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VHQC

Sepsis Survivor Advocates for Improved Patient Education on Surgical Infections

It was late January 2013, and 53-year-old Tom Childrey had been fighting flu-like symptoms, combined with pain in his right hip, for several weeks. Childrey, an avid fitness enthusiast who lives in Henrico County, rarely fell ill. He had spent six weeks slowly returning to his fitness routine after an anterior hip replacement performed on December 11, 2012. The procedure, among the most common orthopaedic surgeries performed today, was to replace his right hip, which suffered some wear and tear, combined with arthritis, from years of physical activity and fitness.

The procedure, performed by a highly regarded orthopaedic surgeon at a Hampton Roads orthopaedic practice, and the post-op recovery had gone very well. Childrey was standing and walking within hours after the surgery, and he was able to go home the next day. With the exception of some swelling around his incision about a month afterwards, his recovery went smoothly in the weeks following his hospital stay.

Worried about his right hip, Childrey on January 25 placed a call to his surgeon's practice in Hampton Roads; he scheduled an appointment there for February 10. He had called them about two weeks prior, when he had noticed some swelling on his incision. Over the phone, a nurse explained that swelling was normal, and if he squeezed the scar, it would emit the fluid to eradicate the swelling. Trusting the nurse's orders, Childrey had done as he was told, and the swelling went away.

"Looking back, I should have known better," said Childrey. "I'd been feeling badly for weeks, which for someone who is rarely sick, is not normal. Because my doctor was in Hampton Roads, and I was in Richmond, I relied on a phone call and took medical advice for the swelling over the phone, because the office assured me I did not need to come in."

Still experiencing flu-like symptoms on February 10, Childrey made the two-hour trip to Hampton Roads for his scheduled appointment. He was attended by a physician's assistant, who ordered X-rays of his right hip. Childrey's girlfriend, who accompanied him to the appointment, asked if there could be an infection, but the PA explained that the X-ray showed no infection and that the hip pain Childrey was feeling was from the IT band, which was not out of the ordinary. The PA gave him a shot of cortisone for the hip pain, and Childrey went home.

By February 20, Childrey didn't feel well enough to get out of bed. He couldn't continue to work from his home office as a merchant account services broker. Feeling feverish and still experiencing flu-like symptoms, and now with pain in his left hip, Childrey went to Patient First. His temperature registered at 104.7; immediately, he was sent in an ambulance to Henrico Doctor's Hospital on Forest Avenue.

What is TeachBack?

- A research-based health literacy intervention that improves patient-provider communications and improves patient outcomes
- Ensures health care providers are explaining information clearly to patients
- Asks a patient (or caregiver) to explain in their own words what they need to know
- Checks for understanding and if needed, requires providers to re-explain the information to the patient, and check again for understanding

Tips for using Teach-back effectively

1. Use a caring tone of voice and attitude.
2. Display comfortable body language and make eye contact.
3. Use plain language.
4. Ask the patient to explain back, using their own words.
5. Avoid asking questions that can be answered with a simple yes or no.
6. Emphasize that the responsibility to explain clearly is on you, the provider.
7. If the patient is not able to teach-back correctly, explain again and re-check
8. Use reader-friendly print materials to support learning.

See more at http://www.teachbacktraining.org/

At the hospital, he was treated for a fever. He complained about the pain in his left hip. Back in 2000, Childrey had suffered an accident, requiring a posterior hip replacement in his left hip, but the hip had healed properly, like new. The hospital x-rayed the left hip; he was told the hip looked fine.

"I was feeling so sick that I did not have the energy to question the ER's response, nor did I ask them to further pursue the hip pain," said Childrey. He was discharged around 3 a.m. and was instructed to take Tylenol, and the ER specialists assured him his fever would break within 12 to 24 hours.

Three days later, Childrey had become delirious from fever. His entire left leg was now hurting, and he couldn't get out of bed. He was transported by ambulance, on a stretcher, to Henrico Doctor's Hospital's Parham Road campus.

This time, the medical team understood that Childrey could have more than just a fever. By now, Childrey's entire left leg was sore to touch. They immediately ordered a blood test and X-ray. The blood test showed a bacterial infection, and Childrey immediately was given antibiotics through an IV. Childrey was diagnosed with sepsis, a blood infection resulting from his anterior hip replacement surgery. The infection had found its way to Childrey's other leg, which contained a titanium prosthesis inserted from the posterior hip replacement in 2000.

According to the Centers for Disease Control and Prevention (CDC), sepsis affects more than 800,000 Americans annually and is the ninth-leading cause of disease-related deaths. Sepsis can happen in response to an infection and can quickly become life-threatening. It is very difficult to predict, diagnose and treat. Common symptoms include fever, chills, rapid breathing and heart rate, rash, confusion and disorientation. The most common cause of sepsis after surgery is infection, which is what happened to Childrey. Patients who develop sepsis have an increased risk of complications or death, and they are left with higher healthcare costs and longer treatment.

The Agency for Healthcare Research and Quality lists sepsis as the most expensive condition treated in U.S. hospitals, costing more than $20 billion in 2011. Recently, the CDC has begun projects specifically focused on sepsis prevention to gain better understanding of the factors that contribute to this infection, enhance prevention strategies and save lives. The CDC is working to implement strategies to increase sepsis awareness among the public, healthcare providers and healthcare facilities.

How VHQC can help

As Virginia's Medicare quality improvement organization (QIO), VHQC equips healthcare professionals with the educational tools and training to address a wide range of quality challenges, including preventing infections. VHQC convenes providers in collaborative learning networks to share knowledge and best practices for delivering evidence-based, patient-centered care. This includes healthcare-acquired infections (HAI).

"Patients who enter and leave a provider's care often feel overwhelmed by the paperwork of instructions handed to them, and they often don't hear or remember everything," noted Deborah Smith, MLT(ASCP), BSN, CIC, infection prevention area manager, VHQC. "It is the responsibility of providers to ensure that patients and their caregivers understand the condition, as well as treatment and risks once they leave the provider's care."

Smith is a proponent of Teach-back, a research-based health literacy intervention that improves patient-provider communication and patient health outcomes. Teach-back is an easy method for providers to ensure that they are explaining information clearly to their patients.

"Providers need to remember they should not just tell patients what they need to know," said Smith. "Instead, they should ask the patient or their caregiver to repeat or explain, in their own words, what they need to know or do. It's a great way to check for understanding and, if needed, the provider can re-explain the information and check again."

In supporting the goals set forth by the Department of Health and Human Services' National Quality Strategy, VHQC ensures that providers who work with their QIO will contribute to a 40 percent national reduction in healthcare-acquired conditions, including sepsis. Through large-scale learning, QIOs, including VHQC, are accelerating the pace or change and rapidly spreading best practices.

As a patient and inexperienced in medical issues, Childrey relied on experts—his medical providers—for care. He was unaware that sepsis was a potential risk from hip replacement surgery. He did not associate a fever with a procedure he had undergone two months prior, from which he thought he was recovering nicely.

"Could I have asked for antibiotics? Could I have requested an appointment with my surgeon? Could I have asked for a blood test?" posed Childrey. "The answer to all these questions is yes. But I did not know, and what I didn't know could have been fatal."

Childrey's medical team at Henrico Doctor's, which included ER and ICU physicians, an orthopaedic surgeon from Advanced Orthopaedics and an infection specialist, quickly put a plan together. Childrey's fever broke after three days. However, the infection had now required an additional procedure and scope on Childrey's posterior hip. Fortunately, this hip was in good condition, so the existing prosthesis could be spared, and surgeons did a simple clean-up around it.

Following this and with his fever broken, Childrey felt ready to go home. Instead, the infectious disease specialist informed him that the infection had left Childrey extremely septic. He advised Childrey to have a medical directive and a will drawn up. Despite feeling better, Childrey was at risk of death.

The CDC estimates that between 28 and 50 percent of people die from sepsis—that is one U.S. patient every two minutes.

Childrey remained in the hospital for 18 days, with a pick line in his right arm to administer antibiotics. Upon discharge, Childrey was still weak. For the next 12 weeks, he remained at home with a three times daily intake of antibiotics administered through the pick line. Two times a week, home health care nurses visited him to draw blood. After three months, Childrey was well enough to have the pick line removed, and he could once again move around. He was prescribed an oral antibiotic for the next nine weeks. By late August, he was able to stop taking antibiotics.

"I went from being very physically fit to being so weak I couldn't even hold myself up," noted Childrey. "Once the infection was gone, I was fine physically. I slowly resumed exercise, guided at first by a physical therapist. The entire situation lasted nine months, with six months when I could not work. Fortunately, I had health insurance and some savings, so I stayed afloat financially."

Childrey today feels back to his normal self. He is at work full-time, and he is exercising daily at the level he was before his surgery. Thanks to probiotics and improved nutrition habits, he feels even healthier than before his surgery. He has regained 20 of the 45 pounds he lost due to the infection. He continues to see an infection specialist every six months, mainly for his own peace of mind.

He learned important lessons along the way.

"If you're not feeling right, you have to question it," he said. "Now I know that despite having a successful surgery and a top-rated surgeon I trusted, I was still susceptible to infection. I now know what the warning signs are because I had them. I didn't know that I could have asked for blood tests, which would have shown the infection. And even though I was walking well and progressing in my recovery from hip replacement surgery, I was still at risk of infection. My body was still healing."

Childrey believes his providers should have done more.

"My surgeon has a national reputation for success in this type of surgery, and that is why I chose him, despite being two hours away. He was completely professional, and I had a good experience and outcome with the surgery. I have and will continue to recommend him to anyone needing this procedure.

"The disconnect fell not from the surgical procedure itself, but from the lack of education I was given on possible complications from this surgery," continued Childrey. "I later studied up on sepsis and learned that it is a leading risk factor from hip replacement surgery. But as a patient undergoing a hip replacement, I was not made aware of this. I did not know to look for symptoms such as swelling, fever and body pain."

Childrey also feels that his provider in Hampton Roads should not have tried to diagnose his swelling over the phone, sight unseen. Without looking at it or running a blood test, the provider told Childrey the swelling was "normal" and advised him to squeeze the pus out himself. Childrey did know enough to question their advice, and he trusted his provider. Instead, he should have asked them to look at it.

"With modern technology today, I could easily have emailed them a picture of the swollen incision, but they did not ask me for this. Instead, I followed and trusted their advice, sight unseen, by phone and not in person."

According to The Sepsis Alliance, the most common cause of sepsis after surgery is infection, which includes infection of the incision where the surgeon opened to perform the procedure. Patients and providers alike need to monitor the incision, watching it for signs of infection, including:

- Increasing redness around the incision
- Pus or other fluid coming from the incision
- Warmer than usual skin around the incision
- Increased pain around the incision
- Fever
- Fatigue