



Acupuncture Today
September, 2000, Volume 01, Issue 09

Alzheimer's Disease and Acupuncture

Treatment Appears to Improve Mood and Cognitive Functions

Alzheimer's disease is the most common cause of intellectual decline and dementia in the elderly, affecting approximately one out of 10 people over age 65 and nearly half over age 85. The condition affects women more frequently than men, and it is characterized by shrinkage of the frontal or temporal lobes and nerve cell death in several areas of the brain, leading to a loss of key mental functions such as memory, learning and concentration.

Several therapies have been employed to slow down or reverse the effects of Alzheimer's disease, ranging from an increased intake of vitamins and antioxidants to using nicotine patches to a new class of drugs called cholinesterase inhibitors. Patches and large doses of vitamins may have unwanted side-effects, however, and the long-term benefits of cholinesterase inhibitors remain largely unknown. New research presented at the recent World Alzheimer's Conference in Washington, D.C. have shown promising results with another form of treatment: acupuncture. In two separate studies - one at the Wellesley College Center for Research on Women, the other at the University of Hong Kong^{1,2} - scientists have found that acupuncture can increase a patient's verbal and motor skills and improve mood and cognitive function.

In the first study, Dr. Nancy Emerson Lombardo and a team of colleagues at Wellesley College in Massachusetts studied 11 patients, 10 with Alzheimer's and one with vascular dementia. Subjects were treated with acupuncture twice a week for three months, with each subject receiving a minimum of 22 treatments. Patients were subjected to a variety of tests before and after being treated, including the Cornell Scale for Depression, the Spielberger State Anxiety Inventory, and the Mini-Mental Status Exam (MMSE) for cognitive function.

The researchers found "statistically significant improvements" in the depression and anxiety scores of patients. For example, the average Spielberger anxiety score at the start of treatment was 49.5; at the end of three months, it had decreased to 40.1. Four subjects experienced "substantial improvement" in mood symptoms after undergoing acupuncture; of those whose moods improved, two also showed improved MMSE scores, and a third improved in tests for fluency and naming ability.

While cognitive function was not measured scientifically (no control group was used), Lombardo said that those delivering treatment seemed to note an improvement in their subjects' thinking skills along with the other improvements, which she believes indicates a close relationship between cognitive ability, anxiety and depression.

"I think people should check it out," said Dr. Lombardo. "Besides anxiety and depression, they are likely to have other issues such as pain that can be helped with acupuncture."

In Dr. Kao's study, eight patients diagnosed with mild to moderate Alzheimer's disease were treated at the University of Hong Kong. Treatment consisted of needling and fine finger turning at eight acupoints: the *si shen cong* (Estra 7, four points on the scalp), *shen men* (HT7 on the wrists) and *tai xi* (KI3 on the feet). Needles were inserted 0.5 inches at an angle into *si shen cong*; 0.5 inches directly



into *shen men*; and 0.8 inches directly into *tai xi*.

Needling for each acupoint lasted a total of 30 minutes, comprising the needle testing and its reinsertion after every 10 minutes of therapy. Patients received a seven-day treatment cycle with a three-day break in between for a total of 30 days.

Patients were graded using the TCM Symptoms Checklist for Alzheimer's and the MMSE exam to measure their levels of orientation; memory; attention; and the ability to name an object, follow verbal and written commands, and write a sentence spontaneously.

After being treated, Kao's team reported that patients "significantly improved" on measures of verbal orientation and motor coordination and had higher overall MMSE scores. They also noted that patients "showed a significant overall clinical improvement" on the TCM checklist, leading the researchers to conclude that acupuncture treatment "has shown significant therapeutic effects" in reducing the symptoms of Alzheimer's disease.

Treatments May Provide Hope for Millions of Sufferers

As the average life expectancy has increased over the past few decades, so have the number of people with Alzheimer's disease. Unless a cure or other preventive measure is found, the Alzheimer's Association estimates that by the year 2025, 22 million individuals worldwide will develop Alzheimer's disease.

Admittedly, the research conducted by Kao and Lombardo cannot be considered definitive. Both studies used small patient bases (a total of 19 patients were involved); neither team employed a control group; and some patients didn't respond to treatment as well as others.

Nevertheless, these studies represent an important step forward in the research of both acupuncture and Alzheimer's disease. Because they showed such promising results, the work by Kao and Lombardo could help lay the groundwork for larger, controlled investigations to determine how acupuncture combats Alzheimer's, which could eventually lead to safer, inexpensive forms of care for the more than four million Americans who currently suffer from the disease.

References

1. Emerson Lombardo N, et al. Acupuncture to treat anxiety and depression in Alzheimer's disease and vascular dementia: a pilot feasibility and effectiveness trial. Presented at the World Alzheimer's Conference, Washington, D.C., July 9-18, 2000.
2. Kao H, et al. Acupuncture enhancement in clinical symptoms and cognitive-motor abilities of the Alzheimer's disease patients. Presented at the World Alzheimer's Conference, Washington, D.C., July 9-18, 2000.

Editor's note: If you would like to comment on this article, please contact *Acupuncture Today*:

Tel: (714) 960-3268

Fax: (714) 536-1482

Editorial@AcupunctureToday.com

Mail: Acupuncture Today, PO Box 6070, Huntington Beach, CA 92615-6070

