Polytrauma and TBI

How a Decade of War Has Changed Treatment

More than a decade of war has dramatically changed the way polytrauma (PT) and traumatic brain injuries (TBI) are treated in America’s veterans returning home with these life-changing wounds.

“In the 1990s, there were specialized centers for these types of injuries, but the network we have now didn’t exist,” said Dr. Ronald Riechers, medical director of the poly-trauma team at the Louis Stokes Cleveland VA Medical Center.

Riechers explained that when the current generation of wars began, the VA developed a system of treatments based on the nature and severity of a patient’s injury. Patients are classified at levels one through three, with three being the most severe. As a patient recovers, the condition is downgraded to the next level with what Riechers calls a “warm handoff ” to the patient’s individually assigned liaison service officer at the next treatment center.

“The system-based care has been the biggest change regarding how we treat these injuries,” said Riechers.

Another change is the immediate treatment that often begins on the battlefield. In previous conflicts, the injured were evacuated to a treatment center. In recent wars, especially as bases were established and facilities erected, a patient could be moved from the point of injury to lifesaving care at full-spectrum medical facilities within the course of an hour.

“What the military did early on was place medical professionals down range, as proximately close to the fighting that was safe,” Riechers said. “Neurosurgeons were there early, and some were aggressive in performing surgery on wounds to the skull, as sometimes the pressure created by that
kind of injury is what would be fatal.”

The early intervention has greatly increased survival rates.

“We can aeromedical evacuate a patient [to a treatment center] rapidly after they received surgery early,” Riechers said. “This reduced negative cognitive impairment and death. We have better survival rates than the civilian sector because of early intervention, and the ability to begin neurologic care at a tertiary medical facility is dramatic.”

Riechers said the future of PT/TBI injury care consists of integrating treatments for patients with both posttraumatic stress disorder (PTSD) and a TBI. While the overwhelming majority of cases are mild, he said, TBI symptoms are often associated with a mild concussion and shouldn’t be overlooked.

“Coexistence of PTSD/TBI is extremely high,” he said. “What you will see moving forward is people who have PTSD/TBI being integrated into interdisciplinary programs and treatments.

“The challenge lies in identifying these injuries in these individuals who can’t necessarily describe their experience due to amnesia that sometimes comes with the extreme adrenaline rush that led to the injury in the first place,” said Riechers.

Any veteran who may have experienced even what might have initially been called a “mild” concussion is encouraged to see a specialist to ensure they are properly diagnosed—especially as some injuries can worsen over time.

“The stigma of asking for help, whether a veteran suffered a TBI-related injury and is still serving or has transitioned out of uniform, can and should be removed from our mindset as a veteran community,” said DAV National Adjutant Marc Burgess. “Anyone who has suffered an injury like this, even if they were initially told it was mild or didn’t report it, should absolutely see a medical professional.” Riechers agrees.
“There’s no IV drip to treat TBI and, unfortunately, there’s no pill, either,” Riechers said. “The cure comes from early treatment, rehabilitation or surgery, if required. It’s important to report head injuries and be evaluated.”