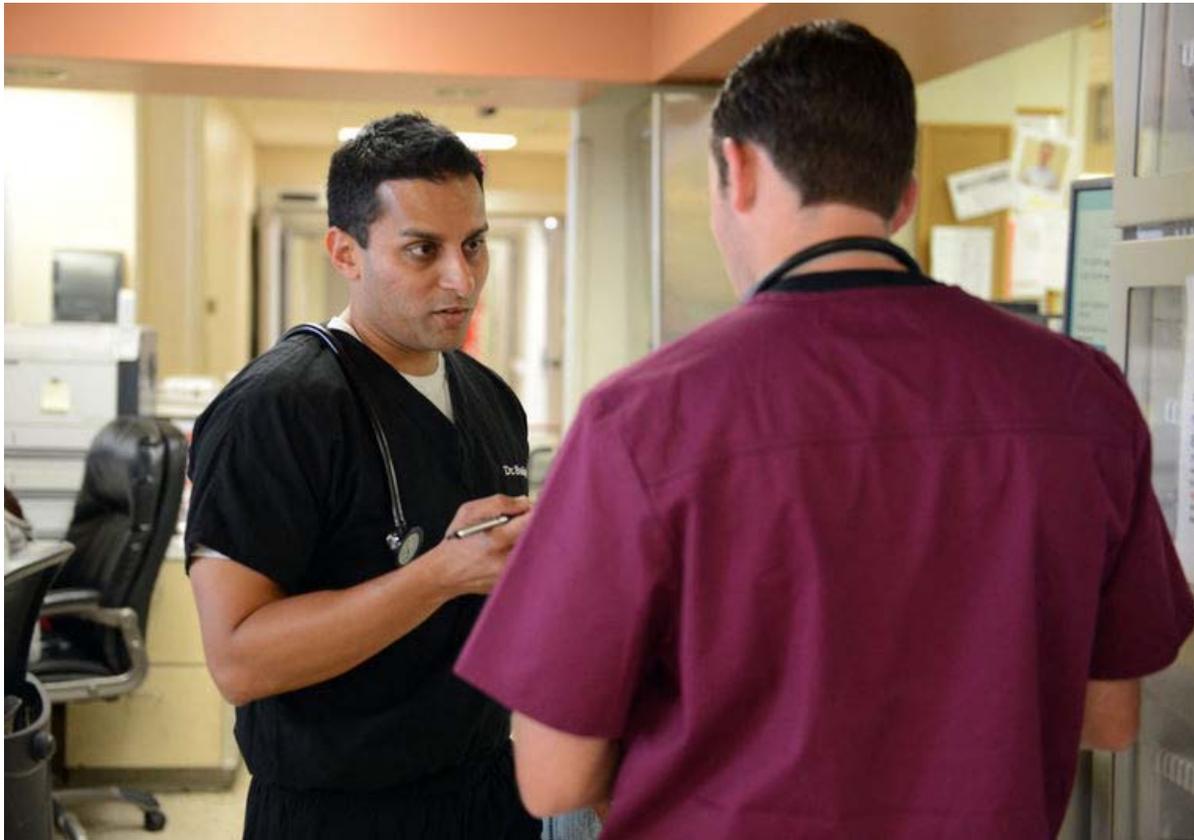




Crush injuries still comon post boom

By Ruth Campbell rcampbell@oaoa.com | Posted: Monday, September 5, 2016 5:30 am



Dr. Sudip Bose, left, talks with Texas Tech University Health Sciences Center physician assistant student Jacob Webster Monday afternoon in the emergency room at Medical Center Hospital.

Although the oil and gas industry has slowed down, medical professionals in Odessa still see a “fair amount” of crush injuries whether it’s from an oilfield or a car accident or something literally crushing them.

Cindy Burnette, trauma outreach coordinator for education and injury prevention at Medical Center Hospital, said crush injuries usually involve soft tissue that gets put under pressure of any kind.

Crush injuries may not break a bone, but it puts pressure on the muscle and breaks it down, which releases myoglobin, a molecule that stops up the tubules of the kidneys. It also disrupts circulation and can make potassium leak out of the body, creating an imbalance, Burnette said.

“One of the biggest problems we have with people with crush injuries is they go into kidney failure if it’s not treated properly,” said Burnette, who also is a sexual assault nurse examiner.

“They can also end up with amputations ... because they can get what we call compartment syndrome. Our skin is stretchy, but it can only stretch so far, especially if there’s not an opening and it swells,” she added. “All that’s going to press in on the nerves and blood vessels and it basically ends up killing the extremity. What they may have to do surgically, if it’s too late sometimes, we’ll end up amputating.”

Along with car and oilfield accidents, people can also get trapped under cars or felled by farm equipment, Burnette said. With children, she said, climbing is often the culprit most of the time, although their injuries also can be related to motor vehicles.

An injured person will usually start to feel the effects of their injury within two hours.

If an injury is bleeding, Burnette advises whoever is with the injured person to stop the bleeding if they can. If the blood is squirting out or pulsating out, Burnette said that tells someone it’s an artery. If it’s oozing, it’s can be stopped with a tourniquet, piece of clothing or a belt.

Someone who suffers from a hand injury could wind up seeing Dr. Gerald Farber, a hand and orthopedic surgeon. Most of what he said he sees are finger and upper extremity injuries.

“Most commonly, it’s the very tip of the finger,” Farber said. “... They get crushed between the pipes where guys are moving pipes around and they slip. I’ve had a few where they get in the fittings.”

Farber said the injuries he sees can range from a fracture at the tip of finger all the way to a nail and part of a finger getting ripped off, at which point he has to go in and finish the amputation and try to close it.

An open injury with a fracture may not need surgery, he said, but it does take a long time to heal and the injury is tender for a long time. “Those people usually get back pretty well,” said Farber, who served in the U.S. Army for 26 years and left as a full colonel. He ran the hand surgery fellowship at Walter Reed National Military Medical Center for about seven years.

People who have had amputations “return pretty well also,” but it takes a little bit longer for them to get back.

“Then they all have some issues, some tenderness with pinching. Almost all those fingers are more sensitive to the cold,” because nerves and circulation are disrupted, Farber said. He added that he recommends good gloves.

The more fingers someone loses, the more it can change the mechanics of someone’s hand. “Usually, the sensation is going to come back pretty well unless the nerve is cut in two,” Farber said. “Usually, if the nerve is in tact it’s going to recover reasonably well.”

If a bone is crushed, sometimes it’s a challenge to get the motion to return, Farber said.

“The bone is going to heal. Most of the time it’s going to heal without any problems. The issue is the soft tissue injuries. The tendons will tend to scar down to that bone and get stuck down, so that’s the issue that you deal with trying to get their motion back.”

One of the newer techniques Farber said he’s been using is “wide-awake surgery.”

“I numb them up with a lot of local anesthetic and they’re awake,” he said. “I make an incision and you get down to where you need to tell the patient to try and close their hand, keep going to where they can move it. ... I’ve been doing that for tendon repair.”

For a crush injury, as long as it’s clean, Farber said there’s no critical amount of time to get them to a hospital. “If it’s an open injury, you want to get them on antibiotics to minimize risk of infection. Again, sooner is better than later but it’s not as critical as for a replant,” he said.

If there’s any deformity, Farber said, that means there’s a fracture and the injured person needs to be seen by someone. Also, if there is numbness, loss of function or inability to extend or bend a finger, it could be a tendon injury and the injured person should be seen soon by a physician soon.

Farber added that oilfield workers wear gloves as part of their safety program, which generally helps. But sometimes he hears stories about gloves getting caught in machinery.

“Occasionally the gloves are a problem, but I’d say more often than not they’re helpful,” Farber said.

Dr. Supid Bose, an emergency room physician at MCH who served in Iraq, said it’s what you do in peacetime that prepares you for war.

“If you’re in an unsafe environment, recognize that now. If you’re in the oilfield, you’re possibly at risk, if you’re a construction worker you’re possibly at risk. A car accident, you don’t know when that will happen,” said Bose, a former U.S. Army major.

Compression, he said, is the main problem medically. Studies have shown that giving IV fluids is helpful for crush injuries because it flushes out the kidneys, Bose said.

“The other thing people may not think about is the after effect,” Bose said. He added that there may be “mental abrasions” like post-traumatic stress disorder (PTSD).

“We see it in soldiers, but it can affect people in our community, too, if they’re in a car accident or dangerous situation,” Bose said.

Scene safety is another factor Bose said is focused on the military. He witnessed an incident where a medic ran into the middle of a street to help someone who had been shot, but it turned out the person was playing dead and they were both shot and killed.

The main thing when confronting a dangerous situation, Bose said, is “calming yourself enough to use common sense.”

“That’s easier said than done. I speak a lot about emergency leadership. You’re in these emergency situations, you react a lot of times. Your body, just from a physical perspective, often has some physiology which you don’t always think about. You start sweating; your pupils dilate; you palpate; you get nervous. I have to keep mind of that in the emergency room when I’m taking care of critical patients,” Bose said.

“You can recognize that’s happening, then recognize there’s a clear space then afterward control that action,” Bose said.

http://www.oaoa.com/news/article_409f463c-715d-11e6-af21-07f3ce0a475f.html