

12/11/2016

Review of the S-Cut

Evaluated by:

Kurt Eifling, MD, Washington University in St. Louis School of Medicine resident  
Zachary Hafez, MD, Washington University in St. Louis School of Medicine resident  
Jason Wagner, Assistant Residency Program Director, Assistant Professor Washington University in St. Louis School of Medicine, faculty member

Since starting my career in emergency medicine, the trauma shear has been emblematic of our role at the point where people change from regular community members and become patients. They arrive unstable, traumatized, scared, and almost always clothed. Yet before we can change them to resuscitated, collected, and reassured, they must also become naked. The need to make people immediately naked is unique to our specialty, and the devices we use for that daily purpose are just as ubiquitous as stethoscopes and smart phones. Shears are everywhere, but does that mean they are the best tool for this every-day job?

Other industries that have faced the same question, "what's the safest, fastest way to make this one piece of fabric into two pieces?" do not elect a scissor-type design. Escaping from an entangled seatbelt in the US Marine Corps, for example, is typically done with a horseshoe-shaped blade on a single-piece tang, such as this one made by Benchmade. As devices intended for self-rescue, these are often Spartan in design and not designed for daily carry or comfortable use with the ungloved hand. Most products designed for rapidly cutting fabric in an emergency agree that the operator is advantaged most by pulling a blade closer; not by pushing a scissor away.

The S-Cut is a Swedish product that combines the safe hand-feel of our familiar trauma shears with the strap-cutting approach of a pulled blade, making nakedness happen more rapidly and safely than ever before. Though originally designed for equestrian and veterinary applications to cut straps, cords, and ropes quickly and safely, first-responders have adopted this device in Europe. We tested the S-Cut QE (short for "quick and easy") as a way of making clothed people into naked patients in our level-one trauma center in urban St. Louis.

The experience of using the S-Cut QE in the clinical setting is overall excellent. The first time I used this device, I was amazed at how quickly and effortlessly it laid open a pair of denim jeans and the patient's belt. Moreover, I was certain I would not have the shears open and nip the patient's skin folds nor any one of the providers' dozen hands darting all over the patient's body. It glided neatly through multiple layers of clothing, leather belts, and synthetic boots. It was not tested specifically on cutting through a metallic zipper, but traversing the zipper is not necessary when a flick of the wrist gets you to the waistband instead. The S-Cut QE fits neatly into a lab coat pocket, has a tether point for a lanyard, and it weighs no more than shears. It also performs well taking down bulky gauze dressings with the patient's skin feeling a smooth plastic anvil instead of the blunted steel blade of traditional shears.

The only drawback I found was my own anxiety in having something so exquisitely sharp in my pocket during shifts. I feared I would jam my own hand thoughtlessly into my lab coat pocket and onto the

light-saber blade, but this anxiety proved to be unfounded in my case. The mouth of the cutting area is narrow enough, and the protective anvil broad enough, that to insert one's finger the device would be difficult to achieve deliberately, and even harder by accident. A holster is available.

In professional kitchens, it is considered common knowledge that part of knife safety is keeping your knives very sharp. A blade sliding easily through a medium will not tempt the user to press or mash into the act of cutting with force that is difficult to control. If you like your scalpels sharp, you're cutting easy, and your trauma patients exposed, then the S-Cut QE may be just the upgrade you need from traditional shears.

Jason Wagner