

Study Show Brain Flaws Gulf War Syndrome Vets

At the annual meeting of the Radiological Society of North America in Chicago, Dr. Robert Haley, professor of internal medicine at the University of Texas Southwestern Medical School at Dallas, presented research which shows that defects in the brains of Gulf War veterans with Gulf War Syndrome appear related to the symptoms of confusion, learning problems and psychological disorders seen in these soldiers, researchers said Monday.

Doctors said that images of the brain show certain deficits in production of chemicals required for optimal brain functioning and when those deficits occur a whole range of problems can occur among the veterans who fought against Iraq in 1991.

Haley said numerous studies had assumed that the real cause of the myriad Gulf War Syndrome symptoms were due to post-traumatic stress disorder (PTSD), but the magnetic imaging spectroscopy studies he performed on 12 patients with the worst cases of the disorder shows no correlation between PTSD and the problems his group of subjects is having.

Co-researcher Dr. James Fleckenstein, professor of radiology at University of Texas, said, "Magnetic resonance spectroscopy continues to validate an organic basis for Gulf War patients' complaints and disabilities in a more specific way than older tests in past research."

For example, Haley said the new findings show that damage on the right side of the brain appears to cause certain symptoms such as impaired sense of direction, memory lapses and depression. Damage on the left side appears to cause more global confusion, including difficulties in understanding instructions, reading, solving problems and making decisions. Left-side damage also appears to cause the production of high levels of dopamine, an important brain hormone involved in movement and emotions.

Damage to the brain stem appears to account, in part, for loss of balance and dizzy spells and correlates with objective tests of brain stem reflexes important in balance.

"These veterans would have problems getting lost, they had sexual dysfunction, they had problems making decisions," Haley said. Similar difficulties were seen in animal studies with similar brain dysfunction. "The bottom line here," Haley said, "is that brain cell damage that we see with magnetic resonance spectroscopy explains the symptoms of Gulf War Syndrome."

Haley said he believes that some of the troops now suffering from Gulf War Syndrome were exposed to low levels of nerve gas during the desert fighting to lift the Iraqi occupation of Kuwait. Fleckenstein said it was also possible that the veterans were affected by compounds in the anti-nerve gas medication used to ward off possible nerve gas attacks by Iraq.