

# Use of Complementary Therapies Common in HIV

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BY TIMOTHY F. KIRN  
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SAN FRANCISCO — The use of complementary and alternative medicines is common, but often overlooked, among patients infected with HIV. Dr. Jason Tokumoto said at a meeting on HIV management sponsored by the University of California, San Francisco.

Studies have indicated that 70% of HIV-infected patients use some form of complementary or alternative medicine (CAM). A survey of 1,675 HIV-infected patients found that the most commonly used CAM products included multivitamins (54% of patients), garlic (53%), massage (49%), and acupuncture (45%) (AIDS Care 2001;13:197-208).

Physicians are often unaware of the use of CAM products. "This can be a problem because in some cases these [complementary or alternative medicines] can actually be harmful," said Dr. Tokumoto of the department of family and community medicine at UCSF.

In one study, 25% of the surveyed HIV-positive patients were using a CAM product that was potentially harmful, and one-

third of these patients did not tell their clinicians about their CAM use (J. Acquir. Immune Defic. Syndr. 2003;33:157-65).

For example, St. John's wort, which may have some efficacy for depression, interacts with the cytochrome P-450 enzyme system and can thereby decrease indinavir trough blood levels by 81% and nevirapine levels by 21%.

St. John's wort should not be used with any protease inhibitor or nonnucleoside reverse transcriptase inhibitor, Dr. Tokumoto said.

Garlic, which many HIV patients use to improve lipid levels, should not be used with saquinavir. Garlic can reduce saquinavir blood levels by 51%, probably because it, too, is an inducer of the cytochrome P-450 system, he said.

The profile of HIV-infected patients who often use CAM products is similar to that of CAM users in the general patient population, Dr. Tokumoto said.

These patients tend to be women, be involved in medical decisions, have a negative attitude toward antiretroviral therapy, have been infected for a relatively long time, and have high income and education levels.

"If you have a patient who fits this profile, you want to be asking about CAM," he said.

Dr. Tokumoto offered these comments about what is known about specific CAM uses and HIV:

► **Herbals.** Nothing known in herbal medicine or Chinese medicine has been shown to be effective in suppressing HIV or stimulating the immune system. A Cochrane review recently looked at nine randomized, placebo-controlled trials of eight herbal products in HIV patients. "What the authors concluded was that none of these herbs really worked," Dr. Tokumoto said.

There has been some debate over whether HIV patients should take echinacea, which is sometimes used to treat colds, because of concerns that long-term use could lead to immunosuppression.

► **Micronutrients or vitamins.** Studies suggest that most HIV-infected patients are not micronutrient deficient and not clinically vitamin deficient, although it has been reported that HIV-infected persons have low serum levels of vitamins A, E, B<sub>6</sub>, and B<sub>12</sub>.

But in one trial, researchers gave micronutrients or placebo to 40 HIV patients for 12 weeks, and found an increase in the mean number of CD4 cells in the micronutrient group and a decrease in the placebo group. There was no difference in viral load (J. Acquir. Immune Defic. Syndr. 2006;42:523-8).

"However, although these results look promising, this is a small study," Dr. Tokumoto commented.

Some vitamins and antioxidants such as riboflavin, thiamine, and vitamins C, E, and K may theoretically prevent lactic acidemia caused by mitochondrial toxicity from nucleoside analogues. But there have been no trials in HIV patients, and these substances have had only limited value in patients with congenital mitochondrial disease.

"There are scattered anecdotal reports of patients responding to some of these vitamins," Dr. Tokumoto said.

► **L-carnitine.** In an uncontrolled study of 21 HIV patients, administration of L-carnitine 1,500 mg twice daily for 6 months, appeared to reduce nucleoside analogue-related neuropathy.

Overall, 76% of the patients showed im-

provement (HIV Clin. Trials 2005;6:344-50).

► **Lipodystrophy.** No CAM is currently being investigated for lipodystrophy; however, in one 74-patient survey, 25% used vitamins, 23% used resistance exercise, 21% used specific diets, and some used meditation in an effort to reduce lipodystrophy. Only 37% told their physician they were using these modalities (J. Altern. Complement. Med. 2006;12:475-82).

► **Hyperlipidemia.** The supporting studies of garlic to lower lipid levels are compromised by their short duration and the different preparations used, according to Dr. Tokumoto.

Cholestin, which is produced by red yeast fermented on rice, contains natural statins. This substance has been shown to reduce LDL cholesterol and triglyceride levels by 20%-30%. But there are no studies in HIV patients, and no studies of the interactions with protease inhibitors.

Fish oil has also been shown to decrease triglyceride levels.

► **Milk thistle.** Milk thistle could be attractive to HIV patients who are on antiretrovirals and/or coinfecting with hepatitis B or C because its active ingredient, silymarin, may be hepatorestorative.

At the dosages used, it probably does not interfere with the efficacy of protease inhibitors.

Although the data are inconclusive, "I do know some hepatologists who are prescribing milk thistle for their hepatitis C patients," he said.

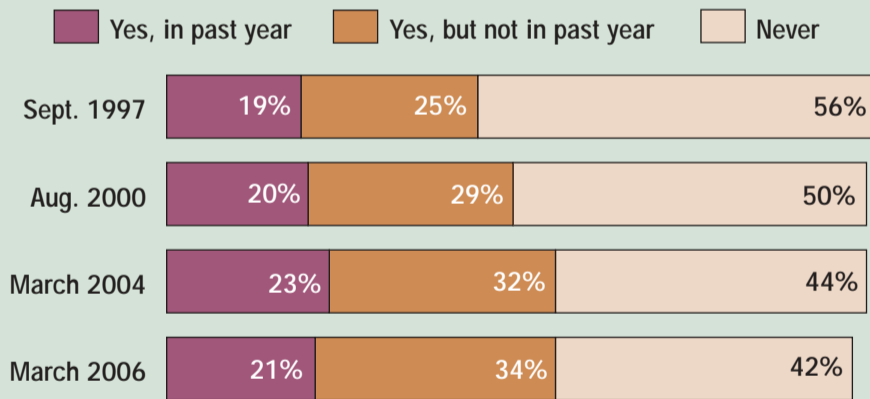
► **Acupuncture.** Acupuncture is widely used by HIV patients for pain and neuropathy. One study of 215 patients reported that neither acupuncture nor amitriptyline was more effective than placebo (JAMA 1998;280:1590-5). But most acupuncturists say that the procedure is difficult to study rigorously because treatment is highly individualized, Dr. Tokumoto said.

► **Marijuana.** Anywhere from 14% to 43% of HIV patients may use marijuana medicinally or recreationally. Because of the political climate, marijuana use has not been studied in clinical trials.

But smoking marijuana over a short period of time has been shown not to affect CD4 cell counts, viral load, or antiretroviral levels, he said. ■

## DATA WATCH

### About Half of Nonelderly Americans Have Been Tested for HIV in Recent Years



Notes: Population is under 65 years of age. Numbers may not add to 100% due to rounding.  
Source: Data based on surveys by the Kaiser Family Foundation

## Disease Containment Is Paramount in Pandemic Outbreak

BY MARY ELLEN SCHNEIDER  
New York Bureau

BOSTON — In the event of an avian influenza pandemic, old-fashioned containment strategies will need to be the first line of defense to limit exposure, David Heyman, a terrorism expert, said at the annual meeting of the American Public Health Association.

The best countermeasure in the case of a pandemic is vaccine, but vaccine is unlikely to be available for at least 4-6 months after the onset of the outbreak.

Antiviral treatment could help improve outcomes but has been shown to have only a modest effect on transmission and may also be in short supply in the event of an influenza pandemic, said Mr. Heyman, director

and senior fellow for the Center for Strategic and International Studies' Homeland Security Program in Washington.

The U.S. strategy for responding to an avian influenza pandemic has so far centered on vaccine production and development, stockpiling of antiviral medications, and state plans for distribution. Although it is important to focus on vaccines and antivirals, those treatments are unlikely to be ready in time for the first wave of a pandemic, he said.

"There are a number of tools in our toolbox. The strategy needs to be figured out. We don't have a specific strategy right now," Mr. Hewitt said.

One factor that will be key to bringing a pandemic under control would be to slow transmission until vaccines

and other medicines become available. Some of the possible elements of a disease-containment strategy that are being considered by the U.S. government include closing schools, encouraging social distancing, voluntary household quarantines, and masking and good infection control.

It is important that the least restrictive measures necessary are used, and the public must be engaged as a partner in the response, he said. "They need to be educated, starting today."

However, implementing such containment strategies would be a challenge because many people are resistant to strategies that involve quarantine because of "the historical use of quarantines that led to deprivation of rights and privacy," he said. ■