



Center For Minimally Invasive Spine Surgery

Neurosurgery

Spine Center

Millions of people suffer from neck or back pain at some point in their lives. Sometimes this pain is related to trauma, spinal tumors, or infection. More commonly the pain is of a degenerative nature and can be chronic and unrelenting. This pain often responds to multiple levels of intervention. At the Spine Center at NewYork-Presbyterian Hospital/Weill Cornell Medical Center, we provide state-of-the-art, comprehensive, integrated care for patients with all types of spine-related conditions and injuries. Our team of experts includes neurosurgeons, physiatrists, physical therapists, pain management specialists, neurologists, oncologists, and radiation therapists. At the Spine Center, patients with spinal problems are evaluated as individuals. Together, we collaborate to tailor a personalized plan of care to ensure appropriate treatment and to help patients regain function. Patients receive a complete continuum of care, from diagnosis to treatment and recovery.

Center for Minimally Invasive Spine Surgery (CMISS)

In the absence of an acute situation we will usually recommend a trial of non-operative treatment before seriously considering surgery. In patients where an adequate trial of non-operative treatment has failed surgery may be indicated. Our Center for Minimally Invasive Spine Surgery (CMISS) is a nationwide leader in the field of minimally invasive spine surgery. Traditionally, spine surgery often required long incisions, significant muscle retraction and long patient recovery times. With newer surgical approaches, many of the same surgical goals can be accomplished with far less trauma to the patients. In patients requiring surgery, the best long-term outcome is the goal. Minimally invasive techniques are no longer limited to simple decompressions but are now used routinely for more complex spinal surgeries including fusions and scoliosis correction. Minimally invasive spine surgery offers several advantages to patients:

- Quicker recoveries
- Shorter hospital stays
- Lower infection rates
- Preservation of spinal musculature with better and quicker recovery after surgery

The surgeons of the CMISS at Weill Cornell Medical Center perform these surgeries routinely and are leaders in the field. While the types of spinal pathologies that are being treated by the Center for Minimally Invasive Spine Surgery at Weill Cornell Medical Center continue to expand, some of the current problems being routinely addressed are:

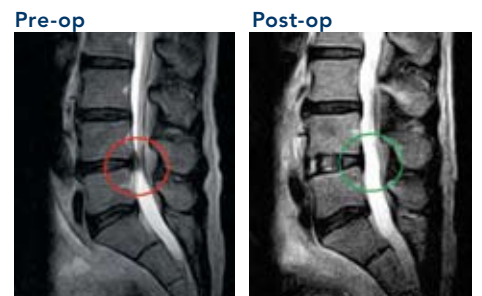
- Herniated discs, cervical and lumbar
- Spinal stenosis
- Spondylolisthesis
- Synovial cysts
- Scoliosis
- Spinal tumors
- Spinal trauma

Spinal Tumors

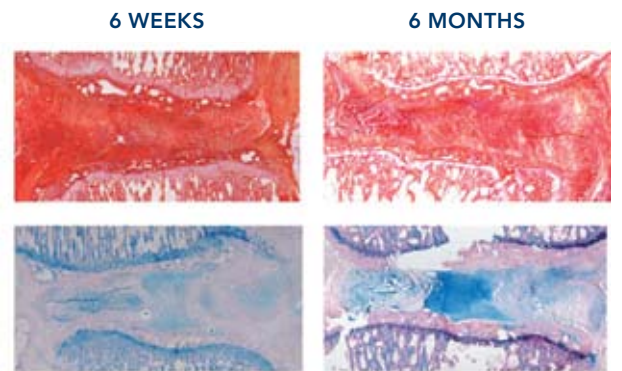
Surgeons at the Spine Center treat both benign and malignant tumors of the spine. Our team presents cases each week at the Spine Tumor Board to develop precise treatment for each patient. Novel therapies at Weill Cornell Medical College for spinal tumors include kyphoplasty with radioactive beads and intraarterial drug delivery.

Research and Education

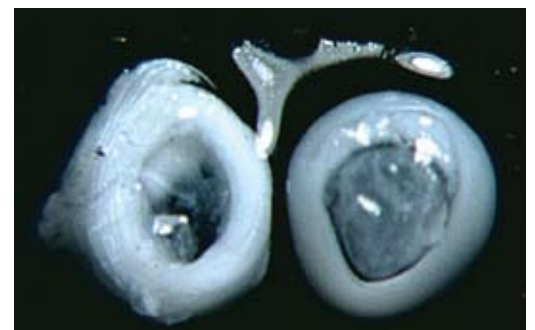
The surgeons at the CMISS are frequently asked to teach minimally invasive surgery techniques to surgeons from around the world and sponsor a yearly CME course on "Indications and Controversies of Minimally Invasive Spine Surgery." Among many other projects, our surgeons are leading groundbreaking research on biological disc replacement for injured or degenerated lumbar and cervical discs in patients with back and neck problems. One day, this will allow the replacement or repair of diseased discs with bio-engineered tissue implants rather than performing a fusion or artificial disc surgery.



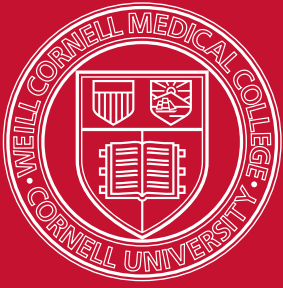
Lumbar MRI demonstrating improvement in spinal stenosis following minimally invasive anterior spinal fusion



Bio-engineered discs retain structure and remain viable for 6 months after implantation.



Explanted disc next to a bioengineered native disc.



Weill Cornell Medical College

Brain and Spine Center

May 2010

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Upcoming CME Activities and Other Events

BRAIN AND SPINE 2010

May 7, 2010

A CME course providing a comprehensive update on neurological and neurosurgical topics for the primary care physician. For more information and to register, visit www.cornellneurology.org

THE ART AND SCIENCE OF GLIOMA THERAPY: EMERGING CONCEPTS IN BIOLOGY AND TREATMENT

May 13, 2010, 6pm – 9pm

For more information and to register, visit www.cornellneurosurgery.org

JUDITH JAFFE MULTIPLE SCLEROSIS CENTER MONTHLY CME LECTURE SERIES:

Costimulation and T-regulatory Cells from Bench to Bedside

May 19, 2010, 6:00pm – 8:30pm

For more information and to register, visit www.cornellneurology.org

ADVANCED ENDOSCOPIC SKULL BASE AND PITUITARY SURGERY

June 11 & 12, 2010

A CME course providing an overview of the newly emerging field of endoscopic skull base surgery combining didactic sessions with hands-on cadaver dissection. For more information and to register, visit our website at www.cornellneurosurgery.org

INDICATIONS AND CONTROVERSIES OF MINIMALLY INVASIVE SPINE SURGERY AND NAVIGATION: HANDS-ON SYMPOSIUM

Dec. 2, 2010; 12:00pm – 5:30pm • Dec. 3, 2010; 7:30am – 5:30pm • Dec. 4, 2010; 7:30am – 12:00pm

This symposium will provide a comprehensive overview on new and less invasive techniques with and without stereotactic navigation for the operative treatment of spinal disorders. *CME pending.* For more information, please contact Jessica Grajales at jeg9059@nyp.org

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The Weill Cornell Center for Sleep Medicine is committed to prompt and effective communication with our patients and their primary care and/or other physicians.

Arthur Spielman, PhD.

Board-certified clinicians: Charles Pollak, MD, Matthew Ebben, PhD, Ana Krieger, MD,



dedicated to these patients.

At Weill Cornell's relocated and newly expanded, state-of-the-art Center for Sleep Medicine, our multidisciplinary team is expert at evaluating the full range of sleep problems, whether they arise from an underlying medical problem such as sleep apnea or restless leg syndrome, other underlying medical and psychiatric conditions, physical airway obstruction, or from poor sleep habits, stress, or anxiety. We accommodate patients for outpatient visits and overnight studies promptly and at their convenience.

CENTER FOR SLEEP MEDICINE

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