapy," Patricia Salvato, M.D., said in a poster presentation at the annual Interscience Conference on Antimicrobial Agents and Chemotherapy. Physicians also avoid using epoetin alfa because it is expensive, and they believe that their patients would prefer not to get regular subcutaneous injections.

But these results showed that maintaining a normal hemoglobin level in HIV-infected patients can have a significant impact on quality of life that "may translate into clinically meaningful improvements in functional capacity," said Dr. Salvato, an infectious diseases physician in Houston.

These results showed that maintaining a normal hemoglobin level in HIV-infected patients may translate into improvements in functional capacity.

The study was funded by Ortho Biotech, which markets a formulation of epoetin alfa (Procrit).

Of 292 patients who were infected with HIV and had been on a stable antiretroviral treatment regimen for at least 4 weeks, all patients had a hemoglobin level of 12 g/dL or less; the median level for patients in the study was 11.1 g/dL.

Each patient received a subcutaneous dose of 40,000 units of epoetin alfa once a week until their hemoglobin level reached the target level of at least 13 g/dL; 237 patients (81%) reached the target level. Once at this level, patients went on a maintenance regimen of 40,000 units every other week, and they were followed on this regimen for 24 weeks. Patients whose hemoglobin level dropped to 11 g/dL or less were switched back to weekly dosages until their hemoglobin again rose to at least 13 g/dL. If a patient's hemoglobin level rose to 14 g/dL or higher, treatment was stopped until the level fell below 14 g/dL.

Quality of life for each patient was measured at baseline and then at 2-week intervals using a linear analog scale. Patients also were assessed with the Medical Outcomes Study HIV Health Survey scores for physical and mental health. Complete outcome scores were collected for 208 patients.

Patients had an average hemoglobin increase of 2.6 g/dL. Compared with baseline measurements, overall quality of life scores increased by an average of 15 mm (29%) by the time patients entered the maintenance phase, and by 19 mm (37%) after 24 weeks of maintenance treatment, Dr. Salvato reported at the conference, sponsored by the American Society for Microbiology. The quality of life improvements involved both energy and activity level.

The Medical Outcomes Study HIV Health Survey scores rose by an average of 6 points (14%) for the mental-health assessment by the time patients entered the maintenance phase, and this increase was maintained through the end of the 24-week follow-up. The physical health summary score rose by an average of 4 points (10%) when patients entered maintenance, and this increase also was maintained for 24 weeks.

Adverse events that were judged related to epoetin alfa occurred in 6% of treated patients, and none were serious. ■

Study Tests Use of Nonoccupational Postexposure Prophylaxis for HIV

BY ROBERT FINN
San Francisco Bureau

SAN FRANCISCO — A feasibility study among 891 individuals in San Francisco has identified issues that must be considered in offering nonoccupational postexposure prophylaxis, Michelle Rowland, M.D., said at a meeting on HIV management sponsored by the University of California, San Francisco.

Postexposure prophylaxis (PEP) has been shown to reduce the risk of HIV transmission by 81% in health care workers, but no information is available about the efficacy of prophylaxis after nonoccupational HIV exposure. A placebo-controlled study would be difficult to conduct because of ethical considerations, said Dr. Rowland of UCSF.

'PEP is not just medication. It's also adherence counseling, risk-reduction counseling, and referral, because the whole point of this is to help people stay HIV negative.'

At press time, the Centers for Disease Control and Prevention was preparing to issue national guidelines on the use of PEP to reduce the risk of HIV infection.

Of the 891 people in the study, all of whom were given PEP within 72 hours after exposure, 700 could be evaluated 12 weeks after PEP was initiated, and 7 (1%) seroconverted. All seven reported having unprotected receptive anal intercourse, four of them with a partner known to be infected with HIV. In contrast, only 50% of the nonseroconverters presented after receptive anal intercourse, a significantly lower percentage.

Individuals in the study reported one or more episodes of unprotected receptive or insertive anal or vaginal intercourse, receptive oral sex with ejaculation, or shared injection drug equipment. The potential sources of infection had to be known HIV-infected persons, men who has sex with men of unknown HIV status, a past or present injection drug user, a commercial sex worker, or an anonymous contact.

Adherence was fairly good. During week 1, 84% of patients reported no missed doses during the prior 4 days; that figure was 78% during both week 2 and week 4.

Previous studies have yielded estimates that the risk of infection from a single encounter is 0.8% to 5.0% for receptive anal intercourse and substantially lower for other types of exposure. The investigators therefore queried the seroconverters about additional risk behavior. Six of the seven reported other high-risk encounters in the 6 months before PEP, and three of the seven reported ongoing high-risk behavior even after starting PEP, suggesting that the failure of PEP in these patients may not have been entirely due to medication failure.

"PEP is not just medication," Dr. Rowland said. "It's also adherence counseling, risk-reduction counseling, and referral, because the whole point of this is to help people stay HIV negative. The per-contact transmission rate is virtually almost nothing. So people are not at risk for HIV just at that particular moment; they're particularly at risk for the rest of their lives."

There's a tendency to want to divide people presenting for PEP into three groups: those who should be advised to use PEP, those who should be offered PEP, and those who should not be offered PEP. In practice, she said, "It's hard for me to *recommend* PEP to anybody, and it's easy for me to agree to *offer* it to a fair number of people. The bottom line for me is that it's my job to help that individual person make an individual risk-benefit assessment."

Animal studies and experience with health care workers suggest it's important to begin antiretroviral therapy at most 72 hours after exposure. But many people who are exposed misinterpret that as meaning that they can wait 72 hours before deciding on PEP. "The message we're trying to get across is, 'You want to start this as soon as possible, and we're not going to initiate it after 72 hours,' " she said.

Investigators generally agree that the antiretroviral component of PEP should be continued for 28 days, but there's a great deal of controversy about what antiretrovirals to use and whether two nucleosides are enough or whether a three-drug regimen is better. The practice at UCSF is to use two drugs, but Dr. Rowland would consider using three in certain circumstances. For example, a three-drug regimen might be indicated if a patient reports multiple exposures over 5 days, including several within the required 72-hour period.

She recommended that clinicians be aggressive in getting information about the source of the exposure, to determine whether that person is truly HIV-positive, and to conduct viral resistance testing. This is critical in choosing which antiretrovirals to use. ■

What to Do Before Starting HAART

SAN FRANCISCO — The debate continues to rage on when to initiate highly active antiretroviral therapy in HIV disease.

At a meeting on HIV management sponsored by the University of California, San Francisco, Paul A. Volberding, M.D., joked that the answer is obvious: before it's too late, but after it's too early.

But whatever the clinician decides, there is a series of steps that must be taken before antiretroviral therapy begins, said Dr. Volberding of the Veterans Affairs Medical Center in San Francisco:

- ► Confirm the HIV results. "We [recently] had in the Bay Area yet another case of a person who had been followed for HIV infection without anyone noticing that his HIV test was negative," he said.
- ► Take a history and conduct a thorough physical exam.
- ► Get a CBC and a chemistry profile.
- ► Order a CD4 cell count and a plasma HIV RNA measurement.
- ► Consider resistance testing. "I think we're at the point where baseline resistance testing should be recommended in all cases," Dr. Volberding said, but this is not yet part of official practice guidelines.
- ► Assess the patient's readiness for treatment and the likelihood that he or she will be adherent.
- ► Refer the patient for an ophthalmology exam if the CD4 count is below 100 cells/μL.
- ► Make sure female patients get a gynecologic exam with a Pap smear.
- ► Test for syphilis with a rapid plasma reagin test or a Venereal Disease Research Laboratory test.
- ► Test for tuberculin with a purified protein derivative test.
- ► Order a chest x-ray.
- ► Order hepatitis A, B, and C serology.
- ► Order a toxoplasma IgG test.
- ► Order a fasting glucose and a lipid panel.

—Robert Finn