

# Acupuncture Improves Symptoms of PTSD

BY PATRICE WENDLING

Chicago Bureau

CHICAGO — Brief exposure to acupuncture significantly improved the symptoms of posttraumatic stress disorder when this treatment was compared with usual care, in a randomized controlled trial in 55 veterans.

Traditional Chinese medicine (TCM) acupuncture was evaluated for posttraumatic stress disorder (PTSD) because current treatments are only modestly effective, and some evidence exists for the efficacy of acupuncture in depression, anxiety, insomnia, and chronic pain syndrome, said Col. Charles C. Engel, MC, USA, who is director of the Department of Defense deployment health clinical center at Walter Reed Army Medical Center, Washington.

In addition, roughly 10%-17% of soldiers returning from the Iraq War experience PTSD in the year after deployment. The median time to care for most veterans is 12 years.

"I've done drug trials [and] psychotherapy trials, and this is the easiest trial in terms of recruitment," Dr. Engel said at the annual meeting of the International Society for Traumatic Stress Studies. "Patients were excited about this as a modality."

Dr. Engel and his associates randomized 55 active-duty personnel with PTSD to usual care (medication or psychosocial therapy) or eight 90-minute TCM acupuncture sessions delivered twice weekly for 4 weeks, plus usual care. The acupuncture sessions, which included needling and patient-practitioner

interaction, were standardized for the first four sessions and individualized for the second four sessions. All practitioners held a master's degree in TCM acupuncture.

The mean Clinician-Administered PTSD Scale (CAPS) score at baseline was 76.2 in the acupuncture group and 70.0 in the usual care group, while the mean PTSD Checklist-Civilian Version (PCL-C) scores were 58.1 and 55.4. The civilian version was deliberately chosen because peo-



**'This is the easiest trial in terms of recruitment. Patients were excited about this as a modality.'**

DR. ENGEL

ple in the military may have PTSD from multiple causes, only one of which is combat, Dr. Engel explained at the meeting cosponsored by Boston University.

Most of the patients were male (64.3% in the acupuncture group and 74% in the usual care group), the mean age of the two groups was 37 and 33 years, and 68% of all patients were recruited from primary care providers.

Patients with moderate to severe brain injury were excluded, as were those who had had a psychological trauma during the 30 days prior to randomization.

The analysis was based on 19 of 28 (68%) acupuncture patients and 24 of 27 (89%) usual care patients.

Compared with usual care, acupuncture was associated with significantly greater decreases in PTSD symptoms on CAPS and PCL-C, and these improvements were maintained through the 12-week follow-up, said Dr. Engel, who is also with the department of psychiatry, Uniformed Services University of the Health Sciences, Bethesda, Md. The mean PCL-C decreases were 19.4 at the end of treatment and 19.8 at the 12-week follow-up in the acupuncture group, compared with 4.0 and 9.7 in the usual care group. Cohen's *d* measures of effect sizes both before and after treatment and between groups were large (all greater than 1.0), he noted.

Symptoms of depression and pain also significantly improved in the acupuncture group, compared with the usual care group. The 36-Item Short Form Health Survey (SF-36) scores for mental functioning improved significantly with acupuncture. There was a trend toward improvement in physical functioning on the SF-36, but it likely didn't reach significance because the sample was fairly healthy physically and didn't have much room to improve, Dr. Engel said in an interview.

The investigators are interested in conducting a large multicenter trial that would involve a sham acupuncture arm in addition to the usual care and regular acupuncture arms examined in the current study.

VET-HEAL, a research program of the Samueli Institute for Information Biology, in Alexandria, Va., provided funding for the study. Dr. Engel reported no relevant conflicts of interest. ■

# PTSD Tied To Metabolic Issues in Vets

BY MICHELE G. SULLIVAN

Mid-Atlantic Bureau

Posttraumatic stress disorder appears to have a significant relationship with the development of metabolic syndrome, Pia S. Heppner, Ph.D., and her colleagues have reported.

Their observational study of 253 male and female veterans found that the risk for metabolic syndrome increased by 1% for each point scored on the Clinician Administered PTSD Scale (CAPS). The association between the disorders remained robust even after controlling for multiple demographic and medical factors, wrote Dr. Heppner of the Veterans Affairs San Diego Health Care System research service and her coauthors.

"The importance of the association becomes apparent when one considers the fact that metabolic syndrome has been shown to predict cardiovascular disease-related morbidity and mortality," they wrote in *BioMed Central Medicine* (doi:10.1186/1741-7015-7-1).

The study subjects were mostly male (92%) and white (76%). Their mean age was 51 years; most of them (71%) had served in Vietnam. According to both the CAPS scale and DSM-IV diagnostic criteria, PTSD of at least moderate criteria was present in 55%, while another 24% expressed symptoms at a sub-threshold level. An additional 64% had a current or past history of depression.

The overall prevalence of metabolic syndrome was 40%. Among those with PTSD only, 34% met the criteria for metabolic syndrome; the prevalence among those with major depressive disorder (MDD) was 29%. Prevalence was significantly higher in those with both disorders (46%).

A logistic regression analysis controlled for age, sex, race, education, drug and alcohol use/abuse, nicotine use, and a current or past diagnosis of MDD. The total CAPS score was a significant predictor of metabolic syndrome, but MDD was not, they wrote.

Dr. Heppner and her colleagues said that their findings are in line with previous studies in populations vulnerable to PTSD. For example, one study found that metabolic syndrome was three times more likely in police officers with severe PTSD symptoms, compared with officers in the "lowest PTSD severity category" (*Int. J. Emerg. Mental Health* 2006;8:227-37). Still, the current study "extends the current knowledge of PTSD and diminished health status."

The study's cross-sectional design prevented Dr. Heppner and her colleagues from fully establishing a causal relationship between PTSD and metabolic syndrome. "Prospective studies are clearly needed in this area to fully examine the long-term health risk related to PTSD," they wrote. ■

# Depression Treatment Lacks Intensity for Some

BY HEIDI SPLETE

Senior Writer

RIO GRANDE, P.R. — Primary care physicians don't appear to treat depression any more aggressively in patients who have medical comorbidities, compared with other patients, despite mounting evidence showing that depression may worsen medical outcomes.

The conclusions were based on a review of more than 20,000 adult records. "There is good evidence that the rate of depression is higher in persons with certain medical comorbidities," Dr. James Gill said at the annual meeting of the North American Primary Care Research Group. "You could make the argument that persons with depression should be treated more aggressively if they have comorbid conditions," he added.

In a previous study, Dr. Gill, president of Delaware Valley Outcomes Research LLC, reviewed a large database of patients treated by a range of medical specialists and found no significant differences among the specialists in terms of their use of antidepressant medications to treat depressed patients with and without medical comorbidities (*Int. J. Psychiatry* 2008;38:203-15).

In order to focus on primary care physicians specifically, Dr. Gill conducted a secondary analysis of 209 family medicine and general internal medicine physicians and 24,876 of their patients, aged 18 years and older, who had diagnoses of depression.

The study population included 1,849 patients with incident depression diagnosed during the 1-year period from October 2006 through October 2007. Study participants had at least one office visit during the year and an active diagnosis of depression as of the end of the year. Data were collected from electronic medical records via the Medical Quality Improvement Consortium.

Approximately 75% of the patients were on any type of antidepressant medication at the study's end. A total of 92% were taking at least the minimum dosage of their prescribed medications, and almost half (49%) were taking the full dosage.

In addition, about one-quarter of the patients in the study had at least one of the six medical comorbidities included in the review: coronary heart disease, heart failure, cerebrovascular disease, chronic obstructive pulmonary disease, cancer, and diabetes. The most common co-

morbidity was diabetes, affecting 13%.

After the researchers controlled for age, gender, and additional comorbidities, none of the six comorbidities were a significant predictor of any antidepressant medication use or of the dosage. Nor did the researchers find any significant differences in medication use by comorbidity in a subanalysis for the patients with incident depression during the observation year.

Patients with comorbid conditions were slightly more likely to be taking the maximum dosage of an antidepressant, and patients with medical comorbidities in the incident group were slightly less likely to be on medications.

Primary care providers may not be treating depression aggressively due to concerns about medication side effects and the cost of additional medications. The study was limited by a lack of information about the severity of the patients' depression, Dr. Gill said.

But the question remains as to whether treating depression more aggressively can improve the comorbidities, he added, and more research is needed to explore this topic.

Dr. Gill had no financial conflicts to disclose. ■