

NEWSLETTER

SPRING 2005

We are building  
a website! For  
more information,  
log on to:

**WWW.  
NYPAIN.  
NET**

Ask us about:

**New  
Medications**

approved by the  
FDA for

**Headaches  
and  
Neuropathic  
Pain**

We now offer:

**Deep Tissue  
Medical  
Massage**

Partial or Full  
Insurance  
Coverage

# Comprehensive Pain Management

Gary P. Thomas, MD

Chaim Y. Mandelbaum, MD

## Artificial Disc Replacement — What is it, and who is it for?

Artificial disc replacement, also known as **spinal arthroplasty**, is a simple process where a worn out spinal disc is replaced with an artificial one. This type of device is a major step forward in the treatment of spinal disorders.

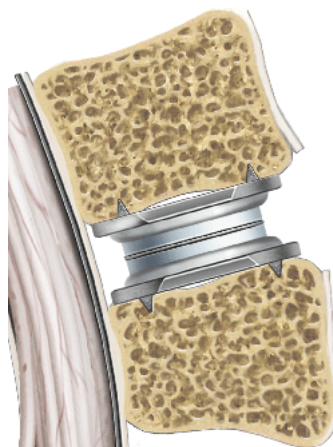
In October 2004, the United States Federal Drug Administration approved the first artificial disc for the treatment of severe lower back pain. The Charité® Artificial Disc, manufactured by Johnson & Johnson, is a device consisting of two metallic endplates and a movable, high-density plastic center, which replaces the damaged disc. It is designed both to align the spine and to allow the spine to move in a normal way.

### Who is a good candidate for such a device?

Potential candidates are those individuals with degenerated discs in the lumbar spine who suffer from disabling, chronic lower back pain.

In general most patients with symptomatic back pain can be treated non-surgically with anti-inflammatory medications, physical therapy and minimally invasive injections. A subset of individuals will continue to experience pain. The chronic nature of back pain often interferes with the ability to work and participate in regular daily activities. As a result, surgical treatment may become necessary.

If surgery is indicated, the surgical treatment of choice has traditionally consisted of a lumbar spinal fusion. However, there are a number of drawbacks to this procedure. They include a 20% – 30% fusion failure, decreased range of motion, and accelerated degeneration at adjacent spinal levels, all of which can cause continued pain after surgery.



**Charité® Artificial Disc**

The great advantage of artificial disc replacement is the preservation of normal range of motion. This potentially means less stiffness and slower degeneration at other spinal levels.

In order to achieve good results from disc replacement, careful selection of patients is critical. At present, the best candidates for spinal disc replacement are adults with a one level degenerative disc at L4-L5 or L5-S1. Contraindications to this procedure are patients whose

vertebrae may not be as strong due to osteoporosis, or patients who have slippage of vertebrae, such as spondylolisthesis. Finally, like joint replacement surgery, artificial implants may fail over time due to wear of the materials and loosening of the implants. Long-term studies which track the life span of the implants are needed.

Disc replacement surgery requires two surgeons. A general surgeon makes an abdominal incision, and a spine surgeon then uses special tools to remove the damaged disc and to implant the artificial disc. The entire procedure takes a couple of hours.

In clinical trials, complication rates for disc replacement surgery were similar to those seen in spinal fusion surgery. Complications of disc replacement include unresolved pain, surgical bleeding, infection, allergic reactions, and bladder problems. However, patients who received the replacement disc maintained flexibility, left the hospital sooner, and were more satisfied with their procedure than were spinal fusion patients. Disc replacement patients returned to work and normal activity in about half the time as spinal fusion patients.

If you have any questions about artificial disc replacement or other treatments for back and neck problems, please contact our spine care specialty team of surgeons, pain management, and rehabilitation physicians.

# The Twenty Minute Back Pain Miracle

## Percutaneous Disc Decompression

Now there's a new option for patients suffering from lower back and radicular leg pain (sciatica) due to contained disc herniations. This treatment is specially designed for those who have failed conservative treatments and are interested in trying minimally invasive options, prior to considering traditional back surgery.

Conservative therapies are generally tried first which may include oral medications,

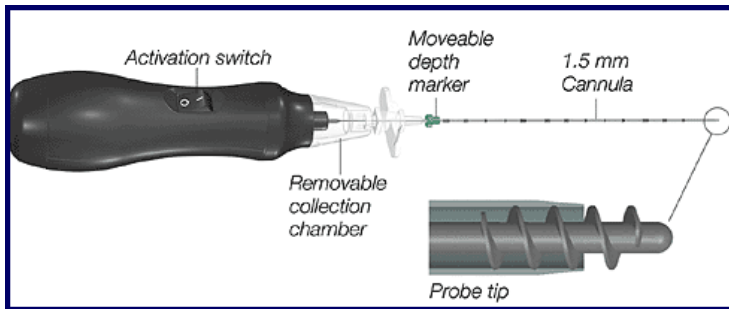
discectomy probe. It is performed at our pain management center, using precise x-ray localization and light sedation, if desired. This revolutionary procedure which has minimal discomfort is much less invasive than traditional surgical treatments.

In the procedure room, a local anesthetic is given to numb the area, and the discectomy probe, which is the size

of a hypodermic needle, is inserted into the affected disc. The probe is activated allowing for painless removal of 1-2 grams of internal disc material. Removing the disc material

releases the pressure on the herniated disc, and within a 4-week period the body retracts the remaining herniated disc to take pressure off of the nerve.

Most patients have significant reduction in pain and in some cases, pain may be eliminated. The procedure is typically followed by therapy and an exercise program which together allow for reduction of pain to a tolerable level and a return to normal activity.



### Dekompressor® Probe

physical therapy, and injections such as epidurals. When patients fail to receive relief from these measures, they may consider surgical options.

Prior to conventional surgery such as a laminectomy or a spinal fusion, one should consider less surgically invasive procedures like a percutaneous discectomy which is available using a Stryker Dekompressor®



**Q: What type of pain can be treated?**

**A:** Low back and leg pain due to contained disc herniations. This procedure is limited to patients who do not have outer annulus disc rupture or more serious conditions such as spinal stenosis or spondylolesthesis.

**Q: How does the procedure work?**

**A:** The Stryker Dekompressor® discectomy probe removes disc tissue using a specially designed non-traumatic mechanical spiral removal system. This allows for removal of disc material while leaving the surrounding tissues undisturbed. The total procedure time is generally 15 minutes to 1 hour.

**Q: Will the procedure hurt?**

**A:** After local anesthetic, there should be minimal pain generated by the Dekompressor® discectomy probe. This advancement in technology requires only a tiny puncture in the skin, similar to a simple injection.

## Matrix Therapy

Recent problems with many of the prescription medications on the market have led many patients to seek non-pharmacological treatment for their medical problems. Matrix therapy is safe, non-toxic, non-invasive, and effective. This very popular therapy consists of specialized computer-generated frequencies of bio-electric energy which are combined with massage, ultrasound and acupuncture meridian treatment. The benefits include pain relief, muscle relaxation, muscle re-education, increased blood flow, and stimulation of healing.

### Manhattan Office

Cabrini Hospital Pain Management Center  
233 Third Avenue  
New York, NY 10003  
Phone: (212) 995-6495  
Fax: (212) 995-6020

### Park Slope Office

New York Methodist Hospital Pain Management Center  
408 Seventh Avenue  
Brooklyn, NY 11215  
Phone: (718) 832-0885  
Fax: (718) 832-2028