

out-of-pocket for surgery. Evans says Yeung promised only 80 percent pain relief. "He actually got me to 95 percent," she says.

Three out of four Americans will suffer back pain, according to the Agency for Healthcare Research and Quality. And 80 percent of Angie's List members who responded to an online poll say they suffer back pain. Genetics play a role, as do aging and physically demanding jobs. But despite the prevalence of back pain, experts say it's among the least-understood topics in medicine. pain, 10 percent have sought surgery, and it's estimated doctors perform more than 1 million back procedures every year.

Surgeons from two board-certified specialties — orthopedics and neurology — are trained in spine surgery. "For the most part, there's not a lot of difference between them for spine care," says highly rated neurosurgeon Dr. Joseph Cheng of Vanderbilt University Medical Center in Nashville, Tenn. But, he says patients should make sure their surgeon specializes in spine surgery.

BACKBREAKING PAIN?

Before turning to spine surgery, talk to your doctor about options

by Matthew Brady

TABETHA EVANS SPENT her young adulthood rock climbing, body surfing, zip-lining, anything that promised an adrenaline rush. "If it looked like fun, I was ready to do it," says the Angie's List member now living in Casa Grande, Ariz.

Along the way, she ruptured two discs in her lower back. Painkillers and steroid shots helped blunt the pain, but a few times a year it would immobilize her — the final time in 2010 while bending down in a grocery store to pick up a can of tuna. "I got stuck, I couldn't move," she says, and knew she had to find a solution to her back problems. For her, the right choice was removal of the damaged parts of her two discs by highly rated orthopedic surgeon Dr. Anthony Yeung of Phoenix. She estimates she paid about \$400 "You see 12 specialists, you'll get 16 different opinions," says highly rated physical medicine specialist Dr. Heidi Prather of Washington University Orthopedics in St. Louis. "We don't understand it well."

Because of this, consumers must talk openly with multiple providers and ask questions. Treatment options include doing nothing at all — time heals most back pain, according to the National Institute of Neurological Disorders and Stroke — to physical therapy, chiropractic care and, ultimately, surgery. Of the Angie's List members polled who suffer back The majority of back pain involves the lower back, experts say, because the bones in the upper and middle back don't flex as much. Experts also separate lowback problems into two categories: symptoms involving only pain in the lower back, and symptoms involving pinched nerves indicated by pain, numbness or tingling in the legs, or dysfunction in the bladder or bowels.

"You really need to break it down into what the indications are," says

Photo by Byron Medina | Dr. Anthony Yeung removes part of a spinal disc that is pressing on his patient's nerves, causing back and leg pain.



Photo by Byron Medina | Dr. Anthony Yeung, 70, teaches surgeons worldwide his minimally invasive techniques. Yeung helped to greatly reduce member Tabetha Evans' back pain.

highly rated orthopedic surgeon Dr. William Abdu, medical director of the Spine Center at Dartmouth-Hitchcock Medical Center in Lebanon, N.H. He helped oversee the most comprehensive study to date comparing surgical and nonsurgical treatments of the three most common back conditions: disc herniation, degenerative disc disease and spinal stenosis — or narrowing of the spine.

If symptoms are related to nerve problems, he says, doctors have a high level of confidence in diagnosis and, on average, patients do much better with an operation. For back pain not involving pinched nerves, the diagnosis is less clear. How long to wait before seeing a doctor depends on the pain, Prather says: "If you can't work, you shouldn't wait."

Mary Keninitz began suffering low back pain in 2005 and sought out highly rated orthopedic surgeon Dr. Steven Hughes who, she says, diagnosed her with lumbar stenosis. "One disc was pushing forward, another was pushing back," says the Angie's List member of Alexandria, Va. "It was so painful." Hughes first prescribed physical therapy and pain medication. "He was not one to jump into surgery," she says.

When alternatives didn't work, Hughes performed a laminectomy on Keninitz, which removes part of the vertebra to relieve pressure on the nerve. "The relief was immediate and complete," she says. "I was cycling 48 days after the surgery." In hindsight, she says part of her wishes she'd had surgery sooner. "But it's probably good that I eliminated less-invasive alternatives," she says. Total out-ofpocket cost for the surgery was less than \$1,000, and Keninitz estimates she spent that same amount on medicine and alternatives.

Laminectomies and spinal fusions, where vertebrae are joined, are the most popular inpatient back procedures, according to AHRQ. Other procedures include disc replacement, foraminotomy where bone is removed from the vertebrae to widen space where nerves exit the spine, and discectomy that removes all or parts of a disc. Some surgeries include a combination of these procedures, which are typically covered by insurance, doctors say. However, some insurance providers consider disc replacement experimental and won't cover the cost.

Healthcare Blue Book estimates the fair market price for back surgery ranges from \$12,164 for laminectomies to \$46,429 for a simple fusion, including surgeon, anesthesiologist and facility fees. The fair price represents what a health provider typically accepts from insurance companies as full payment, which is substantially less than the billed amount.

Less invasive back techniques involve the same surgeries but

Behind the rise of spinal fusion

One back surgery trend alarms many experts: Spinal fusions have increased 105 percent from 2000 to 2009, according to the latest CDC numbers. While the surgery joins vertebrae together, some studies show success rates — reduction or elimination of pain as low as 47 percent.

"It's not the fusion operation that's bad," says orthopedic surgeon Dr. Eugene Carragee at highly rated Stanford University Medical Center. He says the problems are a result of doctors performing fusions on the wrong patients. The procedure can be helpful for those suffering spinal instability, or abnormal movement between vertebrae. Experts agree the term is vague, causing confusion over who's the best candidate.

"We all define instability differently," says Dr. William Abdu, medical director of the Spine Center at Dartmouth-Hitchcock Medical Center. Even if doctors had a clear definition, he adds, imaging still doesn't identify the source of the pain and doctors could choose the wrong surgery. "Patients are left with making a very important decision based on imperfect information," Abdu says.

A study published in the *Journal of the American Geriatrics Society* reveals much of the increase in fusion's popularity comes from older adults doing it in combination with laminectomy for spinal stenosis, or narrowing of the spine. Carragee points to improvements in surgical techniques and new medical devices. The surgeries escalated beginning in 1996 when the FDA approved the first "fusion cage," a new generation of surgical implants.

He says money is also a motivating factor. Doctors receive about four times more for a fusion than a laminectomy, which may be more suitable for patients without instability. with smaller incisions, and many patients can be back to normal activities much faster, says Dr. Zoher Ghogawala, neurosurgeon at the A-rated Lahey Clinic in Burlington, Mass. Evans, for example, had her surgery on a Tuesday and was back to work the following Monday. Recovery for more invasive techniques can take up to eight weeks.

Ghogawala wants to develop better studies to guide doctors on correct procedures. "We don't have clear-cut guidelines," he says. "Spinal surgery is a big deal, and most surgeons are good about cautioning patients [about risks]. Spinal surgery when appropriately prescribed has an enormous impact on quality of life."

Still, he and other experts recommend alternative options first like chiropractic care, yoga or physical therapy. In the absence of red flags that can include pain or numbness

"I was cycling 48 days after the surgery."

in the legs, time is the most conservative approach, Prather says.

When a doctor ordered an MRI, diagnosed a pinched nerve and recommended surgery, Jack Grossnickle of Crystal Lake, Ill., says he refused. Instead, he visited highly rated chiropractor Dr. Gregory Cook of Back on Your Feet. "I've never tried a chiropractor," Grossnickle says. "He took this little adjusting tool — a J tool. It snaps on the back. If someone had told me [it] would make my back feel better, I would have laughed in their face. It's amazing the difference." He went an average of three times a week for two months, reducing the frequency toward the end. Insurance covered care, but because Cook was out-ofnetwork each visit cost him \$50 for a total of \$750.

In most cases involving a pinched nerve, however, Cheng of Vanderbilt University Medical Center says surgery may be the first option. He compares it to a bad tooth that needs a root canal. "That is the only thing that's going to help," he says. Similarly, with pinched nerves, "Nonsurgical options don't have a long-lasting effect."

Disc herniations, however, require a different approach. "Most herniations improve by themselves within six weeks," he says. "The goal is to keep the patient comfortable." That goal is accomplished typically with medications and/or anti-inflammatories. Experts say most people over the age of 40 have disc degeneration or even herniated discs, and whether to operate comes down to a discussion with a doctor.

Experts recommend talking about surgery risk factors including leakage of spinal fluid, blood clots, and in the case of fusion, breakage of the hardware used to fuse the discs. Also ask the doctor how many



times they've performed the specific procedure. In general, surgeons who do the most of any type of procedure have the lowest complication rates. A study published in the June 2012 edition of the journal *Neurosurgery* found that the patients of very high volume back surgeons — more than 81 procedures in four years — had lower complication rates.

Surgeons may not be able to give an exact complication rate, but they can give you a ballpark, Cheng says. "I've been here 10 years and I do these types of cases X number of times a year. I've had one patient die, etc.," he says. "It's up to the patient to take that number and think about whether they want another opinion."

In the end, the patient should feel in control and well-informed, Abdu says. If a surgeon won't answer questions and explain the risks and benefits of surgery or alternatives Photo by Meredith Rizzo | Mary Keninitz of Alexandria, Va., underwent laminectomy surgery for back pain, a procedure that has since allowed her to live pain free and enjoy physical activity again.

to surgery, the patient should walk away. "The surgeon may be correct, but he or she must take the patient into consideration," he says. "The right choice is the one the doctor and patient choose together." Rarely does that choice need to be made in a hurry. "Ninety-seven percent of spine surgeries, you don't have to rush," Abdu says. "People have the time to become educated and make an informed choice."\$

> additional reporting by Gretchen Becker

Have you had a back surgery or used alternative providers to help with back pain? Tell us about it by submitting a report at angieslist.com.