Back in the Swing

As a physical therapist who helps patients recover from injury, Jeanette recognized that something was very wrong after she hurt her back on the job. Constant pain in her lower back and hip impacted her daily life. She couldn't exercise, she couldn't lift patients at work and, worst of all, she couldn't keep up with her three young, energetic children.

Jeanette, 34, knew exactly where to turn for help: Commonwealth Orthopaedics spine specialist Steven Hughes, MD. "I worked with him a lot in my job," she says. "He was always very involved and cared what was happening to his patients. I sensed he would treat me with that same level of consideration and attention."

Jeanette was right. At her first appointment, Dr. Hughes immediately diagnosed bilateral spondylolisthesis – a vertebra in her lumbar spine had slipped forward onto the vertebra below it, causing pain and nerve crowding in her lower back, hip and leg. When physical therapy and facet joint blocks failed to alleviate the pain, Jeanette opted for a spinal fusion.

"This procedure eliminates abnormal mobility in two or more vertebrae," Dr. Hughes explains. "The surgeon places bone grafts between the vertebrae as well as titanium rods and screws to hold the spine in good alignment while the bone grafts heal. Over time – typically four to six months – the bone graft fragments fuse into one solid unit."

Good candidates for spinal fusion are patients with stenosis (narrowing of the spine) or spondylolisthesis for whom conservative treatment, such as injections and physical therapy, have failed.

Commonwealth offers state-of-the-art, minimally invasive procedures that take a fraction of the ordinary surgical time. "The latest techniques use smaller incisions and cause less damage to surrounding tissue and muscles," says Commonwealth spine specialist Ronald Childs, MD, who is medical director of the Inova Spine Institute at Inova Fairfax Hospital and Chief of Orthopedic Spine Surgery. "There's less pain and bleeding, patients are up and walking soon after surgery, and overall recovery time is faster."

Jeanette and her two children enjoy a brisk walk.

Two of the most advanced techniques are transforaminal lumbar interbody fusion (TLIF) and extreme lateral interbody fusion (XLIF). During TLIF, surgeons approach the spine from the side of the spinal canal through a midline incision in the patient's back, sparing nerves and muscles. XLIF is performed through the patient's side, avoiding the major muscles of the back.

Returning each patient to a full, active lifestyle is priority one. "Our practice is at the forefront with ever-changing technologies and treatments that allow us to restore

performance and function," says Commonwealth surgeon Tushar Patel, MD, who specializes in spine surgery. "In all cases, we have just one overriding goal in mind, to help our patients get back to their lives. We evaluate patients carefully, as individuals, to determine the best course of action to achieve this."

After a couple of months of rehabilitation to restore range of motion, flexibility and core strength, Jeanette returned to her demanding job as a physical therapist. She resumed running and tennis soon after that. The constant ache in her hip is gone and she has the stamina to keep up with her kids – aged 6, 4 and 2 – lifting them onto the swings and monkey bars at the playground with ease.

"My entire experience at Commonwealth was excellent," she says. "From the minute I walked into Dr. Hughes' office, I felt he understood my story and treated me like a person, rather than just another patient. He only cared about getting me better and back to what I love."

Steven S. Hughes, MD, *graduated summa cum laude from the University of Rochester and completed his medical degree with honors from the University of Rochester School of Medicine. Dr. Hughes worked as a surgical intern at Bethesda Naval Hospital and was later honorably discharged after serving as a Commander in the United States Navy. Following his internship, he completed an orthopaedic surgery residency at Strong Memorial Hospital in Rochester and a fellowship in spinal surgery at Case Western Reserve Hospital.*

Ronald C. Childs, MD, *a Major in the United States Army Medical Corp, earned a BA in Psychobiology from Boston University before going on to complete his medical degree and orthopaedic surgery residency at Howard University. Dr. Childs then pursued additional training in Chicago where he completed a spine surgery fellowship program at Rush-Presbyterian -- St. Luke's Medical Center.*

Tushar Ch. Patel, MD, *earned his medical degree from the University of Pennsylvania in Philadelphia and completed his orthopaedic surgery residency at George Washington University Medical Center. He then went on to do a fellowship in Spinal Surgery at the Cleveland Clinic Foundation in Cleveland, Ohio.*

For full biographies and a complete directory of the physicians at Commonwealth Orthopaedics who perform these and other procedures visit our website at www.c-o-r.com.

Treating a Disabling Disorder: Complex Regional Pain Syndrome

Complex regional pain syndrome (CRPS) is a disorder of the peripheral nervous system that can cause severe pain, burning, skin discoloration, swelling and stiffness. Also known as reflex sympathetic dystrophy, CRPS can strike at any age and affects both men and women. Nobody knows exactly what causes this disabling condition, which is frequently triggered by tissue or nerve injury.

Early detection is key to effective treatment. CRPS symptoms include:

- Continuous burning or throbbing pain that worsens over time
- Joint stiffness, swelling and damage
- Changes in skin color or texture
- Hypersensitivity to cold and touch
- Muscle spasms or weakness
- Motor disability

The sooner these symptoms are recognized, the better the prognosis for a full functional recovery. But with no definitive diagnostic test, doctors must rely on bone scans, thermography (which measures skin temperature and blood flow), X-rays and MRI to help detect bone, nervous system and tissue changes.

The most common treatment for CRPS is physical or occupational therapy. Additionally, sympathetic nerve blocks may help ease specific symptoms. "Injection of an anesthetic to block pain fibers in the affected nerves may relieve pain in some patients," says Brett Robinson, MD, an anesthesiologist and pain management specialist at Commonwealth Orthopaedics. "By injecting local anesthesia with or without steroid medications in the area of these nerve bodies, the abnormal nerve impulses can be interrupted with the hope that, when the medicine wears off, the nerves will return to a more normal state." When symptoms are in a patient's upper extremities, the nerve block is injected into the neck. When symptoms are in the lower extremities, the nerve block is administered in the lumbar spine.

In most cases, patients receive a series of therapeutic blocks for the best possible response.

Brett M. Robinson, MD, *a native of New York City, earned a BA in Psychology from Yale University before going on to receive his medical degree from Tulane University. He then completed a rotational internship and an anesthesiology residency at the University of New Mexico, Department of Anesthesiology and Critical Care Medicine, in Albuquerque, New Mexico.*