



UNIVERSITY PAIN MEDICINE CENTER

MONTHLY | November 2015

Minimally Invasive Pain Specialists



SUCCESS WITH SPINAL CORD STIMULATION

ALSO INSIDE:

Rosemary Roast [p.2](#) Try Acupuncture [p.6](#) Post-Procedural Care [p.8](#)

CONTACT US: 732-873-6868 or www.upmcNJ.com



CONTENTS

NOVEMBER 2015

01 WELCOME

University Pain Medicine Center Welcomes Dr. Tony George

02 RECIPES

Fantastic Fall Rosemary Wine-Marinated Roast

04 SUCCESS WITH SPINAL CORD STIMULATION

One thing is certain concerning pain – you know it when you have it!

06 CHRONIC PAIN? TRY ACUPUNCTURE

Chronic pain in your muscles and joints can make life unbearable.

08 POST-PROCEDURAL CARE

The Dos and Don'ts for your best post-procedural care

10 YOGA

Yoga Can Help Relieve Your Chronic Pain

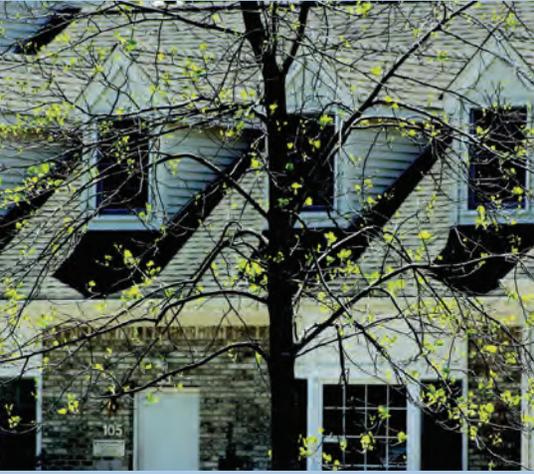
12 INNOVATIONS IN RESEARCH

We understand the importance of consistently discovering new, advanced treatment options for patients.

13 PUZZLE

Play Sudoku





University Pain Medicine Center Minimally Invasive Pain Specialists

Our caring and certified physicians are ready to treat your pain condition. We offer the most comprehensive care in New Jersey, as well as the most cutting-edge treatments.

THERE'S A LOCATION CLOSE TO YOU!

Main Office

Towne Professional Park at Somerset
33 Clyde Rd., Suites 105 and 106
Somerset, NJ 08873

Somerset Office

2 Worlds Fair Dr., Suite 203
Somerset, NJ 08873

Monroe Office

294 Applegarth Rd., Suite G
Monroe, NJ 08831

South Plainfield Office

1810 Park Ave.
South Plainfield, NJ 07080

New York City Office

314 West 14th Street
New York, NY 10007

Brooklyn Office

255 Eastern Parkway
Brooklyn, NY 11238

START YOUR JOURNEY TODAY!

732-873-6868

www.upmcNJ.com • www.ucrcnj.org

Editor: Sarah Ravits, Dr. Tonyelle Russell

Design: Addie Mirabella

Published by: Xanthus

If you are interested in a magazine for your practice contact Nick Ryan at Nick@XanthusServices.com



WELCOME

Dr. Didier Demesmin

Dr. George is an Interventional Spine Specialist who is also Board Certified in Physical Medicine and Rehabilitation. He completed his residency at Tufts Medical Center in Boston, Massachusetts and finished his Transitional Internship at St. Luke's University Hospital in Bethlehem, Pennsylvania. Dr. George finalized his Interventional Spine Fellowship in the Department of Orthopedics at University of Massachusetts Memorial Medical Center in Worcester, MA. During his fellowship, he received additional training in treating acute and chronic sports injuries among several athletes at the Orthopedic Sports Clinic.

Dr. George engages his highly respected 3-pronged approach to treatment – offering minimally invasive techniques to optimize functional recovery for all of his patients. His goal is to provide skilled, multidisciplinary, individualized care to every patient he treats.



||| Dr. Tony George

Dr. George is a proud member of several professional organizations including the American Academy of Physical Medicine and Rehabilitation, the International Spine Interventional Society, the American Society of Interventional Pain Physicians and the North American Spine Society. Dr. George is known for his stellar participation in research and pain management innovation. He is also the recipient of multiple awards including the Gwen Clingman Memorial Award and Parminder S. Phull Humanitarian Award.



FANTASTIC FALL ROSEMARY WINE-MARINATED ROAST

Rosemary contains antioxidant and anti-inflammatory compounds by increasing removal of free radicals associated with chronic inflammation. “Wow” your tastebuds with this delicious pain-reducing recipe for fall!

Ingredients:

- 3.5 lb boneless beef chuck arm pot roast, beef chuck shoulder pot roast or beef chuck 7 bone pot roast
- 1 bottle of red wine (Cabernet Sauvignon, Red Zinfandel or Merlot)
- 1/2 teaspoon kosher, sea salt or regular salt
- 1/2 teaspoon ground black pepper
- 1/2 cup fresh Rosemary (chopped)
- 2 tablespoons Extra Virgin Olive Oil
- 10.5 oz can of condensed beef broth
- 1/4 cup “no salt added” tomato paste
- 1 tablespoon Dijon mustard
- 1 tablespoon Italian seasoning, crushed
- 3 cloves fresh garlic
- 1 large onion, cut into thin wedges
- 5 medium carrots, peeled, cut in half (lengthwise)

and halved crosswise)

- 5 medium potatoes, peeled and cut lengthwise into sixths
- 2 cups whole fresh mushroom
- 3 stalks celery, bias-sliced into 1 inch pieces
- 2 tablespoons snipped Italian parsley

Cooking Directions:

1. Trim all fat from meat. Place meat in a resealable plastic bag set in a shallow dish. Pour wine over meat; seal the bag. Marinate in the refrigerator for at least 8 hours and up to 24 hours, turning bag occasionally.
2. Drain meat, reserving wine. Pat meat dry with paper towels. Sprinkle meat with salt and black pepper. In a 4 to 6 quart Dutch oven, over medium heat brown meat on all sides in hot Extra Virgin Olive Oil.
3. In a medium saucepan, bring reserved wine to boiling, reduce heat. Simmer, uncovered, for 15-20 minutes or until wine is reduced by half, about 1.5 cups. Stir in beef broth, tomato paste, mustard, Italian seasoning, Rosemary, and garlic. Return to boiling; reduce heat. Simmer uncovered for 5 minutes more. Pour wine mixture over meat in Dutch oven; add onion.
4. Bake, covered in a 325 degree oven for 2.5 hours. Add carrots, mushrooms, potatoes and celery. Bake, covered, about 1 hour more or until meat is very tender. Transfer meat and vegetables to a large serving platter, reserving juices in Dutch oven. Cover meat and vegetables with foil to keep warm.
5. For wine sauce, skim off any fat from juices. Bring to boiling; reduce heat. Simmer, uncovered, for 10 to 15 minutes or until juices are slightly thickened. Season to taste.
6. Slice meat or use a fork to break meal apart into pieces. Serve wine sauce with meat and vegetables. Sprinkle meat and vegetables with parsley. If you like, serve with French bread!





SUCCESS WITH SCS



One thing is certain concerning pain – you know it when you have it! If you suffer with chronic pain, over time, it can wear you down – not just physically, but mentally and emotionally. However, you may not know what kind of pain you are experiencing.

Pain is typically classified in these 2 categories; both of which can be mild, moderate or severe.

- Acute pain occurs immediately following an injury and usually lasts no longer than six weeks when treated appropriately.
- Chronic pain is any type of pain that persists 6 months or longer. Chronic pain is often difficult to treat because the exact cause can be hard

to determine. It can vary from one person to the next – individuals with seemingly the same kind of chronic pain may need different treatment therapies. Chronic pain is also the leading cause for physical and emotional suffering, familial and social disruptions, disability, and work absenteeism.

The treatment therapy that will work best for you depends on your specific type of pain, the severity of the pain and how you respond to pain treatment.

Spinal Cord Stimulation (SCS) is a neurostimulation that has become increasingly popular due to the growing body of literature, patient responses and positive physician feedback showing its effectiveness

in treating chronic pain and the reversible nature of the treatment with implant removal. In this interventional pain management treatment, a permanent spinal cord stimulator is implanted under the skin. It is often employed in severe, chronic pain management. This spinal cord stimulator delivers regular electrical impulses to the spinal nerves that are causing pain, blocking these pain messages before they can reach the brain. The implanted device is small, like a pacemaker, and does not interfere with normal daily activities. Spinal cord stimulation therapy may help to reduce dependence on oral pain medications.

Conditions treated by spinal cord stimulations

Spinal cord stimulation is used in the treatment of several pain conditions, including:

- Failed back surgery syndrome
- Complex regional pain syndrome (CRPS)
- Chronic low back pain that does not respond to other therapies
- Chronic arm and leg pain
- Critical limb ischemia
- Refractory Angina Pectoris

Your expert University Pain Medicine Center specialists will work with you to determine whether a neurostimulation therapy is in your best interest for your pain condition.

Spinal cord stimulation is performed in two separate procedures

The two spinal cord stimulation procedures include:

- Initial trial electrodes: An initial procedure to connect an external, trial pulse generator. This is used to test the effectiveness of the spinal cord stimulation treatment before proceeding to the permanent spinal cord stimulator.
- Permanent spinal cord stimulator implant: If your pain is reduced by an acceptable amount

determined by you and your physician during the initial test period, you will undergo a second procedure to implant a permanent spinal cord stimulator under your skin for long-term pain management.

What about the cost?

So far, data has shown that despite the seemingly initial higher costs, SCS is substantially cost-effective for the long term. Not only are the total costs of the SCS procedure recovered usually within less than 18 months, the excessive need for oral pain medications, hospitalization, and continuous need for repeated doctor's office visits are all significantly reduced.

Any Complications?

Complications are generally minor with proper expertise. The most common complication includes electrode migration and slight tenderness following the procedure. You can consult your University Pain Medicine Center Specialist and schedule a consultation should pain or discomfort arise.

What can I expect?

Your University Pain Medicine Center treatment begins with a thorough medical history, physical exam and customized treatment plan. You can expect long-term pain relief with improved quality of life, daily function, increased mobility, improved sleep quality, and overall reduction in doctor's and hospital visits. You can also feel the freedom of being in control of your own life again – modulating your pain with SCS and beginning to live your best life again.

All in all, Spinal Cord Stimulation has been established as an effective treatment in a number of chronic pain syndromes. Let the University Pain Medicine Center Physicians help you relieve your chronic pain facilitating a happier, healthier more energetic life!



CHRONIC PAIN? TRY ACUPUNCTURE

Chronic pain in your muscles and joints can make life unbearable. Sometimes treatments like ice, heat, anti-inflammatory medications, physical therapy, and appropriate exercises can often ease the pain. What happens when these things don't work? Acupuncture is an option with an excellent track record that provides sustained positive benefits, relief from both acute and chronic pain. "I think the benefit of acupuncture is clear, and the complications and potential adverse effects of acupuncture are low compared with the medication," says Dr. Lucy Chen, a board-certified anesthesiologist, specialist in pain medicine, and practicing acupuncturist at Harvard-affiliated Massachusetts General Hospital.

What is Acupuncture?

Acupuncture is a form of Traditional Chinese

Medicine that has been practiced for centuries. The theory is that energy, called qi, (pronounced "chee") flows through and around your body along pathways that are mapped to coincide with Traditional Chinese Medicine – these pathways are called meridians.

The belief Acupuncturists hold is that illness occurs when the flow of qi is either blocked or unbalanced. Acupuncture is a way to unblock, rebalance or influence chi. Acupuncture can also be utilized to relieve stress, prevent illness or continually optimize health.

How does Acupuncture work?

Acupuncturists insert tiny, hair-thin needles into the skin at specific points along meridians around the body. There is virtually no pain when the treatment is performed by an experienced, licensed practitioner.

By inserting the needles into the specific points along diagnostic meridians, the thought is to correct the imbalances in the flow of energy in the body, called qi. Each point corresponds to certain health conditions, organ functions, mental, emotional issues.

Your acupuncturist will look for landmarks on your body – using certain muscles and bones, for example – to find the point where the needle is placed. He or she will quickly tap very the needles into your skin. You will probably place several needles (of varying sizes) into several spots. Some maybe placed deeper than others, depending on what the provider believes is needed to restore the flow of chi. Usually, the treatments last about 20-30 minutes per session. Plan on weekly treatments until you start to see a benefit, then gradually lengthen the time until the next visit.

How does Acupuncture feel?

You may feel slight pressure when a needle goes in. Some people say they feel a “zing” or “tingling” sensation. Most people find that it doesn’t hurt. The area may feel slightly numb, itch or be a little sore. This is considered a sign that the energy flow, or qi has been accessed and is in the process of being balanced, realigned or unblocked. Sometimes providers will adjust the needle, use electrical current or heat to improve the treatment.

Is Acupuncture Safe?

Generally, acupuncture is safe when performed by a certified provider. A state license proves that the provider has a certain level of training and follows specific guidelines. There are still a handful of states where acupuncture is not licensed yet. Rarely do problems occur after an acupuncture treatment. Be sure that your provider uses a new pack of sterile needles every time he or she begins a treatment.

Speak with your Primary Care Physician if you have other questions about the safety of acupuncture.

What is Acupuncture used for?

Acupuncture is most commonly used to treat chronic pain. You can use it as a stand alone therapy or in conjunction with a treatment program. In addition to treating chronic pain, studies have found results for the use of acupuncture to a number of treat a number of health conditions including gastric ailments, post-surgical pain and cancer pain. Acupuncture may also be useful for:

- Headaches
- Myofascial pain
- Rheumatoid Arthritis
- Carpal tunnel syndrome
- Labor pain
- Neck Pain
- Facet Joint Pain
- Tennis elbow/Golfer’s elbow
- Fibromyalgia
- Osteoarthritis
- Low Back Pain
- Dental pain
- Migraine headaches
- Diabetic Neuropathy
- Trigeminal Neuralgia

Your acupuncturist will look for landmarks on your body – using certain muscles and bones, for example – to find the point where the needle is placed.

What is the fee for treatments?

Acupuncture treatments can range from \$60-\$150 per session. Often private insurance does not cover the costs of an acupuncturists treatment. Medicare and Medicaid do not cover acupuncturists either; but some plans may cover the cost of a physician-acupuncturist. Inquire with your health insurance carrier to determine if your acupuncturists visits are reimbursable.

Millions of people across the globe chose acupuncture every day to manage their pain, increase their vitality, relieve stress, and prevent diseases. You can search for a trained acupuncturist at the National Certification Commission for Acupuncture and Oriental Medicine {<http://www.nccaom.org/>} or by calling the organization at 904-598-1005.



DOS AND DON'TS FOR YOUR BEST POST-PROCEDURAL CARE

How you recover from a pain management procedure can be as important as the precision of the physician who performs it. Usually the first 24-72 hours following your procedure (the immediate postoperative period), you may experience a moderate increase in your normal back pain. This is typical. Rest, ice, pain medication and oral anti-inflammatories (NSAIDS – either prescription or over-the-counter)

will minimize possible discomfort during this time. Any unusual or new symptoms (i.e., fever, chills, rash, increased numbness or weakness) should be reported to your physician.

Do: Walk it Out! Take Short Walks (15-20 minutes per day). Walking is the best exercise assuming that your general medical condition allows it. Always check with your primary care provider before beginning a new exercise program.

Don't: Go Too Hard! Overexert yourself, lift heavy objects (over 10-15 lbs) or do extenuating back exercises in the first 3-4 weeks following your procedures.

Do: Grab Onto Something! Hold on to the back of a chair when bending. This is no time to prove your independence. Using a straight back chair or a fairly rigid recliner for sitting will help protect the integrity of the procedure.

Don't: Get Behind the wheel! Especially following a lumbar

surgery for at least 10 days, unless otherwise instructed. You may ride as a passenger at anytime although you should allow frequent rest periods for long trips. Always get out of the car and stretch your legs during rest periods. It may be best to take several short trips prior to a long trip. Prolonged sitting in a car may exacerbate back or leg symptoms that were present pre-operatively.

Do: LAUGH IT UP! Laughter truly is the best medicine! Research has shown that even 30 seconds of laughter following any surgical procedure increases circulation, stimulates the immune system – and most of all, makes you smile!

Don't: TAKE A PLUNGE! It may be tempting to relax in the jacuzzi, swimming pool or bathe following a procedure, but taking a light shower as instructed by your health care provider is best.

Do: EXHALE. Deep Breathing Exercises are about the most natural way to produce soothing, relaxing and pleasure inducing alpha brainwaves. Breathing through your mouth also increases the charge of energy and facilitates the discharge of emotions.

Don't: SMOKE. It may sound silly to even mention smoking but your body will require all of its

nutrients to heal. Using tobacco decreases your nutrient and mineral supply. Smoking severely slows down the healing process and can cause higher incidents of wound infections, necrosis and haematoma formation.

Do: Turn In Early! Sleep is the body's renewal system and after any procedure, you can speed up your recovery time when you get 6-8 hours of restful sleep each night.

Don't: Overdo Your Pain Medications. Using pain medicine should be minimal during the post-operative period. As with

narcotic pain medications such as Lortab or Percocet also contain acetaminophen.

Do: Eat Your Veggies! Consuming 5-8 servings of leafy green veggies per day (kale, swiss chard, mustard or collard greens, romaine lettuce) provides your body with the Vitamin C, Calcium, Vitamin D, Magnesium and Folate it needs in order to optimally heal, strengthening your bones, muscles and giving you energy to enjoy the benefits of your procedural correction.

Using pain medicine should be minimal during the post-operative period. As with any procedure, a certain amount of discomfort and pain is to be expected in the area surrounding the incision.

any procedure, a certain amount of discomfort and pain is to be expected in the area surrounding the incision. This discomfort, which can include numbness and tingling is normal until the inflammation and nerve sensitivity has subsided. Narcotic pain medications should be used as little as possible. They can cause constipation and over the counter laxatives may be used as needed. You should not take aspirin for at least 3 months. You may take acetaminophen (Tylenol) and most

Remember, your healing takes time, care and patience. Following these simple dos and don'ts coupled with the post-procedural instructions your physician provides will allow you to recover with ease. Each individual situation is different and therefore requires individualized attention. Feel free to ask questions during your doctor's office visits. Do write down any questions before you come into office so you don't forget anything that needs further clarification.



YOGA CAN HELP YOUR CHRONIC PAIN!

Yoga, which focuses on gentle movement, breath and awareness, offers many benefits to people facing a variety of health conditions. Yoga is being used to alleviate stress, insomnia, nausea, chronic pain and fatigue. Yoga also provides an overall sense of well-being.

Decades of research have increased our understanding of chronic pain, and most importantly that it is a mind-body process; meaning that it is influenced not only by physical illness and injury but also by our thoughts, attitudes, emotions, past trauma and

our levels of stress. It shows that there is a very different set of rules when dealing with acute pain and when pain becomes chronic over time.

Research is showing how through movement, breath, relaxation and meditation we are able to tap into the mind and body's natural pain suppressing systems.

Practicing yoga can be significant in management of chronic pain--in that it is an excellent system for dealing with both acute and chronic stress. When stress is high, the breath becomes quick and erratic, the muscles tense and tighten and mood plummets.

Yoga offers simple breathing exercises that anyone

can do, which can shift the body from a fight-or-flight stress reaction into relaxation mode. In addition, chronic pain can cause shallow breathing; when you hold your breath, your body becomes less oxygenated and toxins rapidly build up in the body. Yoga aids with deep full breathing--the lungs work, the diaphragm expands, while the back and abdominal muscles work. Not only does the body become oxygenated, but the breath becomes one of the most important tools for releasing tensions and anxiety.

**“Yoga is the fountain of youth.
You’re only as young as
your spine is flexible.”
– Bob Harper**

Traditionally, yoga makes the distinction between pain and suffering. Pain is an emotional or physical affliction, while suffering is how our mind responds to the pain. Since our mental reaction to pain and suffering can add to our participation in chronic pain, the practice of Yoga provides a framework to develop a new relationship with our painful body as it helps to cultivate steadiness, calmness, acceptance and compassion.

Yoga is a complete mind-body system. Practicing yoga offers continued reduction of stress--releasing all of that muscular tension, coping with burdensome emotions (anxiety, fear, sadness) and for training the mind to be less reactive to painful sensations. Pain relievers can lose the effectiveness over time; but Yoga becomes more efficacious with each session as it creates profound changes in the circulation of the body, nervous system and well-being. In addition to that, a carefully set up Yoga practice is unlikely to intervene with other pain treatments and the great news is--side effects of Yoga are almost always POSITIVE! Yoga is likely to make you feel cheerful, healthier, stronger, more flexible, relaxed and more effective in your everyday life!

Here are 3 Yoga Stretches to Help Relieve Hip and Lower Back Pain

Lizard-Lower Lunge: Move and Release Hip Tension

Lizards have loose hips and this pose is a testament to that! Step your left foot forward several feet in front of the right foot. Bend the left knee until it lines up perfectly with the ankle. Drop the right knee to the ground and keep the toes curled under on that foot to stretch the calf muscle. Walk the left foot out to the side and place both elbows on top of blocks on the inside edge of the left foot. Keep hips lined up parallel to each other. You are opening the right psoas muscle and the left inner thigh.

Bound Ankle Pose: Open and Relax the inner thighs and groin

Bring the soles of your feet together, pulling the heels close to your groin, bending the knees, and butterfly flare the legs open. If you notice your knees are set too high to relax, place a blanket directly under the sit bones to prop the hips up. Keeping your spine straight, lead with the chest, pull your shoulders back, and fold toward your feet.

Cow Face Pose: Stretches the Spine

Begin by threading the left leg under your right leg. Work towards stacking the knees, while keeping both sit bones on the ground. Tuck the toes in to protect the knees. Sit in the pose for several minutes. Once the muscles begin to loosen and you no longer feel a stretch, fold forward with a straight spine. If this stretch proves to be too intense, just put both sit bones on a blanket and place a block or blanket between the knees.



INNOVATIONS IN RESEARCH

At University Pain Medicine Center, we understand the importance of consistently discovering new, advanced treatment options for patients. Currently, we are embarking via research and implementation on a promising therapies for both Spinal Stenosis and Complex Regional Pain Syndrome (CRPS).

We are aware of how non-stop, unbearable pain could be a medical condition known as Complex Regional Pain Syndrome (CRPS). Currently, there are no approved treatments for pain associated with CRPS, however, doctors and researchers alike are working to find pain relief treatment options. Local physicians are conducting a clinical trial of a pain medication for individuals diagnosed as having CRPS-1. Their goal is to evaluate the efficacy and safety of this trial medication, which is administered via a series of infusions.

In order to pre-qualify for this trial, patients must:

- Be between the ages of 18 and 80
- Have a medical diagnosis of CRPS-1
- Be receiving stable treatment for CRPS-1 for at least 1 month prior to the trials onset

The trial conducting doctor will review additional pertinent eligibility criteria with patients. All of the trial-related visits, tests and medications will be provided to patients at no cost! Furthermore, reimbursement for trial-related travel and time may be provided!

To learn more about this trial, please call 888-641-4961, visit www.studyCRPSnow.com or contact your University Pain Medicine Center team at 732-873-6868.

Spinal Stenosis is a common condition usually caused by age-related changes to the spine. Ligaments of the spine can thicken and widen, discs can lose height, joints get bigger and your bones may grow spurs. These changes can cause spaces in the spine to narrow and put pressure on the spinal cord and nerves as they branch out from the spinal canal.

The symptoms that develop from spinal stenosis may include leg pain, weakness, intermittent pain, feeling relief from pain by rest (sitting or lying down) and/or any flexed forward position, pain occurring during certain activities (such as walking for lumbar stenosis, or biking while holding the head upright) and/or positions (such as standing upright for lumbar stenosis) and other symptoms. Your physician will likely suggest conservative treatments prior to referring you to a spine surgeon for a traditional lumbar decompression surgery that removes the bone and soft tissue putting pressure on your nerves.

Now, a minimally-invasive option called PILD (short for Percutaneous image-guided Lumbar Decompression) has become available that allows most patients to return home the same day and does not involve or require general anesthesia.

The Totalis™ system is a set of specialized

instruments that perform the PILD procedure through a small tube that is around the diameter of a dime. Patients are given medication for sedation, (drowsy and numb lower back) or general anesthesia where necessary (fully “asleep”). A small tube known as a Cannula, is placed through an incision about 1 inch long in the middle of the back at the level the physician plans to treat. Specialized Totalis™ instruments are then placed through the Cannula to remove the tissue and or bone that are putting pressure on the nerves. Once the procedure is finished, the Cannula is removed and the tiny incision is closed. Patients typically spend a short-time in the recovery area until ready to go home.

As a participant in the research study you will have direct access to new treatment options, help others by contributing to medical research and treatment advances, receive special followUp care for your condition.

The STEPS Trial is a research study to show how

well the Totalis™ procedure works to relive pain and other symptoms related to lumbar stenosis. The Totalis™ system is already cleared by the FDA for use in the United States, . The procedures costs will be covered for patients who are enrolled in the STEPS Trial.

Some of the general requirements to qualify for the STEPS Trial include:

- Patients are 65 years of age or more
- Lumbar spinal stenosis is the primary cause of current symptoms
- Symptoms worsen when walking or standing, and better when sitting or bending forward
- Tried at least 6 months of non-operative treatment without sufficient relief

If you are interested in learning more about the STEPS Trial, talk to your University Pain Medicine Center doctor about all of the possible benefits and risks before making an informed choice, or see if you might qualify for the study.

PUZZLE

How to play Sudoku

To solve a Sudoku puzzle you have to use the numbers 1-9 to fill in the blank spaces so that each row, each column and each 3 x 3 square has all the numbers 1-9 appearing once. The only thing you need to solve a Sudoku number place puzzle is logic. You don't need any mathematical knowledge. In the easier puzzles you may be able to see straight away where a particular number goes. Focusing on one particular blank square at a time, scan its row, column & block.

8	7		4			5		
	1		5					4
5					3			
3				8			9	
7		1	9		5	8		6
	9			4				3
			2					5
1					9		4	
		7			6		3	1



NEW JERSEY'S PREMIER PAIN CLINIC

COMMON CONDITIONS

- Degenerative Disc Disease
- Herniated Discs
- Arthritis
- Vertebral Compression Fractures
- Headaches
- Cancer Pain
- Neuropathic Pain
- Motor Vehicle Accidents
- Workers Compensation

TREATMENTS OPTIONS

- Physical Therapy
- Epidural Injections
- Various Nerve Blocks
- Spinal Cord Stimulation
- Minimally Invasive Injections

Visit UPMCpainmedicine.com for information on these and other procedures

Are you constantly in pain? Still searching for relief?

University of Pain Medicine Center is a leading pain management facility in central New Jersey. We treat all chronic and acute pain conditions with the most innovative treatments available. We believe in finding the right diagnosis and treatments for your pain conditions.

Our physicians are board certified, which means you are getting the highest quality of care available. Schedule at one of our many locations today.

Don't suffer in pain, Get relief today!

Somerset • South Plainfield • Monroe • New York City
Call **732-873-6868** or visit UPMCpainmedicine.com



University Pain Medicine Center
Minimally Invasive Pain Specialists

University Clinical Research Center

University Clinical Research Center provides our patients with breakthrough therapies and newest technologies specifically designed to optimize safety and quality of treatment.

Learn more at ucrcnj.org

