After falling out of favor, tourniquet is back and saving lives

TUCSON — Trajarvis McMurry tried to fashion a makeshift tourniquet from his friend's shirt, but he was too weak to tighten it enough to stop the bleeding coming from his own arm.

McMurry was riding in a truck that rolled over in the predawn darkness last month near Houghton Road on Interstate 10. When bystanders stopped to help, the 23-year-old Army veteran asked if anyone had a tourniquet. No one did.

Moments later, two U.S. Border Patrol agents happened on the chaotic scene. Agent Joseph Tukovits found McMurry, who was lying on the ground, still bleeding. Tukovits applied a tourniquet to McMurry's upper right arm and veteran agent Adam Alessi tightened it. The bleeding subsided, and McMurry was transported to Banner University Medical Center – Tucson, and treated by a trauma team.

Although the tourniquet has been used since antiquity, especially in military settings, it fell out of favor because of concerns over complications such as tissue damage, limb loss and ineffective hemorrhagic control, says Dr. Andrew Tang, associate professor of surgery and trauma medical director at Banner University Medical Center – Tucson.

But lately, because of improved technology and better training, the tourniquet is making a comeback — and making the difference between life and death.

In the aftermath of mass-casualty incidents, such as the one at Sandy Hook Elementary School in Connecticut in 2012, the White House and the American College of Surgeons launched the Stop the Bleed campaign in October 2015, to provide the public with the knowledge and tools to stop life-threatening bleeding.

One of those tools is the tourniquet. Should compressing and packing a wound not stop bleeding coming from an extremity, the application of a tourniquet is the next best thing.
Because of the effectiveness of body armor and the increased use of improvised explosive devices during recent wars, a significant number of deaths resulted from injuries to the extremities, Tang said.

“That’s when tourniquet use was revisited by the medical profession, particularly the military medical profession,” Tang said. "Every soldier is trained on tourniquet use with the thought that every soldier can help himself or help his fellow soldiers."

Including McMurry, who was trained to use a tourniquet during his time in the Army.

Although tourniquets are key to reducing the number of mortalities at the scene of mass-casualty incidents, Tang says their use in the aftermath of vehicle crashes should not be underestimated, given their frequency.

For those who are concerned that tourniquets can damage limbs, Tang said that's why training and proper use of the tourniquet are paramount.

A week after the crash, McMurry headed back home to Hearne, Texas and to his daughter.

Submitted by the University of Arizona Communications