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Experts: Even mild head injuries put troops at risk

By Kelly Kennedy

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Within days of falling 15 to 20 feet off a sand berm on the Kuwait-Iraq border and landing on his head in Iraq, Army Master Sgt. José Santiago realized his soldier skills had also taken a dive.

He began shirking his duties because he couldn't trust himself to do them right. He forgot words and used expletives instead. And he sheepishly copped to the ultimate warrior sin: "misplacing" his weapon.

"I tried to suck it up and drive on," he said.

But when his team took sniper fire in Karbala, the concussion that made him forgetful and angry also made his left arm go numb. "I couldn't move, couldn't reach for my weapon," he said.

Experts say troops operating with head injuries — even slight concussions — put themselves and their buddies at risk.

"Concussion may impair the combat-effectiveness of soldiers ... poor marksmanship, delayed reaction time, decreased ability to concentrate and inappropriate behavior that lasts for several days," reads a July 2006 All Army Activities message.

A series of studies on athletes at the U.S. Military Academy at West Point, N.Y., has worked out just how long people need to avoid reinjury based on tests that show cadets' cognitive skills can take days to return to normal, even after headaches, dizziness and numbness have dissipated.

For that reason, any cadets who lose consciousness or show any symptoms are pulled from their sport until the symptoms vanish. Then, depending on the severity of the injury and the number of



Reggie Smith is on the boxing team at West Point. Athletes at the academy were part of a study to determine how long people must avoid additional trauma to the brain after an injury.

previous head injuries, they get benched for a few days, or possibly the rest of the season. Failing to err on the side of caution, studies show, raises the risk of long-term symptoms — or even death.

At the academy recently, 20 cadets watched their classmates go at it in the boxing ring.

"Why are you holding back?" yelled their coach, Army Capt. Dennis Terry. "You move straight back, he's gonna find you all day."

But Terry was on the watch for more than technique. As a glove slammed into a temple, he yelled again. "No more power shots to the head — either of you!"

Later, he explained, "If we have a closed-head injury, one right after another, we know there's trouble. We work really hard to stop it. Some of these kids would just keep hitting."

Terry said the military is coming to understand that troops don't "shake off" concussions.

Karen Peck, assistant athletic

trainer and instructor, said young people with head injuries who suffer a second such injury before symptoms of the first are gone — "second-impact syndrome" — have a 50 percent mortality rate.

"The vascular system dilates, and the brain bleeds to death," she said. "It happens really fast."

And someone who has had a head injury — no matter how long ago — is more likely to incur a second injury, she said.

At the end of class, 20 cadets lined up across from each other for a "buddy check." They made sure the other guy wasn't reeling, that his pupils were the same size, that he wasn't dizzy. This drill, Terry noted, could easily be done after every patrol in Iraq.

Studies show that instant death is not the only risk that comes with multiple mild head injuries. They can cause permanent short-term memory loss, stuttering, inability to perform basic math or reading tasks, and behavioral problems. Recent studies also show that repeated head injuries boost the risk of Alzheimer's disease later in life.

But making people understand what "head injury" means can be difficult. "People say, 'I've been knocked unconscious a few times, but I've never had a concussion' ... that's a concussion," Peck said.

Any loss of consciousness — no matter how brief — is a head injury. But in the chaos of an improvised explosive device explosion, people often don't remember if they've passed out. They only know they feel dizzy, have tunnel vision, a headache, ringing in the ears.

Even with the symptoms, troops don't always speak up. "They want to keep going," Peck said.

Army Boxing Team coach Ray Barone watches fighters spar at the U.S. Military Academy.

As if to prove her point, cadets Michael Benedosso and Reggie Smith spoke of a pal who, after a bout, kept repeating things. "He seemed normal at first, but the more you talked to him, the more you realized he wasn't OK," Benedosso said.

But even as Benedosso said his West Point training would help him look for head injuries among his troops if he goes to Iraq, he made an admission: "I've felt woozy or the entire right side of my body will go numb. I just got caught with a good shot to the head. But I didn't tell anybody because they would have pulled me out."

But that would be the best medicine, doctors say.

David Cifu, who oversees the traumatic brain injury program at the VA medical center in Richmond, Va., said it's best to remain far from potential vehicle accidents and explosions for up to a week after a head injury.

"The clock starts when they're no longer symptomatic," Cifu said. "But there's a concern that would take all of our people out of the fight."

He said military officials talked about how to handle head-injured troops at a May summit. "Maybe, if there's one hour of symptoms, you spend 25 hours out of the fight," he said, talking about one option that was discussed.

The Defense and Veterans Brain Injury Center at Walter Reed Army Medical Center in Washington, D.C., began sending boxes of literature to medics, doctors and commanders on the front lines in early June, he said, adding that defense officials are "very aware" of the West Point studies.

Col. Jonathan Jaffin, chief of the Army Medical Research and Materiel Command, said he understands that troops don't want to let their buddies down by being pulled out of the fight.

But by staying in, he said, "they're not helping as much as they think they are." □

TBI

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condition that had existed before he entered service, though Fishbain allowed that Santiago's mild brain injury could be a contributing factor in the condition's manifestation.

Fishbain also said Santiago was a hypochondriac, faking his cognitive difficulties. "It is felt that his traumatic brain injury is not playing a major role in his current symptoms," he wrote.

He also said Santiago hadn't been to the TBI clinic since late 2006, implying that he refused treatment. But Fishbain didn't mention that the military had referred Santiago to a VA clinic.

"They really don't want to say ... that all those other problems are related to the fall," Santiago said. "I had never heard of TBI."

No reason for faking

Santiago denied seeking a high disability rating. He said he wanted to stay in uniform; he had 18½ years in and wanted his retirement.

"I didn't want to take chances with a medical board," he said. "I had talked to too many guys who were getting screwed."

He began researching the issue himself, taking meticulous notes because he often couldn't recall what he'd learned the day before.

Santiago believes his Chiari malformation is acquired because it didn't show up in X-rays after a car accident a few years ago.

Ronald Glasser, a former Army doctor who has studied brain injuries since Vietnam, said that shouldn't matter; the malformation put Santiago at higher risk for a brain injury, and he should be compensated for it.

"Short-term memory loss does not come from Chiari," Glasser said. "He's damaged."

Santiago is not the only service member who has been treated as if he were making up symptoms.

Annette McLeod, wife of Spc. Wendell McLeod Jr., told Congress on March 5 that rather than acknowledge her husband's cognitive disabilities after a brain injury, the Pentagon found out he had taken Title 1 math in grade school and used that to label him as already "intellectually slow."

The military TBI clinic said McLeod "didn't try hard enough," his wife said. "I know what Dell is capable of, and I knew that there was something wrong." VA later diagnosed McLeod with a TBI.

Jeannette Mayer said her husband, DeWayne, was evaluated for TBI at a private clinic because the Army ignored her plea for help. He had been in five IED explosions, including one that rolled his Humvee. Rather than evaluate him for a TBI, she said, the Army began a medical evaluation