

Back to Life

2013

GET BACK INTO GOLF & TENNIS

GRAB YOUR CLUBS & RACQUET
& LEARN STRETCHES THAT WILL
MAKE YOUR BACK MORE FLEXIBLE

SPINE SURGERY?

LEARN WHEN SYMPTOMS
CAN BECOME PERMANENT

SPINE THERAPISTS HELP
YOU GET ON THE BALL IN 2013



BACK TO GOLF



**GET BACK ON COURSE
WITH THESE TIPS FOR BAD BACKS**

If you've been told NOT to play golf again, there may be new hope for you!

Unfortunately, there is no shortage of well-intentioned doctors who will prescribe a passive approach to back pain: "stay in bed", "don't go to work", "quit playing golf", etc.

South Carolina Spine Center believes the key to recovery from back pain is movement. That's because when a person restricts activity they begin to add on pounds. Then they get heavier and become at more risk of future strain. The key is to break that cycle of disability by moving again, even with just walking, which is a great low impact exercise for back pain.

To get back to golf, South Caro-

The neurosurgeons at South Carolina Spine Center see a lot of back pain sufferers who've been told not to play golf. But by stopping activity they add on pounds. Then they get heavier and become at more risk of future strain.

lina Spine Center recommends starting with only nine holes at a time. Riding in the cart can be hard on a sore back. Instead, let your playing partner drive the clubs around while you walk some of the hole. If necessary, work up to nine holes by playing every other hole to start with until you feel comfortable with an entire nine. Then work up to 18. Playing twilight is less expensive and the pace is slower. The Spine Center provides the tips on these pages to back pain patients wanting to get back to golf in 2013.

Slow play? Perfect time for these golf stretches



STANDING EXTENSION

Right: Extension is a core exercise for many back problems, provided you haven't been diagnosed with stenosis. Hands on hips, lean backward, and hold for 5 seconds. Repeat 10 times slowly.



STANDING STRETCH

Above: With hands outstretched above your head, lean first to the right, hold for 3 seconds, then stretch to the left. Repeat several times.

The South Carolina Spine Center recommends these stretches for the golf course:

ROTATION

Above: Put a golf club across your back and rotate your trunk in both directions.

STANDING PIRIFORMIS

Right: Lean against a tree for support. Then raise your knee up, and across your body. Hold for 5 seconds and repeat with other leg.



STANDING FLEXION

Right: Bend at the waist, keeping legs straight and try to touch your toes. Hold for 5 seconds, and then return to standing position. You can alternate this with extension stretches.



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1

GET LOOSE. Do NOT jump start your swing on the first tee, and do not try to hack a long iron out of the rough on the first hole. Start some stretches before you leave home, and then leave about 20 minutes to warm up on the driving range.

2

STRETCH BETWEEN HOLES. Slow play is a great time to do the stretches shown above. Fred Couples, who has played pro golf for years with a bad back, frequently does the standing piriformis stretch while leaning against a tree.

3

ADAPT. Most putters can get the ball out of the hole and into your hand without having to bend over. You can also lengthen short irons to lessen the amount you bend at the waist. Others use a long "belly putter" to lessen back strain when putting.

4

GET A LESSON. The old "reverse C" finish position from the 1970s strains the back. Most pros today teach a finish position where the back is straight at the finish. Good form is easier on the spine.



Tennis is another fun way to stay in shape. It gets your heart rate up, and is a great sport for all-around conditioning. But if you have issues with your back, consider the following:

What type of back problem do you have? Disc or muscle strain?

There is a great difference in how tennis may affect you. Back strains can get better with special back exercises, and there can be a full recovery. But because discs don't fix themselves, you are typically trying to relieve the symptoms of the bad disc.

Spine therapists at the South Carolina Spine Center use exercises to move the disc around. If you use surgery, the surgeon is removing the damaged disc and may replace it with a fusion.

South Carolina Spine Center tends to see more complex patients than simple back strains. Many of these complex patients can have discogenic symptoms. That means they may have either a bulging or ruptured disc. Still, we're able to help many patients get over their back or neck pain symptoms non-surgically with a variety of options. This can include exercises or spinal injections that relieve inflammation around nerve roots.

Strengthen up with rotational exercises

Neurosurgeons at South Carolina Spine Center note that getting back into tennis involves a commitment on the part of the patient to strengthen core trunk muscles, because of all the trunk rotation during forehands and backhands, arching backward during serves and overheads, and stretching to reach low balls in a bent over position. All those things require a back that is fully recovered. The neurosurgeons say many back problems can respond to special spine exercises. If a person wants to get back into ten-

nis or golf, for example, we'll try some flexion exercises to see if any pain symptoms return. If they can do those without pain, then it can be time to pick up the racquet.

Part of that slow reintroduction into tennis might be to start with doubles tennis, rather than singles, to lessen the need for extreme court movement.

The service motion in tennis, as well as the overhead, requires the back to arch backward a little, and then rotate, which can be demanding on a bad back.

If you start back with recreational doubles, you can ask your fellow players if it's okay if your doubles partner serves all the games for your side. Or perhaps ask your partner to serve every other time for you. By skipping the serve, you can eliminate some of the

arching required in tennis.

The next thing the specialists at South Carolina Spine Center recommend is getting tennis lessons from a tennis pro. A lot of back problems stem from poor tennis mechanics. A tennis pro will have you generating power correctly with the correct mechanics — and your game will improve in the process.

Get back with a tennis pro

Dave Borelli, head coach of the Texas Christian University women's college tennis team, notes that strains



The South Carolina Spine Center located in Greenwood, South Carolina, combines board certified spine specialists with spine therapists.



and sprains can be common in tennis, especially as the game becomes more competitive. Borelli knows, since he's also worked with some of the top touring pros, including James Blake and Mardy Fish.

"The knees and shoulders take the brunt of the pounding on the hard courts," says Borelli. "But over time, the rotational stress on the trunk can simply wear out one's back. And that was the case with Andre Agassi, who had to quit the game because of dis-



abling back pain. Others like Sampras and Connors have also struggled at times with back strain."

Borelli recommends stretching and a slow warm up when starting up. "I'll have my players start by standing at the service line and hit balls to each other using just the service boxes. That improves eye-hand coordination and forces you to NOT hit it hard for the first five minutes. Then as your muscles loosen up, move out to the baselines, and then hit out."

"The great part of tennis," Borelli adds, "is that it keeps you in shape for your entire life. And it's an active way to enjoy your friendships."



Dave Borelli, college tennis coach, and former National Coach of the Year.

Test yourself

for warning signs with these HEEL / TOE drills

The dangerous aspect of a disc problem in the low back is that it can cause symptoms that aren't necessarily painful. A common symptom of a herniated disc is weakness that extends below the knee into the foot. Because there may not be radiating pain accompanying this weakness, the person may ignore the symptom which is a huge mistake. That's because if ignored, this weakness (called neurological deficit) can result in a permanent paralysis of these nerves that control the strength in the foot.

Consequently, any numbness or weakness in a foot, including the inability to raise the front of the foot (called footdrop) needs to be seen within 48 hours by a spine surgeon to prevent these symptoms from becoming permanent. Surgery may not necessarily be required, but this can be an indication that surgery may be needed to relieve pressure on the nerve roots extending out from the spinal cord. Here's how to test if you have invisible problems surfacing:

THE TOE TEST:
Try taking several jogging steps but only on your toes. This will test the strength of the front of your foot to support your body. If you have trouble with this drill, it is time to see a spine specialist within 48 hours.



THE HEEL TEST:
This time, try taking some small jogging steps with just your heels hitting the ground. This will test the ability of your leg to raise your toes as you step. If you can't manage this, it is time to see a spine specialist.



Should you

get back into tennis?

Non-surgical options and when it's time to consult with a spine surgeon

About 80% of back and neck pain symptoms can go away on their own with special exercises. That's the good news.

The bad news is that if you are in the other 20%, you need to get informed about how to manage your care. That's because it's very common for various spine care providers to be biased to the treatment to which they were trained. While surgeons may be biased toward using surgery as a quick way of repairing a damaged disc, non-surgeons can also be excessively biased to waiting and delaying surgical intervention for six months or more. The patient then becomes frustrated with constant, disabling pain.

Exploring your surgical options

Is it possible to wait too long to have surgery? Perhaps. Pain that radiates into a leg or arm can be addressed with watchful waiting, up to the point that the patient can't endure the discomfort any longer.

Watchful waiting should NOT be used when the symptom involves numbness, tingling or weakness in

a leg or arm, according to the team of fellowship-trained spine surgeons at South Carolina Spine Center. The surgeons at South Carolina Spine Center maintain that while the difference may seem subtle to the patient, it is extremely different. Weakness, numbness and tingling is a neurological sign that

the disc herniation may be causing permanent damage to the nerve root. If the patient doesn't address this quickly, that numbness or tingling in the foot or hand could become permanent.

Consequently — if you've been diagnosed with a herniated disc, and non-surgical options don't appear to be



working — it's a good idea to consult a spine surgeon to become educated on your surgical treatment options.

Even with radiating pain, waiting beyond six months may not be a good idea either. Some research in the spine community theorizes there may be a window of time where the disc responds best to surgery.

A nerve root can act like a garden hose. A herniated disc can press on the adjacent nerve root interrupting circulation, like a car parked on top of a garden hose lying in the driveway. The theory is that if you leave the car on that hose for six months, even after you move it, there may be a permanent crimp in the hose.

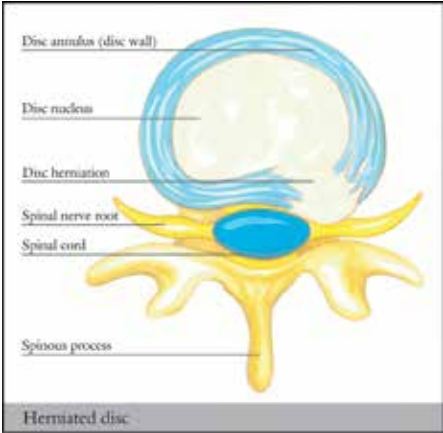
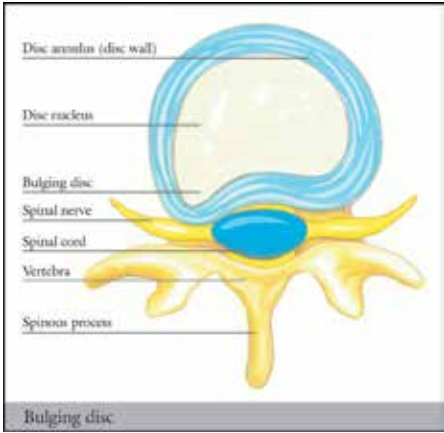
Consequently, watchful waiting may be okay for radiating pain but NOT for weakness, numbness or tingling. And waiting longer than six months with radiating pain may compromise how well eventual spine surgery will be at relieving symptoms.

Dealing with herniated discs

There are three main options for dealing with a diagnosis of a herniated disc.

1. Therapy: A herniated disc can cause painful pressure on the nearby nerves that branch off from the spinal cord. Many herniations occur in the back of the disc wall. Special extension exercises where the back arches backward can compress the back side of the disc, which in turn creates a vacuum toward the front of the disc. It's believed that this vacuum can suck the herniation back inward, which then relieves pressure on the adjacent nerve root. While the disc herniation has not been fixed, the symptoms disappear.

2. Injections: Inflammation can act like a ring on a swollen finger. By reducing inflammation, the pain symptom disappears. The purpose of a spinal injection is to reduce inflammation around the nerve root. By placing medication directly around that nerve root, this allows us to reduce pain symptoms long enough to get the patient moving and into therapy and exercise. In many cases, that's all the patient needs to resolve symptoms, and they are back



In a bulging disc, the nucleus has not broken through the disc wall. In a herniated disc, the disc wall has torn and the nucleus then can pressure a nerve root, causing radiating pain into a leg or arm. Spine surgery is never appropriate for a bulging disc. And even symptoms from a herniated disc can be relieved in many cases with spinal injections and spine-specialized therapy. But in some cases, spine surgery may be the only option if there is weakness in a leg or arm.

to activity without the need for surgery. If you haven't tried spinal injections, you may be resorting to surgery too quickly. It's your last nonsurgical option.

3. Surgery: When surgery is performed, the disc wall is not repaired, rather the herniated part of the disc is removed, which then reduces the pressure on the nerve root.

A team approach

The neurosurgeons at South Carolina Spine Center believe the key is for the patient to understand that they need to manage their own care and not abdicate complete control to

someone else who may be biased. The patient needs to exhaust nonsurgical options like spine therapy and then spinal injections. But if that doesn't work over a period of three months or so, it's probably time to explore surgical options.

Current technology now allows our spine surgeons to perform minimally invasive spine surgery so we can return people to work and play sooner than in the past. That's the benefit of a spine center approach, of having therapy, nonsurgical spine specialists and spine surgeons all under one roof.



Nonsurgical spine specialists enable patients at South Carolina Spine Center to exhaust treatment options before spine surgery.

WHEN SHOULD YOU CONSULT A SPINE SURGEON?

Many back and neck pain symptoms will go away on their own over six weeks with some special exercises. However, some problems represent emergency symptoms and need immediate medical attention to prevent permanent paralysis of nerves. Here's some information on how to recognize danger symptoms. Any symptom that does not improve over three days is a signal to seek medical attention. While you can use watchful waiting with radiating pain, you need to consult a surgeon quickly for numbness, tingling or weakness in a leg or arm, which could become permanent if ignored.

Have you experienced any...

- loss of control of bowel or bladder?
- numbness or tingling in an arm or leg?
- difficulty moving an arm or leg?
- SEVERE trauma, fall or car accident?
- Neck pain WITH severe headache, nausea, bright lights bother your eyes?

YES

- Loss of bowel/bladder control is an EMERGENCY symptom. You need to see a spine surgeon or go to an Emergency Room within 24 hours, or the symptom could become permanent.
- Numbness, pain or tingling into a leg or arm, especially when it extends below a knee or elbow, could imply a disc problem, and should be seen by a spine specialist within 2 days.
- Any traumatic fall or car accident could have fractured bones in your spine, or herniated a disc. You should see a spine specialist promptly who may perform X-rays to assess you.
- Neck pain with headache/nausea is an EMERGENCY symptom. See a doctor in 24 hours.

Did the pain come on after lifting, or after aggressive exercise or sports activity?

YES

- Lifting or sports activities can strain muscles, ligaments & tendons, causing painful spasms. Extreme pain can require a spine specialist. Home remedies include anti-inflammatories like Advil/Nuprin, rest, ice and some simple stretching exercises. However, if symptoms don't improve over 3 days, you need to be assessed by a spine specialist.

Is the pain mostly in your low back, AND accompanied by a FEVER, or making you sick?

NO

- Back or neck pain that doesn't radiate pain or numbness into a leg or arm can be caused by a variety of problems, including a strain of the muscles or ligaments in the back or neck.
- Home remedies include anti-inflammatories like aspirin, Advil or Nuprin, rest, ice and some simple back/neck exercises. Don't do any exercise that causes an increase in pain.
- Remember: Those who self diagnose themselves and self treat themselves do so at their own risk. Back and neck pain can arise from a variety of causes and may require a spine specialist to perform diagnostic tests to identify your problem and the best treatment. A spine specialized therapist can also create a home exercise program customized for you.

Pain in the low back, along with a fever, could be a kidney infection. You should see a spine specialist immediately.

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HOW TO SET UP FOR A PAIN-FREE BACK OR NECK IN 2013

ERGONOMICS

White collar workers can have their own type of injury risk from spending long days sitting at a desk, especially when the chair is not fitted correctly to the person or the desk. Consider that the only furniture someone spends more time in than their office chair is their bed.

Usually, a person's chair is provided by the company and if the company isn't sensitive to ergonomics, that can spell problems. Thankfully, most desk chairs sold in the last five years have some ergonomic consideration in their design. But that still doesn't mean the chair is adjusted to the person or the desk.

Employers, for example, typically buy a universal-type chair for everyone, so it's up to the person to adjust the chair for their height and desk, explains the neurosurgeons at South Carolina Spine Center in Greenwood, SC.

There are guidelines developed by ergonomics experts that can lessen neck strain, back strain and the likelihood that you will develop carpal tunnel wrist problems from long periods at a keyboard. The key to preventing strain is adjusting your chair, because virtually every decent office chair has a height adjustment. So even if the employer

Having an armrest that is too high can cause pain and inflammation on the inner side of the elbow. Armrests that are too low can cause carpal tunnel syndrome in the wrist. If your chair is adjusted too low, it can also cause carpal tunnel or rotator cuff strain to the shoulders. A back chair that is too erect, or without enough lumbar support for the low back, can lead to back pain, neck pain or headaches.



invests in an expensive, well-designed ergonomic chair, that doesn't mean it's adjusted for you. Employees must raise the chair so the angles are right for their trunk height in relation to their desk.

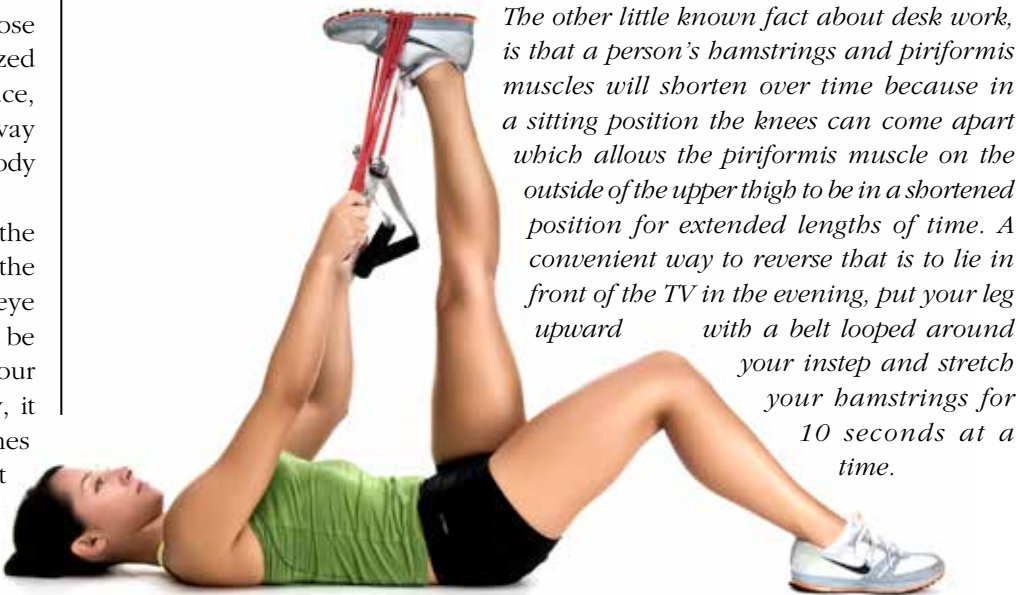
A lot of chairs are becoming popular around the workplace such as "Think" by Steelcase®. These chairs specialize in providing a relaxed, pain-free experience and support proper posture to prevent any aches and pains associated with sitting in a chair for long hours. Other retailers like Relax the Back® stores specialize in chairs and furniture for those people with problematic back pain. These chairs and furniture have lumbar support that can be adjusted for a person's particular back.

Even though people may choose to purchase complex and specialized ergonomic chairs for the workplace, often they don't know the proper way of adjusting the settings to fit their body correctly.

In a properly adjusted chair, the chair height should be adjusted so the computer monitor is just below eye level. The computer monitor should be about an arm's length away from your eyes. If the screen is too far away, it can lead to eyestrain and headaches throughout the day. Then adjust the lighting on your computer monitor to help reduce glare and eyestrain.

If you are buying a new laptop, inquire about a matte screen vs. a glossy screen. A glossy screen can look more colorful and vibrant and be fine for a living room couch, but when taken into a business office with overhead fluorescent lights, the light banks can cause massive reflection onto the screen that can make it sheer agony on the eyes.

Your forearms should be parallel to the floor and should not have to reach far to type on the keyboard. Armrests that are too low can cause carpal tunnel syndrome and inflammation in the elbow. Your wrists should be straight when typing or using the mouse.



The other little known fact about desk work, is that a person's hamstrings and piriformis muscles will shorten over time because in a sitting position the knees can come apart which allows the piriformis muscle on the outside of the upper thigh to be in a shortened position for extended lengths of time. A convenient way to reverse that is to lie in front of the TV in the evening, put your leg upward with a belt looped around your instep and stretch your hamstrings for 10 seconds at a time.

HOW TO SET UP FOR A PAIN-FREE BACK OR NECK IN 2013

The lumbar spine (lower back) should be supported by the back of the chair with your feet planted on the floor. The backrest should fit snugly and comfortably against your lower back.

Your thighs should be parallel to the floor and knees at a 90-degree angle. Some people may find it most comfortable resting their feet on the floor, while others may like a small support to raise their feet. There should be about 3-6 inches of legroom between your lap and desk.

If you have a desktop workstation, adjust items so you will not have to over reach for items throughout the day.

Top selling chairs today have a wide range of appearances, sizes, positions, and adjustments to better fit the worker. Many offices do not have proper chairs because employers typically buy one specific chair for everyone, and often get bulk discounts.

The neurosurgeons at South Carolina Spine Center note that specialized office chairs can cost two to three times more than the average office chair. But if you have inherited a cheap or basic chair, there are some simple tips that can

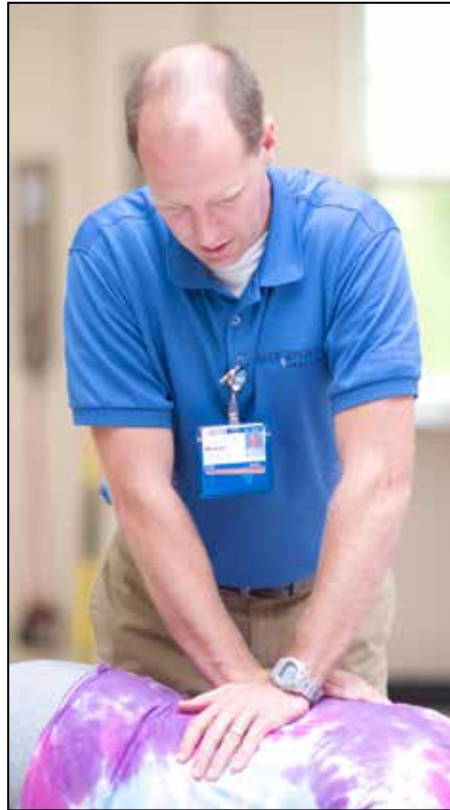
provide all the necessary back support you need and restore that healthy, natural curve to the low back. A rolled up towel can be the perfect way to add lumbar support for your lower back. Insufficient lumbar support can lead to back pain, neck pain and headaches.

Bad chairs can lead to a stiff neck or back, making work more difficult for employees. If you have to deal with an improper office chair, it is important to get up every hour to stretch and take a quick walk around. This will help release stored up tension in your body.

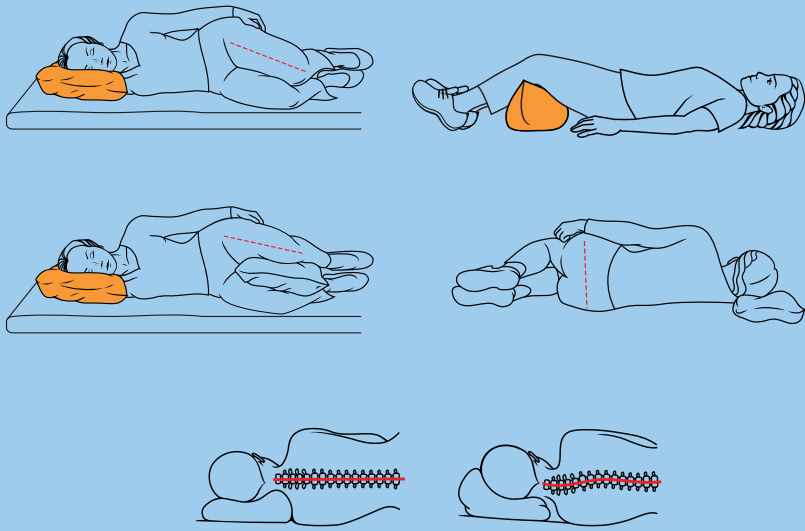
Many studies have shown when employees are properly fitted with an efficient office chair, their productivity also improves by up to 20%. The studies show many workers tend to take fewer breaks and have fewer musculoskeletal problems when they have a proper chair fitted correctly.

Even with the best chair, though, the neurosurgeons recommend movement throughout the day. Sitting for several hours is a prescription for back pain when you get up. The back is not designed to be in a static position for hours. Movement is like WD-40®

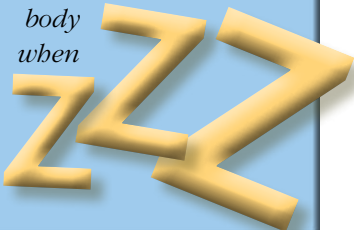
lubricant for the spine. So every 45 minutes or so, just get up from the desk, stretch a little, or walk to the bathroom... anything so you are moving around a little.



HOW TO SLEEP WITHOUT PAIN



Avoid sleeping on your stomach because this arches your back and puts pressure on the spine. Rather, lie on your back and tuck a small pillow underneath your knees. This position allows the spine to unload. If sleeping on your back is not comfortable, try sleeping on your side with a pillow placed in between your knees. Sleeping on your stomach doesn't have to be avoided as long as you place a soft, flat pillow underneath your stomach to eliminate some of the arch that can place stress on your back. It's also important to sleep on a mattress with optimal back support. A good mattress should compliment your body shape. However, when in doubt go with what feels most comfortable to you.



BODY MECHANICS 2013: How to lift without hurting your back

Have you ever heard of someone straining a thigh muscle while lifting? Probably not. That's because the muscles in the legs are longer, stronger, in better shape and resistant to strain. The muscles and ligaments in the back are shorter, prone to muscle spasm when lifting a heavy object. The most common causes of back strain is from improper body mechanics during lifting, or lifting something that is too heavy. So if an object is too heavy, use a hand truck to lever it up and transport it or use a cart / wagon to move it. Always push rather than pull.



MID-THIGH METHOD

Start with one knee on the ground and arms fully extended. With the power of your arms, lift the object a few inches off the ground and against your thigh. Using the power of your LEGS (not your back), move to a standing position.



SQUAT METHOD

Position the object between your legs, and keep your arms extended. Keep your back straight as you use the power of your legs (not your arms or back) to lift the object off the ground. As you stand, straighten your back with the object resting on your thighs.



So it's been about two months after you've noticed the onset of symptoms, and you've tried spine therapy and then injection therapy, and still symptoms like radiating pain or weakness into an arm or leg persist.

It's probably time to meet with a surgeon if only to become educated on your surgical options, to find out if spine surgery can quickly relieve your symptoms, and when you should take the plunge for surgery. For disc herniations and other serious problems, spine surgery may be the only way to repair damaged discs, bone spurs, facet joint problems or fractured vertebrae.

But it's important to remember there is great variation in quality among spine surgeons nationally. And it's up to the consumer to shop for the best spine surgeon. When you meet with the spine surgeon, you should ask about the surgeon's expertise with the latest

WHAT ARE YOUR SURGICAL OPTIONS IN 2013?

spine surgery techniques and spine technology.

Minimally Invasive Surgery

One of the most exciting developments in spine surgery over the past five years has been the evolution of minimally invasive spine

surgery techniques and instrumentation. Minimally invasive spine surgery enables many patients to have their spine surgery in the morning and be home later the same day to recover in their own home. Due to the acute accuracy provided by these tools, surgeons can access the vertebrae through the narrow probes

with surgical cameras and tools.

Generally speaking, perhaps about 30% of spine surgery can be done in an outpatient setting, according to the team of fellowship-trained spine surgeons at South Carolina Spine Center. The spine surgeons also make use of new minimally invasive spine surgery techniques where possible.

In minimally invasive spine surgery, a smaller incision is made, sometimes only a half-inch in length. The surgeon then inserts special surgical instruments through these tiny incisions to access the damaged disc in the back or neck area. Entry and repair to the damaged disc or vertebrae is achieved with minimal disruption to nearby muscles and tissues.

Minimally invasive spine surgery requires extensive training and experience to master use of the tools, but there is tremendous benefit for the patient. The incision is shorter, hospital

stay is shorter and recovery is quicker and less painful. Instead of a three-inch incision, the surgeons at South Carolina Spine Center can operate through a tiny incision, which means a quicker return to work and activity.

Alternatives to fusion

In some cases, a disc may be damaged so badly that removing the damaged disc tissue then eliminates the space needed between the two

vertebrae for the nerve root. In this case, the surgeon must restore the natural disc space with a small wedge of bone in between the vertebrae. The bone can come from either the patient's own hip, or from a bone bank which uses sterilized cadaver bone.

If the patient elects to use a piece of his own hip bone, the post surgical discomfort from harvesting this bone can be as bad or worse than the back surgery itself.



South Carolina Spine Center: One of only five locations to have the most advanced spine surgery suite

South Carolina Spine Center gained access to one of the most advanced spine surgery suites in the nation. In July 2010, Self Regional installed the new iCT BrainSuite®, the first of its kind in the Southeast and was only the fourth in the nation. This surgical navigation system integrates 3-D images from a CT scanner in the operating room with real time guidance of instrumentation that functions much like a GPS system, but is incredibly more accurate.

Spine surgeons can see images of the spine, discs and nerves during surgery and confirm placement of surgical instruments within 1 millimeter. It provides the highest level of precision and accuracy available anywhere in the world.

BrainSUITE® is an ultra-advanced neurosurgical operating room that combines surgical and diagnostic

tools such as intra-operative CT scanning (iCT). This state of the art technology can give surgeons feedback in real time during complex spine and brain surgeries. Multiple CT scans are taken throughout the surgery and give surgeons a better picture of the progress of the surgery. The real time feedback can help a surgeon know if 100% of the surgery is complete, or if there are more problematic areas. The 3D surgical navigation system helps surgeons plan on the best path to the problem site, monitor the progress in real time throughout the surgery, and is often less invasive which translates to faster recovery time. The BrainSUITE technology provides several tools for visualizing and interacting with the data prior, during, and after surgery.



BrainSUITE®

One alternative to cadaver or bone grafts is to use BMP, which stands for “bone morphogenetic protein.” The neurosurgeons at South Carolina Spine Center explain that BMP is a bone-growth substance that eliminates the need for cutting bone from a person’s hip.

Trace protein extracts are found in bones and are required for the bone to heal or regenerate. Scientists have developed a usable form of BMP that is now being used in place of bone harvested from a patient’s hip. This bone graft is made from pure bone protein (minerals and collagen) and absorbable collagen sponge that promotes new bone

formation. Studies show that the positive results achieved from surgery using BMP equal that of an autograft procedure (in which bone is taken from the hip).

Artificial Disc Replacement

Unlike fusion surgery that locks spinal vertebrae, which can in turn damage adjacent discs above and below the fusion site, artificial disc replacement is designed to retain motion by replicating the function of a normal, healthy disc. Most artificial disc designs have plates that attach to the vertebrae and a rotational component that fits between these fixation plates.

Medtronic Bryan™ Cervical Disc

The Medtronic Bryan Cervical Disc is an artificial disc option for the surgical treatment of cervical degenerative disc disease. This artificial disc allows patients to keep their neck range of motion, stay active and is an alternative to traditional standard fusion surgery.

Because of the weight of the body and the rotational stress that the trunk places on discs in the lumbar area, more stress is placed on artificial discs in the lumbar area vs. the cervical area. Another advantage of cervical artificial disc surgery is that the neck area is more accessible in surgery than the front of the lumbar spine, and there is less risk related to artificial disc surgery in the neck area.

The first lumbar disc was approved by the FDA in the United States in 2004. They have been in use before that for a decade in Europe. Still, most conservative spine surgeons urge patients to be cautious about this new technology.

Any artificial disc can wear out in 15 or more years, the surgeons are careful to note. Also, they caution that the revision surgery can be complex. Also, while the current discs provide rotational movement, they don’t mimic the up and down shock absorption that the natural disc provides. Consequently it’s crucial to consult with a spine surgeon who is realistic about this treatment option and proficient in artificial disc surgery.

Why you might need a SECOND OPINION

For those back and neck pain sufferers who have exhausted nonsurgical treatment options, spine surgery may be the next step in resolving a spine problem. Because spine surgery is a serious decision, it can be a good idea to obtain a second opinion. Most health insurance companies, for instance, recommend patients to get a second opinion in advance of surgery.

A second opinion from the South Carolina Spine Center can provide you the following benefits:

- Determine if you have considered all possible treatment options and if there are any other non-surgical options that can relieve symptoms without the need for surgery.

- If spine surgery is necessary, what type of spine surgery should be performed? You may not need a complex fusion procedure that was initially recommended.
- Do you qualify for minimally invasive spine surgery as an outpatient, and

be home later that same afternoon, for a faster recovery and return to activity.

- Could you benefit from a second opinion? And is it worth the time and expense to travel to a spine center?

No referral is needed for your image review. Call 888-526-8806 or visit SCSpineCenter.org.

The South Carolina Spine Center also offers enhanced services for both patients and their families, including:

- A comprehensive patient guide-book and pre-surgery class
- Designated private rooms in a modern neurosurgical patient unit
- Specialized nurses and therapists
- A nurse navigator who provides education and assistance
- Clinical assessment by a neurosurgeon

The neurosurgeons at the South Carolina Spine Center are fellowship trained in neurosurgery and board certified by the American Board of Neurological Surgery and/or the Royal College of Surgeons.

The South Carolina Spine Center accepts most major insurance plans, including BlueCross BlueShield of South Carolina, United Healthcare®, Cigna®, PAI, SuperMed, HealthScope and Med-Cost.



SOUTH CAROLINA SPINE CENTER

Advanced spine care services of

SELF REGIONAL
HEALTHCARE

115 Academy Avenue, Unit A
Greenwood, S.C. 29646

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South Carolina Spine Center

115 Academy Avenue, Unit A | Greenwood, S.C. 29646
(888) 526-8806 | www.SCSpineCenter.org

Recognizing the national trend toward a Center of Excellence approach for complex health problems, South Carolina Spine Center was created by Self Regional Healthcare to improve the way the health system cares for back and neck pain. The South Carolina Spine Center is located in Greenwood, S.C., and cares for patients throughout the state of South Carolina and beyond the region. The Spine Center emphasizes non-surgical treatment options in advance of spine surgery. If spine surgery is needed, the Spine Center has three fellowship-trained neurosurgeons — the highest level of medical education possible.

South Carolina Spine Center, like all spine centers, is a work in progress, with the goal of providing a seamless integration of the appropriate specialists in spine care. South Carolina Spine Center will be measuring and reporting clinical outcomes and patient satisfaction to referral sources, employers and health insurance companies.

Second opinion

A second opinion can help you determine if you have considered all possible treatment options and if there are any other non-surgical options that can relieve symptoms.

Call: 888-526-8806

Email: SCSpinecenter@selfregional.org



The Spine Center is committed to a well-informed health care consumer, and has an online spine encyclopedia at SCSpineCenter.org that has symptom charts, home remedies for back problems, medical illustrations and video animations on spine conditions and surgeries. The Spine Center, as a community service, provides a free 36-page Home Remedy Book to those in their community with spine problems.



Priority Consult for referring physicians

South Carolina Spine Center provides a Priority Consult for referring physicians that can triage the patient to the appropriate spine specialist at the Spine Center. The patient can call 888-526-8806 and speak to our Priority Consult representative.



The South Carolina Spine Center is consistently ranked in the top 10 percent of all spine programs in the U.S. by CareChex®.



Top 10 percent in the nation for Spinal Fusion Medical Excellence, 2011-2013.

Designated as a

Blue
Distinction
Center®

for Spine Surgery



BlueCross BlueShield:

Blue Distinction Center for Spine Surgery®.

BlueCross BlueShield of South Carolina is an independent licensee of the BlueCross BlueShield Association. Designation as a Blue Distinction® Center means these facilities' overall experience and aggregate data met objective criteria established in collaboration with expert clinicians' and leading professional organizations' recommendations. Individual outcomes may vary. To find out which services are covered under your policy at any facilities, please call your local BlueCross and/or BlueShield plan administrator.