

# SOUTHWESTERN NEWS

Media Contact: Mindy Baxter  
(214) 648-3404  
melinda.baxter@email.swmed.edu

## GULF WAR SYNDROME DIZZINESS LINKED TO NERVE GAS

DALLAS – April 13, 2000 – In medical tests analyzing brain function, Gulf War veterans who complain of dizziness showed results similar to those of victims of the Toyko subway nerve-gas attack, according to a recent study.

UT Southwestern Medical Center at Dallas researchers used similar medical tests and found similar evidence of brain-stem damage in Gulf War veterans as victims of the 1995 sarin nerve-gas attack in Japan, which injured nearly 6,000 people.

Published in the March issue of *Otolaryngology-Head and Neck Surgery*, the study proves that dizzy Gulf War veterans sustained brain damage that is causing their symptoms. This study provides further evidence to suggest these veterans were exposed to chemicals and nerve agents in the Gulf War, the UT Southwestern authors said.

“Our tests showed this dizziness is not anxiety or stress,” said lead author Dr. Peter Roland, professor of otolaryngology-head and neck surgery. “It’s a sign of brain damage.”

A 1996 Department of Veterans Affairs study published in *The New England Journal of Medicine* showed that Gulf War veterans were 50 percent more likely to die in a motor vehicle accident than military personnel not sent to the Gulf War. UT Southwestern researchers said the current study may explain why Gulf War veterans face a greater risk of death in car accidents.

Gulf War veterans described their dizziness as coming on suddenly in short attacks. Many said they had lost their balance and fallen as result of these attacks.

Researchers used highly specialized tests to measure eye movements and electronic brain measurements to test the brain and middle ear function of these veterans.

“These tests show evidence of dysfunction in the deepest structures of the brain where balance is controlled,” Roland said.

Dr. Robert Haley, chief of epidemiology at UT Southwestern, has studied Gulf War veterans since 1994. Haley, a study co-author, said the study is another important step in developing medical tests to document brain damage in Gulf War syndrome patients.

“We find that ill Gulf War veterans don’t usually mention their dizzy spells because they are not as incapacitating as the severe fatigue, body pain and memory problems,” Haley said. “After several in-depth interviews with these veterans, we realized the problem. We tried these

(MORE)

## DIZZINESS - 2

specialized tests, and the tests located the cause of the symptoms in the brain.”

Gulf War syndrome is characterized by a vague set of symptoms that only together can lead to a syndrome. This study suggests tests that researchers might be able to use to detect Gulf War syndrome more quickly and easily in the future, Haley said.

And with more knowledge about these dizziness attacks, researchers say they hope to help Gulf War veterans lead more normal, less dangerous lives.

“If 50,000 Gulf War veterans have been experiencing these unpredictable attacks of vertigo where things suddenly seem to spin around them, it’s not hard to imagine how this could explain the higher death rates from motor vehicle accidents,” Haley said.

In an accompanying editorial published on the journal’s World Wide Web site, journal editor-in-chief Dr. Richard Holt praised the study’s authors for pursuing research in a controversial field.

“[The researchers] have performed a great service to the Gulf War veterans who are suffering from symptoms that have been characterized as Gulf War syndrome,” Holt said. “The strength of this study lends great credibility to the call for continued evaluation of patients with this syndrome and, ultimately, clinical trials for treatment of their symptoms.”

In a groundbreaking paper in the January 1997 *The Journal of the American Medical Association*, Haley identified three distinct syndromes, each linked to various Gulf War chemical exposures, including pesticides, insect repellants, chemical-warfare agents and pyridostigmine bromide (PB) tablets soldiers took to combat the effects of nerve gas.

In June 1999, Haley and fellow researchers published a paper showing that genetically low levels of an enzyme, type Q paraoxonase, may have caused some Gulf War soldiers to be more sensitive to low levels of nerve gas. And in an abstract presented at the November 1999 meeting of the Radiological Society of North America, Haley and colleagues presented evidence found through sensitive brain scans that shows brain damage in sick Gulf War veterans.

Haley is currently working on a study of amyotrophic lateral sclerosis (ALS), or Lou Gehrig’s disease, in Gulf War veterans.

The Perot Foundation funded the dizziness study.

###

This news release is available on our World Wide Web home page at  
[http://www.swmed.edu/home\\_pages/news/](http://www.swmed.edu/home_pages/news/)

To automatically receive news releases from UT Southwestern via e-mail, send a message to  
UTSWNEWS-REQUEST@listserv.swmed.edu. Leave the subject line blank and in the text box, type  
SUB UTSWNEWS