

'He saved my life'

SURGERY REVERSES
18 YEARS OF SYMPTOMS

For 18 years, Patricia Behnke lived with symptoms blamed on a severed nerve from a carotid artery procedure.

"All these years, half of my tongue, nose, right side of my face and esophagus had no feeling," the 73-year-old woman remembers. "I had to learn how to eat and swallow all over again."

She moved to Vancouver about three years ago, and early last year the symptoms began to get worse. Over a six-month period, she lost more and more feeling and function. "It got to where I couldn't even stir a cup of coffee," Behnke says. She fell frequently with no warning and was unable to raise herself up.

All of her symptoms pointed to a stroke, but to everyone's surprise a computerized tomography (CT) scan revealed a tumor in the lining of her brain. Behnke says a previous CT scan done in another community years ago never showed a tumor.

Behnke was referred to Ashok Modha, M.D., a neurosurgeon with Northwest Surgical Specialists/Rebound Neurosurgery. "When Dr. Modha saw the test results, he scheduled surgery right away," Behnke says. "He saved my life."

After removal of a benign but growing tumor, Behnke was happily surprised that all of the symptoms she had struggled with for 18 years were gone.

Behnke spent several days in the Inpatient Rehab unit, regaining, and in some instances, relearning, functions that had been lost or reduced over the years.

Dr. Modha says that patients with less aggressive tumors can expect to live a normal life.

"With all of my health problems over the years, I've been a patient in a lot of hospitals all over the country. I worked in a Portland hospital for 15 years," Behnke says. "I have had better care here at SWMC than I've ever had anywhere."



Another surprise Dr. Modha moved to Vancouver last year from one of the nation's premier cancer centers, Memorial Sloan Kettering Cancer Center in New York City. "Since my wife and I are new to the community, we are constantly meeting new people," Dr. Modha says. "People are always asking why a neurosurgeon like me would come to Vancouver.

"I am surprised that this community

doesn't realize we do everything here you would expect to find at any major medical center," Dr. Modha explains. "We have the same level of equipment and skills that are found at the medical schools and hospitals where I trained, except for Sloan

Kettering. But you would expect that in the mecca of cancer centers.

"SWMC will take another major step up the technology ladder," Dr. Modha adds, "when the new CyberKnife is installed this spring. That is currently only available at very few centers in the U.S., with only a handful on the West Coast."

Treating brain cancers Born in Kenya, Dr. Modha attended high school in Canada, medical school in Winnipeg and completed his residency in neurosurgery in Ottawa.

While in college, he did research using magnetic resonance imaging (MRI) scans. His mentors and those he worked with were either neurosurgeons or neurologists. In medical school, he gravitated toward working with neurosurgeons, observing and learning from them.

Most neurosurgery involves spinal surgery for back pain, disc herniation

and other spinal cord ailments. Dr. Modha was drawn to brain tumors. "I find it to be the most interesting thing in neurosurgery," he explains. "Brain tumor operations are the most rewarding and most interesting operations. They're very, very rewarding because you really get to help people."

Some brain tumors are curable. They can be removed and the patient can lead a normal life. Other brain tumors are not curable, but surgery can improve the patient's quality of life and make a big difference in survival. They are able to live longer with a better quality of life.

His interest in brain tumors led to a one-year neurosurgical fellowship in neuro-oncology (brain and spinal





Ashok Modha, M.D., is a neurosurgeon specializing in neuro-oncology. He is affiliated with Northwest Surgical Specialists/Rebound Neurosurgery. Dr. Modha came to Vancouver from Memorial Sloan Kettering Cancer Center in New York.

SWMC takes life-saving steps

SWMC will take another major step up when the new CyberKnife is installed, says Ashok Modha, M.D., a neurosurgeon with Northwest Surgical Specialists/Rebound Neurosurgery. It is currently only available at very few centers in the United States, with only a handful on the West Coast.

While the CyberKnife is an exciting new step, Dr. Modha says it is just one tool in the neurosurgery arsenal.

■ “My training enables me to do brain surgery with the **patient sedated but awake during surgery**,” Dr. Modha says. “If the tumor is located in an area of the brain that is very important to function, we can actually map out the brain in that area and take out the tumor in the safest way possible, reducing the chance of damaging brain functions.”

■ The **Stealth Neuronavigation System** allows precise mapping of a brain tumor for precise surgery. This enables neurosurgeons to also biopsy tumors that are located in deeper parts of the brain.

■ Using **ultrasound imaging** in the surgery suite enables real-time imaging during surgery. Only a few years ago, the surgeons and patients would have to wait until a follow-up magnetic resonance imaging (MRI) scan could be done to check for any leftover tumor. If a large amount of tumor was still present, the patient might have had to return to surgery. Today Dr. Modha says, “After we remove the tumor, we can use the ultrasound to see if there is any tumor tissue left. We can immediately remove any residual material, making the surgery much more successful.”

■ **Intraoperative neurodiagnostics**, or monitoring brain or spinal cord activity during surgery using electroencephalogram (EEG). An example of this technology is somatosensory evoked potentials (SSEP), where spinal cord nerve function can be monitored. “We have the ability to stimulate the brain and make arms and legs move. We call that intraoperative motor evoked potentials. These can be very helpful when we operate on spinal cord tumors. It makes the operation very safe and reduces the chance of giving the patient a spinal cord injury or paralysis.”

The best part of technology and advances in surgery is the lives they affect. “Even 10 years ago, patients with glioblastoma, the worst possible tumor that could be diagnosed, would have a survival of less than one year,” Dr. Modha says. “Now, with surgery, radiosurgery and all of the advanced treatments we can provide, some patients have been known to survive two to three years, with a better quality of life.”

tumors and cancers) at Memorial Sloan Kettering Memorial Cancer Center. “I surgically remove the tumor, and then I work with oncologists (cancer treatment specialists) to evaluate the next steps in treatment.”

Those next steps may include chemotherapy or radiation treatments, including the new CyberKnife capabilities.

Radiosurgery uses beams of radiation and has been available through gamma knife treatments. Gamma knife treatments are used for lesions, tumors or abnormalities in the brain. The CyberKnife is more versatile and can be used anywhere in the body.

The CyberKnife uses focused radiation beams concentrated on the tumor or structure being treated. It limits the

radiation delivered to normal tissue. Because targeting is so precise, it can even be used close to critical structures or to treat some tumors that cannot be treated by regular radiation therapy.

In addition to brain tumors, the CyberKnife is commonly used to treat lesions in the spine, liver and prostate. Research is developing protocols to use the technology on lungs, kidneys and other soft tissues in the body.

Dr. Modha says that patients with less aggressive tumors can expect to live a normal life.

“I am self sufficient and able to take care of myself,” says Behnke. And that’s the best reward Dr. Modha can imagine. ☺



Rebound classes

Brought to you by the health professionals at SWMC’s Rebound Rehabilitation Center.

JOINT REPLACEMENT
Knee: Jan. 12, 10 a.m., free
Health Education Center
Registration required

Everything you need to know about joint replacement before, during and after surgery. Presented by Rebound Orthopedics surgical staff and Rebound Rehabilitation physical therapists. To register, call **(360) 514-2190** or go to www.swmedicalcenter.com/classes.

RUNNERS’ CLINIC
Jan. 16, Feb. 6 and 20

5 to 6:30 p.m., \$135
Health Education Center
Clinic and follow-up visit, team rates available for 15 or more; registration required

An evaluation program aimed at improving running form, technique, strength and flexibility through an individualized assessment. FitRight Northwest will evaluate your running shoes. You must be able to run 20 minutes pain-free, be 14 years of age or older, and be injury-free. Call **(360) 696-5257** or visit www.swmedicalcenter.com/reboundprograms.

TREATING BACK PAIN
From Symptoms to Treatment
Feb. 7, 6 p.m., free
Health Education Center

Find out what to expect during diagnosis, treatment or therapy. Presented by Rebound Rehabilitation physical therapists.