

Hidden Hercules

Actor Kevin Sorbo reveals his secret battle with stroke. BY LINDA CHILDERS

n the iconic television show Hercules, actor Kevin Sorbo played the title role. His portrayal of the muscle-bound demigod was so convincing that many viewers came to associate Sorbo with his on-screen persona. Almost no one knew that Sorbo had suffered a series of strokes during the course of filming the popular series, which aired from 1994 to 1999.

This month, for the first time, the 52-year-old actor reveals the story behind his health crisis and recovery to Neurology Now and in his new book, True Strength: My Journey from Hercules to Mere Mortal and How Nearly Dying Saved My Life (October 2011, De Capo Press).

STRANGE SENSATIONS

Sorbo, who grew up in Minnesota, played football, baseball, and basketball in high school and college. As an adult, he worked out regularly at the gym and completed his own fights and stunts on the set of Hercules. It wasn't until the summer of 1997, at the age of 38, that his health took a bizarre and unexpected turn. Out of the blue, he began experiencing troubling symptoms in his left arm and hand, including intermittent pain, aching, tingling, and cold sensations.

"At the time, I was promoting the feature film Kull the Conqueror. I had several doctors on my publicity tour check me out, but they didn't believe it was anything serious," Sorbo recalls. "I even had what seemed like a rational explanation, having recently injured my ulnar nerve—the funny bone."

Satisfied that his symptoms were benign and would soon pass, Sorbo continued his strenuous workouts until one day, while lifting weights, he felt a searing pain shoot down his left shoulder. Thinking he may have suffered a strain, he made a same-day appointment with his longtime chiropractor.

"After an examination, he told me I had a lot of tightness in



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my neck and shoulder," Sorbo says. "Then he cracked my neck, which he had never done before, saying he felt the manipulation would help alleviate some of the tension."

SORBO'S ANEURYSM AND STROKES

Driving home, Sorbo began to experience blurry vision, dizziness, and buzzing in his head. He decided to sleep it off. But the next morning, his speech was slurred and he could barely walk. (See box, "The Signs of Stroke," page 79.) His fiancée, actress Sam Jenkins, took him to the hospital, and after a flurry of tests, doctors determined he had severe disruption of blood flow to his lower arm caused by an aneurysm in an artery near his shoulder. An aneurysm is an abnormal widening or ballooning of a portion of an artery due to weakness in that artery's wall. (See box, "Aneurysm: The Basics.")

"Apparently, the aneurysm had been producing blood clots for some time. I had blockages all down my arm that were making my fingers cold, tingly, and numb," Sorbo remembers.

Franklin Moser, M.D., a neurologist at Cedars-Sinai Medical Center in Los Angeles, told Sorbo that of the two main arteries that feed the hand, one of his was completely blocked. Dr. Moser scheduled a surgical procedure where an angiogram tube would be used to insert platinum coils around Sorbo's aneurysm.

"He explained the blood would then clot around the coils and adhere to the walls of the aneurysm, effectively neutralizing it," Sorbo recalls. "I was told that within several weeks the aneurysm would be side-lined or 'clotted off.' The coil clots would form a new arterial wall that would allow blood to flow through the area normally."

Although not a conventional treatment for a shoulder aneurysm, Dr. Moser explained that it was a less invasive procedure, Sorbo says.

Only after the procedure would MRI tests show that Sorbo had suffered three distinct strokes, accounting for his dizziness and vision loss. One of his other doctors suggested that Sorbo's clots may have traveled in reverse, toward his brain. However, the precise cause of his strokes remains unknown.

"I was told clots don't typically travel 'upstream'—in reverse to the brain—so my doctors were unsure whether the aneurysm was related to the strokes," Sorbo says. "I began to wonder whether having my neck cracked had somehow exacerbated my condition."

Sorbo's doctors considered his experience a medical anomaly. They told him that someone of his age and physical health had about a one in seventy-five million chance of experiencing both an aneurysm and strokes.

Aneurysm: The Basics

he most common aneurysm that neurologists see is a saccular cerebral aneurysm, in which a weak or thin spot on a blood vessel in the brain balloons out, forming a tiny sac or bubble off the side of an artery that then fills with blood," Dr. Brown says. "A brain aneurysm can leak or rupture, causing bleeding into the brain. This is known as a hemorrhagic stroke."

Although many aneurysms do not have a specific cause, the various types of aneurysms that occur in the brain can sometimes be caused by:

- Certain genetic disorders
- ► High blood pressure
- ► Cigarette smoking
- ► Atherosclerosis, a condition in which an artery wall thickens as a result of the accumulation of fatty materials such as cholesterol
- ► Head injury
- ► Infection

Aneurysms can also occur in the aorta (the main artery that carries oxygen-rich blood from the heart to the body) and in other arteries of the body. Having an aneurysm in the shoulder, as in the case of Kevin Sorbo, is uncommon.

The National Institute of Neurological Disorders and Strokes (ninds.nih.gov) places the incidence of reported ruptured aneurysm at about 10 in every 100,000 persons per year (about 27,000 individuals per year in the U.S.), most commonly in people between ages 30 and 60 years. Possible risk factors for rupture include hypertension, alcohol abuse, drug abuse (particularly cocaine), and smoking.

"Most cerebral aneurysms do not show symptoms until they either become very large or burst," Dr. Kirshner says. "If the aneurysm does rupture, patients report having the worst headache of their life as well as the sudden onset of neck pain and stiffness."

Signs that a cerebral aneurysm has burst:

- ► Headache
- Neck pain and stiffness
- ► Nausea and vomiting
- ▶ Drooping eyelid
- Sensitivity to light
- ► Change in mental status or level of awareness
- Seizures

"People who experience the 'worst headache,' especially combined with these other symptoms, need to get prompt medical attention," Dr. Kirshner says.

"Prompt medical attention for patients with a cerebral aneurysm that has burst, or with a stroke, leads to a better outcome," Dr. Kirshner says. The most effective therapies for blocked-vessel (ischemic) stroke are clot-busting drugs such as tPA. A stroke needs to be treated as soon as possible and no more than 4.5 hours after stroke onset to be be eligible for intravenous tPA.

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DID CHIROPRACTIC ADJUSTMENT PLAY A ROLE?

Sorbo didn't have any of the risk factors for stroke, which include high blood pressure, high cholesterol, smoking, diabetes, obesity, a family history of stroke, drug use, or cardiovascular disease. Since his symptoms first appeared immediately after having his neck cracked, many of his doctors believed that the chiropractic adjustment, combined with his existing aneurysm, could have triggered his strokes.

While considered rare, there have been documented cases of strokes caused by chiropractic neck manipulation, says Howard

Kirshner, M.D. professor and vice chairman of the department of neurology at Vanderbilt University Medical Center, director of the Vanderbilt Stroke Center in Nashville, TN, and a Fellow of the AAN.

"Chiropractic manipulation of the neck carries the risk of tearing the vertebral artery that leads to the brain, thereby causing stroke or transient isch-

emic attack," Dr. Kirshner says. "Although the risk is low, it does happen, and physicians and patients should be aware of spinal manipulation therapy as a rare but potential risk factor for stroke." (Transient ischemic attack, or TIA, is when blood flow to a part of the brain stops for a brief period of time. A person will have strokelike symptoms for up to one to two hours. After a TIA, the blockage breaks up quickly

and dissolves. And unlike a stroke, a TIA does not cause brain tissue to die.)

A 2003 study in the American Academy of Neurology's journal *Neurology* confirmed the connection between cervical manipulation and stroke. Wade S. Smith, M.D., Ph.D., director of the Neurovascular Service at the University of California at San Francisco and an AAN member, found that patients under age 60 who had strokes from tears in the vertebral artery were six times more likely to have had spinal manipulative therapy in the 30

days prior to their stroke than patients who had strokes from other causes. The patients tended to be otherwise healthier than most stroke patients, lacking risk factors such as diabetes, high blood pressure, and atherosclerosis, a condition in which an artery wall thickens as a result of the accumulation of fatty materials such as cholesterol.

"The number of chiropractic manipulations performed in the United States each year is in the millions, and the incidence of stroke from all causes is only 10 per 100,000 in this patient population," Dr. Smith says. "Still, patients and physicians need to realize that a significant increase in neck pain or neurologic symptoms within 30 days following spinal manipulative therapy warrants immediate medical evaluation. "

Dr. Smith recommends that physicians who see patients with the neurologic symptoms of stroke or TIA—particularly younger patients—should be alert to the possibility that dissection is the cause. Likewise, he said, chiropractic practitioners performing spinal manipulative therapy should warn patients of the risk of tearing the vertebral artery.

"I encourage patients to discuss with their chiropractor the types of spinal manipulations that are practiced and whether they pose a risk of stroke," Dr. Smith says.

STRENGTH & SOUL

Sorbo has moved beyond *Hercules* into movies, including this year's *Soul Surfer*, and beyond illness with his new memoir, *True Strength*.



A TEST OF INNER STRENGTH

Weeks after being released from the hospital, Sor-

bo experienced continuing vision problems and overwhelming fatigue. And on his first day back on the set of *Hercules*, he experienced an anxiety attack.

"Anxiety is a common after-effect in a stroke patient," says Dr. Kirshner. "Symptoms can include headaches, stomach problems, feeling dizzy, sweating, and breathlessness or palpitations. Doctors can confirm that post-stroke symptoms are

anxiety-related and help patients to obtain treatment through medications and psychotherapy."

Hercules was the most-watched television show at the time, and Sorbo's production studio carefully concealed the severity of his condition by bringing on guest stars and rewriting scripts to work around the actor's limitations.

"I felt like I had been transformed overnight from a youthful, carefree jock into someone who needed to grasp the backs of chairs and counters

for an arduous five-yard trip to the bathroom," Sorbo says.

His three strokes left him with dizziness, nausea, and weakness in his left side, yet his doctors continued to assure him he would probably see significant health improvements within three months.

Sorbo started taking walks with his fiancée, Sam, in early mornings, venturing further each day. His primary care physician, Robert Huizenga, M.D., also prescribed physical therapy at a rehabilitation center, where Sorbo tried to push his physical limitations in an effort to speed up his recovery. His therapy



ALWAYS AT HIS SIDE

Sorbo's wife Sam convinced him to try psychotherapy to help him cope with the anxiety and depression he experienced after his strokes.

Sorbo found he was sensitive to many of the medications' side effects, and he quit taking them.

"Depression is a very common yet relatively undiagnosed after-effect of having a stroke," Dr. Brown says. "Depression and anxiety, which often occur together, are very treatable symptoms. They can typically be improved through medication or a combination of psychotherapy and medication."

Sorbo admits that psychotherapy helped him cope with his illness more positively, including the fact that his recovery period was taking much longer than his doctors had anticipated. He also learned that his feelings of anxiety and depression were a natural response to the psychological trauma of stroke, and he found some relief through acupuncture treatments.

"As a result of working with an acupuncturist, I improved dramatically," Sorbo says. "My headaches and dizziness were less severe and more manageable as well."

AN EVERYDAY KIND OF HERO

Today, Sorbo has regained his health, although he still experiences residual arm pain from the circulation loss and nerve damage. Two post-stroke symptoms—the occasional migraine and a 10-percent blind spot with his vision—continue to affect him.

"Headaches are common after strokes, and may feel migraine-like because of new circulatory pathways," says Dr. Kirshner. "Also, tears in the vertebral artery often cause neck and shoulder pain and headache. Vision loss after stroke is often permanent if an area of the brain called the occipital cortex is damaged."

The father of three young children, Sorbo has resumed an active lifestyle. He has received critical acclaim for his role in the recent film *Soul Surfer*; in addition, he has several movies in post-production and is working on a television pilot. In 2010, Sorbo starred in *What If*, nominated for Best Family Movie of the Year 2011 by the Movieguide Awards. Sorbo also received the Movieguide Award for Most Inspirational Performance of the Year for his role in the movie.

The actor credits his recovery to his wife, his strong religious faith, and his determination not to let his health problems get the best of him. He hopes that by sharing his story, he will inspire others who have suffered from aneurysm or stroke.

"My illness made me special in a way that I never wanted nor expected," Sorbo says. "I'm not Hercules; I'm a mere mortal with human limitations and problems. But I am determined to not behave like a victim anymore." And that can take an extraordinary kind of strength.

included balance board exercises and ball tosses to improve his reflexes and coordination. A year after his strokes, he married Sam. She had stood by his side through the entire ordeal.

Still, his progress inched along, which increased his frustration. Sorbo's hours on the set of *Hercules* were limited, and even the simplest of filming tasks proved challenging. Used to working 12-hour days, the actor was now lucky to put in a couple of hours on set.

"A patient's recovery after a stroke or aneurysm can vary quite a bit, based on a number of factors—for example, the patient's age, overall health, and how much brain tissue was damaged," says Robert Brown, M.D., chair of the neurology department at the Mayo Clinic in Rochester, MN, and a Fellow of the AAN. "And the length of recovery can vary dramatically on a case by case basis."

The National Institute of Neurological Disorders and Stroke notes that for some stroke survivors, rehabilitation is an ongoing process and can involve working with specialists for months or even years after the stroke.

"I went through two years of hell before I began to feel like myself again," Sorbo says. "I was depressed and frustrated and had a bad attitude."

In addition to regaining his health through physical rehab, Sam convinced her husband to address the emotional aspects of his condition through psychotherapy. While doctors had prescribed different anti-anxiety and antidepressant medication,