

## **Valorie's Story– Arteriovenous Malformation (AVM) Story**

In February 1969, Valorie's arteriovenous malformation (AVM) bled for the first time. She felt extreme pain on the back of her neck, her body shook with spasms for about an hour and the right side of her body went numb. Valorie's parents thought she had thrown out a vertebra in her back.

After several days with no improvement Valorie's parents took her to see a chiropractor. The chiropractor suggested they see a neurologist. On Valorie's 13th birthday she checked into the hospital and was put into a traction device to relieve pressure on her skeletal system. In the next week Valorie was given a spinal tap, which showed bleeding in her spinal cord, so the doctors suggested exploratory surgery. The doctors believed Valorie's right side would be paralyzed for life. Valorie's parents rejected exploratory surgery and took her home. Over the course of a year she recovered from the bleed and tried to live as normal of a life as possible, always with a dark cloud of uncertainty hanging over her.



In March 1987, at age 31, Valorie's AVM bled for a second time. She was playing with her one-year-old daughter in the front yard when she felt a familiar stabbing on the back of her neck. She quickly called her family for help and laid down on the couch while her right side, once again, fell asleep. By this time technology had advanced and, once at the hospital, she was given an MRI. The doctors placed a cervical collar on her and put her on a steroid regimen. They said she had an inoperable AVM inside her spinal cord at C2 and C3 of her cervical spine.

Valorie was told that if they attempted to remove the AVM the surgery would leave her paralyzed for life. She was told there was nothing they could do for a cure and that she would not regain use of her right side. She was advised not to get pregnant again, to keep her blood pressure down, and to avoid stress.

For the next eight years Valorie lived in pain and her right side never fully recovered from the loss of sensation. She had constant headaches and an ache in her neck. She returned to Stanford Hospital as instructed for check ups, MRIs and angiograms.

In May of 1996, at age 40, Valorie had a third bleed. Like before, she experienced the same symptoms, was given the same tests and told the same diagnosis. Nothing could be done.

While attending a meeting to discuss difficult and rare cases, John Adler Jr., M.D. viewed Valorie's test results. For the first time in her life Valorie was offered a treatment for her AVM. Doctors told her about the CyberKnife<sup>®</sup> Robotic Radiosurgery System and its non-invasive treatment, and assured her that as soon as their System was up and running they would treat her AVM.

The day finally came. On July 3, 1997, the doctors at Stanford began preparing for Valorie's surgery. "My experience with the CyberKnife was awesome," said Valorie.

Valorie liked being able to watch the CyberKnife System at work. She didn't feel the radiation at all and the time passed by quickly. Her treatment was completed in just a few outpatient visits and she was able to get back to her daily activities right afterward.

Valorie took it easy the next three years and experienced no side effects from her treatment. In August 2000, her MRI and angiogram showed 75 percent shrinkage in her AVM. The CyberKnife radiosurgery had worked but she still needed to get rid of that last 25 percent.

The following month Valorie underwent a second CyberKnife treatment. Valorie felt completely confident in the team at Stanford and was grateful that the CyberKnife System was allowing her to live a normal life without fear of paralysis.

It's been eleven years since Valorie's first CyberKnife treatment, and eight years since her second treatment and she is doing great. Her follow-up angiogram showed a huge change in her spinal cord AVM. The shrinkage of the AVM has allowed her spinal cord to move back into a more normal position and the smallest and most dangerous feeder veins that were susceptible to bleeds are now gone.