

# Health & Wellness News

FALL 2009



## In this Issue

Health Tip:  
The Exercise Cure.....4

Procedure in Brief:  
Carpal Tunnel  
Release.....5

Health Care  
Calendar.....6

Resources.....7



Lahey's Nurses Achieve  
Magnet Recognition.®  
See page 8.

## Back in Action

### Innovative spinal procedure helps patient reach new heights

At first, Lyndy Burnham wasn't sure what hit him.

It was the summer of 2003, and Burnham, then age 44, went go-karting with his wife and two kids near their home in Stratham, N.H.

When Burnham pulled into a pit stop, he got what he calls a "nasty jar" from behind. "Someone in the car behind me mistook the accelerator for the brake pedal," says Burnham.

When he left the park, he was a little sore but didn't think much of it. Later that week, however, Burnham developed numbness and tingling in two fingers on his left hand, followed by terrible pain in his left forearm that worked its way through his elbow, up his tricep and into his shoulder. When pain medications failed to help, Burnham called his primary care doctor.

"Just three months before my accident, my doctor had a spinal fusion done at Lahey," says Burnham. "He said to me, 'I'll be happy to give you a referral anywhere you want to go, but I had extraordinary care and results at Lahey.'"

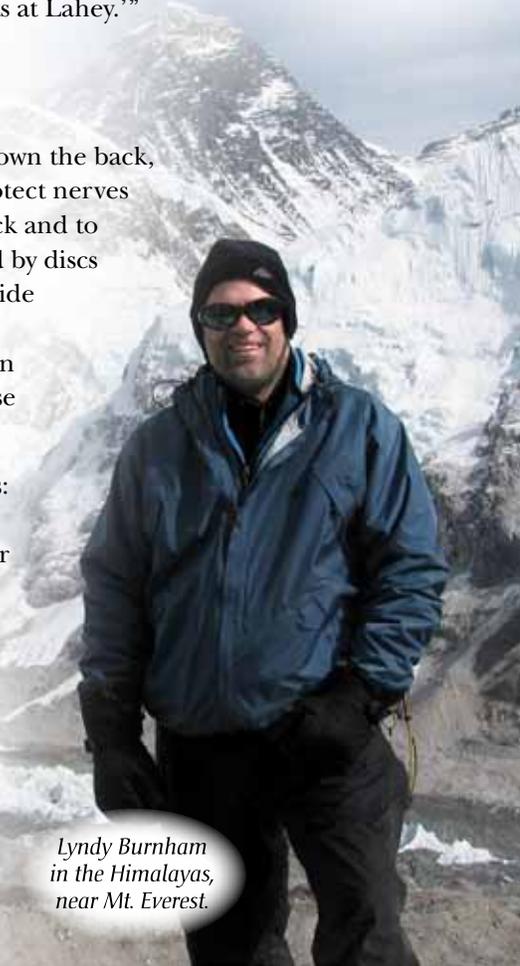
### Diagnosing the Problem

The bones (vertebrae) of the spinal column run down the back, connecting the skull to the pelvis. These bones protect nerves that come out of the brain and travel down the back and to the entire body. The spinal vertebrae are separated by discs filled with a soft, gelatinous substance, which provide cushioning to the spinal column. These discs may herniate (move out of place) or rupture from strain or trauma. The normal aging process can also cause the discs to start to degenerate.

The spinal column is divided into several segments: the cervical spine (the neck), the thoracic spine (the part of the back behind the chest), the lumbar spine (lower back), and the sacral spine (the part connected to the pelvis that does not move).

Burnham went to see Jeffrey E. Arle, MD, PhD, a neurosurgeon at Lahey. After examining Burnham and reviewing his MRI and other films, Arle diagnosed him with a cervical herniated disc.

*(continued on next page)*



Lyndy Burnham  
in the Himalayas,  
near Mt. Everest.

Although most herniated discs occur in the lower spine, about 8 percent occur in the cervical spine, where Burnham's injury was.

"One of the things that Mr. Burnham made clear to me right away," says Arle, "was that he was in training for his black belt in martial arts. Aside from the pain and weakness he was experiencing, this made him even more eager to fix the problem."

After describing the injury, Arle gave Burnham three different treatment options, including injections to provide temporary relief, if at all; a combination of medications; or a surgical procedure called an anterior cervical discectomy and fusion.

"He said to me, now think about what you want to do," says Burnham. "Based on my first consult with Dr. Arle, I was 100 percent confident and comfortable with his expertise, and his bedside manner."

An active person, Burnham had lost 90 percent of the strength in his left tricep. He could no longer do a push up, much less push open a door. "With that kind of weakness," explains Arle, "It was important to get the nerve decompressed sooner rather than later."

With this in mind, Burnham decided to have the surgery.

## The Road to Recovery

According to Arle, what makes the anterior cervical discectomy and fusion procedure unique is that the surgeon goes through the *front* of the neck, rather than the back. "People tend to think that the spine is in the back only, but really it's equidistant between the front and back," says Arle. He adds that going in through the front allows the surgeon to remove the entire disc.

After a small incision is made in the neck, the surgeon carefully removes the damaged disc. While some surgeons make the incision in the left side

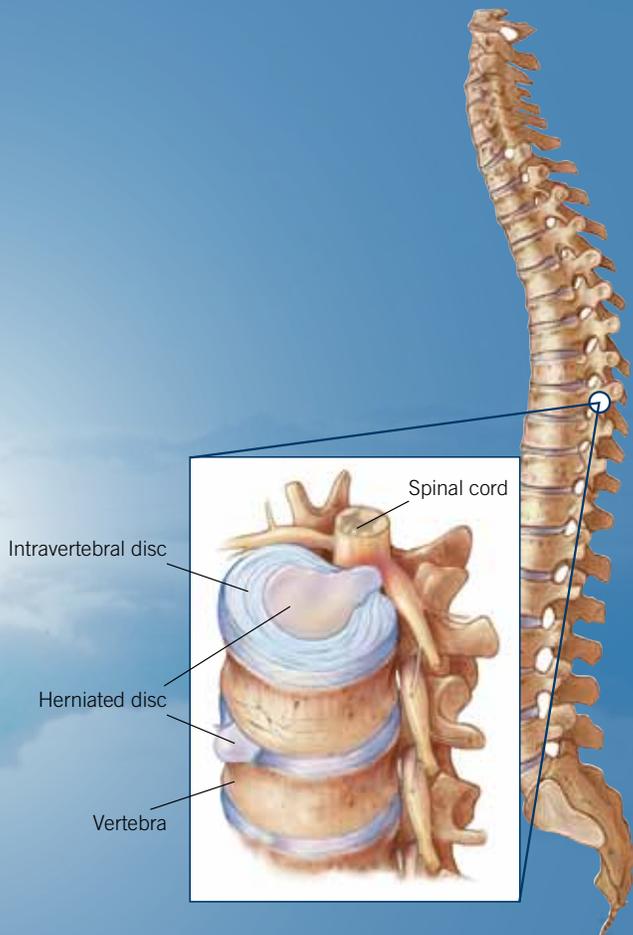
## LAHEY CLINIC'S SPINE CENTER

Lahey Clinic's Spine Center is a true multi-disciplinary effort to evaluate, diagnose and treat conditions affecting the spine. Team members include physicians and other health care professionals with broad expertise in specialties such as neurosurgery, orthopaedic surgery, physiatry, physical therapy, pain management, diagnostic radiology and interventional neuro-radiology. Together, these specialists work to develop individualized care plans for each patient depending on his or her needs.

The team performs detailed, comprehensive spinal evaluations to accurately diagnose each patient's condition. This diagnostic workup may include plain X-rays and/or advanced imaging studies, such as CT or MRI scans. Some of the more common disorders and conditions treated by member of Lahey's Spine Center include

- Congenital spinal disorders
- Degenerative disc disease
- Degenerative spinal disorders
- Disc herniations
- Fractures (spinal compression fractures)
- Low back pain
- Neck pain
- Spinal cord injuries
- Spinal stenosis
- Spinal tumors
- Sprains and strains
- Vascular malformations (AVMs)

Advanced surgical and nonsurgical treatment options are available. Depending on one's diagnosis, treatment may consist of surgery, including minimally invasive procedures; a rehabilitation program (for example, physical therapy); pain management techniques; or a combination of these therapies.



*Lahey Clinic offers consultations, surgery and physical therapy for spinal disorders at multiple Lahey practices and through our affiliated programs at Emerson Hospital in Concord and Winchester Hospital in Winchester. To schedule an appointment, call 781-744-5171 (Department of Neurosurgery).*

of the neck, Arle prefers to go through the right side, even when symptoms are on the opposite side of the body. Typically, the bones of the spine are then spread slightly apart and a bone graft taken either from the hip or from a cadaver is inserted in between the vertebrae to separate and hold them apart. In Burnham's case, however, Arle employed an innovative technique that uses the patient's own bone from the vertebra itself.

"How this works," says Arle, "is that we put a hollow cylinder of titanium between the vertebrae. The cylinder has holes in it, and is threaded, so it can be screwed into place securely. The bone then grows through the cylinder and fuses with the bone above and below it."

Burnham spent one night in the hospital and was given a soft neck brace to wear for six weeks. "It was a quiet time, my recovery. I read all of Dan Brown's novels," he says.

Aside from a little physical therapy in New Hampshire, Burnham didn't do much in the way of rehabilitation. "With this kind of injury," says Burnham, quoting Arle, "the best recovery comes from the least amount of activity."

Six or so months after surgery and with some modifications made for him, Burnham was able to take and pass his Tae Kwon Do certification. "I got my black belt, and this was key to me mentally. It was key in my recovery process. I knew I was going to be active again," he says.

About a year and half later, Burnham climbed Mount Kilimanjaro, and in 2008, he made it to the Base Camp at Mount Everest.

"These were lifelong dreams for me," says Burnham, who will be 50 years old this fall. "My accident could have been a turning point where I might have had to modify my lifestyle dramatically, but Lahey and Dr. Arle gave me a gift I can never repay."

To read more about the Spine Center's capabilities and staff, visit our Web site at [www.lahey.org/spine](http://www.lahey.org/spine).