

## Brain Injury's Toll

Aging veterans with head trauma experience faster cognitive decline

**Traumatic brain injuries** are commonplace during combat; two thirds of soldiers sent to Walter Reed Army Medical Center from Iraq suffer from such injuries. A new study of aging Vietnam veterans with head trauma paints a grim picture of the future for troops returning from Iraq with similar wounds.

Jordan Grafman, a neuroscientist at the National Institute of Neurological Disorders and Stroke, led a study of Vietnam veterans who had suffered penetrating head injuries—trauma caused in these cases by shrapnel or bullets entering the brain. His team found that as these veterans aged their cognitive function declined almost twice as fast as that of their peers. High preinjury intelligence, however, did help protect against this drop. So did education. “The more education you have, the more you’re able to stave off the effects of the injury, including even effects of later decline,” Grafman says. The researchers also identified genetic variants that seem to predict a more pronounced deterioration.

The findings will likely apply to Iraq veterans suffering from the same kinds of wounds, Grafman notes. These veterans should expect an accelerated cognitive decline, and their physicians should be careful not to confuse it with other neurological conditions. “We know that this is going to happen in veterans who had head injury,” he says. “They need monitoring and reassurance that this is not dementia.”

—Emily Anthes

