

## In the news

### GULF WAR SYNDROME: ALL IN THE BRAIN?

A study presented at the recent American Academy of Neurology meeting showed that the cortex and the rostral anterior cingulate gyrus of veterans with Gulf War Syndrome are smaller than those in veterans without the illness.

The causes and even the existence of the syndrome are mired in controversy. “It has been an extremely controversial and emotional debate,” says Robert Haley, an epidemiologist at the University of Texas Southwestern Medical Center in Dallas, USA ([news@nature.com](mailto:news@nature.com), 1 May 2007).

Some people believe that exposure to nerve gas, pesticides and/or vaccines are to blame for the illness. According to Haley, the new findings suggest that “there is a loss of brain cells due to a toxic effect of pesticides and nerve gas, which then causes brain volume shrinkage” (*WebMD*, 1 May 2007).

Other researchers are unconvinced that the findings will help to identify the causes of the syndrome. “[They] do not prove that veterans ... were harmed by wartime chemical exposure,” says Dr. Daniel Clauw of the University of Michigan, USA (*Washingtonpost.com*, 1 May 2007).

It is possible that the smaller brain volumes were pre-existing conditions that somehow increased the veterans’ vulnerability to developing the syndrome. Alternatively, the changes may result from the physical or social consequences of the disease. Simon Wessley, Director of the Centre for Military Health Research at King’s College London, UK, points out that “By now ... they are older, many drink, they may be depressed, and all these things can change the size of regions of the brain” (*The Guardian*, 2 May 2007). Wessley thinks it is unlikely that the new findings will lead to a treatment and says that “many Gulf veterans continue to have symptoms and disability — and, frankly, not a lot is being done for them” (*The Guardian*).

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