

Brown Recluse Spider Bite Treated Successfully with HBOT

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Eight years ago, Sara Street didn't know if she would ever see again. The 20-year-old woman was lying in bed when she was bitten by a brown recluse. "I saw it on my shirt and I just grabbed it and threw it," she said. "I didn't even realize at the time I had been bitten. I never felt it at all." But by morning not only was her eye red, watery and swollen, the entire right side of her face from forehead to chin was completely numb. "I found the spider on the floor where I'd thrown it and recognized it was a brown recluse," Street said. "That's when I really started to get scared because I've seen some horrible scars on people who have been bitten before." According to arachnidologists, the venom of a brown recluse spider is extremely poisonous, even more potent than a rattlesnake's venom. The amount of venom injected is very small but it is extremely toxic to cells and tissues. Once released into the victim's skin, the venom destroys cell membranes, leading to the breakdown of skin, fat, and blood vessels. This process leads to eventual tissue death in the areas surrounding the bite. "All I could think about was having this giant hole in my face where my eye was supposed to be and not being able to see," Street said. Her stepmother took her to the emergency room, where she spent hours being examined by several doctors. "At first they looked at the spider and didn't think it was a brown recluse," Street said. "One after the other they kept coming in my room and looking at my face, and looking again. But when it kept getting worse, they finally decided it must be a brown recluse. "That's when Dr. (David) Posey told us I needed to go to Baptist Hospital," she continued. "He told me that a hyperbaric chamber was the only way my eye could be saved." Hyperbaric oxygen therapy, the use of oxygen under pressure, has been used to assist wound healing for more than 40 years. Patients are placed in a chamber to receive the therapy. Street joked that it looked like a giant coffin. "That coffin saved my sight," she said. But now, someone with Street's type of wound won't have to travel to Jonesboro or Little Rock for treatment. The wound center at White River Medical Center in Batesville has recently begun to offer hyperbaric oxygen therapy for patients who qualify. According to statistics, oxygen is one of the most powerful agents available to modern medicine. More than five million Americans suffer from chronic open wounds that can become seriously infected and in some cases, require amputation. Most complications are a result of limited blood flow to the area which prevents healing. The treatments increase circulation and encourage the growth of healthy tissue. "We're really fortunate to have this therapy available in the Batesville area," said Tami Holloway, registered nurse and director of the Hyperbaric Wound Center at WRMC. "There are only a few other facilities in the state that offer it." **The hyperbaric chamber** works by completely surrounding the patient with 100 percent oxygen at above-normal atmospheric pressure. This increases the amount of oxygen in the patient's blood and, in the case of wounds, allows red blood cells to pass more easily through the plasma into the wound to heal it from the inside out. Simply put, the oxygen is food for the cells. "It offers the possibility of healing chronic wounds that have, in the past, been unresponsive to more traditional therapy," Holloway said. Still, only 1 percent of the patients they see at the wound clinic will actually go into the chambers. "The numbers are like maybe one in 100," Holloway said. "Because it really is a commitment. They have to be here Monday through Friday every single day, and it's a two-hour treatment each time. A lot of patients, especially the elderly, just can't do that," she said. But for some, like Street, the commitment would be worth it no matter what the inconvenience. "I only had to do it for one day so it wasn't bad for me," she said. "But the number of days wouldn't have mattered as long as it saved my eye. ... I'm **living proof** of what those chambers can do."