

Report on the 3rd International AIDS Society Conference: Asian Medicine Highlights

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The International AIDS Society (IAS) held its third conference on HIV pathogenesis and treatment in Rio de Janeiro, Brazil, from July 24-27. Six thousand delegates attended from over 130 countries. The purpose of the conference was to present and discuss clinical and scientific advances in all aspects of HIV/AIDS, including prevention, diagnostics and treatment.

The conference was organized by a coalition consisting of the IAS, the Federal University of Rio de Janeiro, and the Brazilian Society of Infectious Diseases. IAS President and co-chair, Dr. Helene Gayle, is the Director of HIV, TB, and Reproductive Health Programmes of the Bill and Melinda Gates Foundation.

Over 1,300 abstracts were presented, focusing on issues that included new medications, vaccine development, and current status of microbicide research. Of particular interest were presentations dealing with the manufacture and use of generic medications, an area in which Brazil has recently acquired resources and expertise. Although a minority of presenters discussed topics related to complementary and alternative health practices, there was interest and enthusiasm on the part of delegates to hear about these areas as well. Topics of interest in this realm included acupuncture and traditional Chinese medicine (TCM), nutritional factors, and exercise.

Two presentations will be of particular interest to *Acupuncture Today*'s readers: research on the use of reishi mushrooms to affect immunomodulation and the effects of acupuncture to moderate digestive side-effects of HIV medications.

Jessica Leonard, a naturopathic physician and licensed acupuncturist, has been studying the effects of reishi mushrooms (*ling zhi*) on immune function. Dr. Leonard is a postdoctoral research fellow sponsored by the National Institutes of Health and the National Center for Complementary and Alternative Medicine; she works at Bastyr University in Seattle. In addition to volunteering at the Kang Wen Clinic in Seattle since 1999, Dr. Leonard supervises acupuncture treatment at the Immune Wellness Clinic at the Bastyr Center for Natural Health.

In an interview with *Acupuncture Today*, Dr. Leonard described her work:

"My study looked at the effects of *ling zhi* on two measures of immune function - TNF production and NF kappa B activation. TNF is a pro-inflammatory cytokine that is overproduced in chronic inflammatory conditions. With HIV infection, higher levels of TNF drive viral replication and may be related to the wasting syndrome seen in some HIV-positive patients. Elevated levels of activated NF kappa B are also found in chronic inflammatory conditions and also contribute to intensified HIV viral replication. The goal of our research was to determine if *ling zhi* was able to reduce the amount of these pro-inflammatory mediators."

The Bastyr study showed that *in vitro*, *ling zhi* decreases the amount of TNF produced as well as reducing the amount of activated NF kappa B. Among health volunteers who took reishi for 2

weeks, the amount of TNF produced by their immune cells was significantly reduced; the reduction in TNF was first described after 1 week of reishi use and continued at a significantly reduced level for an additional week. Following a 1-week washout period, TNF levels returned to their baseline values.

Dr. Leonard described the next steps of their research: "We have an ongoing pilot trial at Bastyr that is evaluating the effects of reishi in HIV-positive participants who are not currently using antiretroviral therapy; we are evaluating reishi's safety and efficacy in this population of immune-compromised individuals."

How does Leonard envision the role of Asian medicine and CAM in treating people with HIV/AIDS? "There are two main areas where I think TCM and CAM can be beneficial. The first is in treating side-effects of antiretroviral medications. Acupuncture and nutritional supplementation can be effective in reducing many of the side-effects of the medications, including, but not limited to, nausea and other digestive issues, fatigue, myalgia, and neuropathy. By decreasing the side-effects of the medications, we may be influencing compliance, or a patient's ability to tolerate the medications over time."

"The other area is treating patients before they initiate antiretroviral therapy. Through the use of diet, lifestyle modification, and certain CAM therapies such as nutritional supplementation and Chinese herbal medicine, it may be possible to extend the amount of time that individuals living with HIV can stay healthy and postpone antiretroviral therapy."

The conference's other presentation on Asian medicine focused on the role of acupuncture in managing digestive side-effects of medications. A number of studies have shown that acupuncture can be used successfully to control nausea and vomiting associated with cancer chemotherapy and following surgical anesthesia. Researchers at Pathways to Wellness in Boston conducted a crossover clinical trial that evaluated the use of acupuncture to control digestive side-effects related to the use of highly active antiretroviral therapy (HAART). This pilot study recruited over 50 participants who received acupuncture treatment for 6 weeks. Two types of treatment were compared; a set of four points known for their effective control of digestive problems (called the symptom-specific group) was compared to a set of four nearby points that are thought to have little or no value for influencing digestive disorders (called the comparison group). Each set of points was used for 3 weeks, with the order of treatment randomly assigned. Study participants and data analysts were blinded to the order of treatment.

Although improvement in symptoms resulted from both sets of treatment, a greater degree of efficacy was related to treatment in the symptom-specific group for the following conditions: loss of appetite, abdominal cramping, and bloating. The trial determined that a carry-over effect can result from administration of the set of symptom-specific points; in particular, if the set of points that included P 6, St 37, CV 12, and the Spleen auriculopoint were provided during the initial arm of the study, the beneficial effects continued into the second half of the study. Of particular interest was the observation that acupuncture treatment seemed to improve adherence to medication among those individuals whose adherence was suboptimal at the beginning of the study.

Each year, conferences on treatment for people with HIV/AIDS include greater numbers of studies about the value of acupuncture and Chinese herbal medicine. Researchers, clinicians and, most importantly, people who are HIV-positive, are benefiting from the increasing interest, availability, and integration of Asian medical techniques. As professionals in this field, our task is to be knowledgeable about and support these efforts.

References

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