

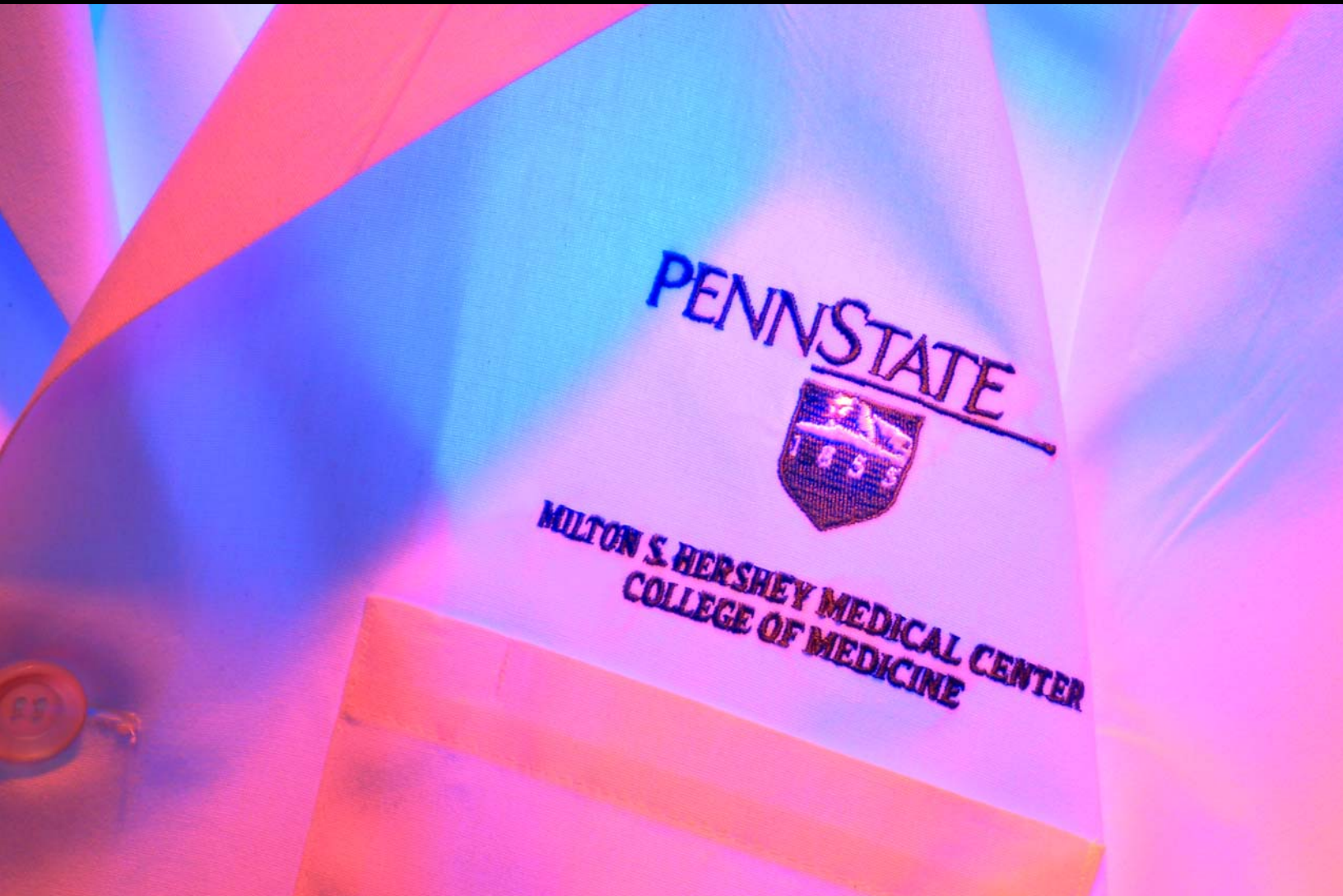


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INSIDE THIS ISSUE:

New Physicians and Surgeons	2
Kyphoplasty for Osteoporotic Spine Fractures	5
Microdecompression for Spinal Canal Stenosis	6
Syndactyly of the Hand	8

The Physician's Link to Penn State Milton S. Hershey Medical Center Specialists



Ken Smith

New Physicians and Services Update

Penn State Milton S. Hershey Medical Center is proud to welcome the following new physicians and surgeons to the Penn State team. For more information, or to make a referral to any of our Penn State specialists, please call MD Network at 1-800-233-4082.

Continued on next page

MD Network New Physician List

KEY

SERVICE

Physician Name
Area of Specialty
Clinical Interests

ANESTHESIA

Baiha Li, M.D.
Anesthesiology
Neuroanesthesia

CANCER INSTITUTE

Thomas P. Loughran, Jr., M.D.
Hematology/Oncology
Large Granular Lymphocyte (LCL) Leukemia, Lymphoma,
Leukemia



DERMATOLOGY

Christine L. Mackley, M.D.
Dermatology
Psychodermatology, General Dermatology, Botox

EMERGENCY MEDICINE

Daniel Ammons, M.D.
Emergency Medicine
Pediatrics, Toxicology

Kenneth VanderHave, M.D.
Emergency Medicine

FAMILY AND COMMUNITY MEDICINE

Angelique McKinney-Bourne, M.D.
Family Practice

Claire Murphy, M.D.
Family Practice (PSUPG-Palmyra)
Women's Health

N. Benjamin Fredrick, M.D.
Family Practice (PSUPG-Fishburn)

MEDICINE

Mazhar Khan, M.D.
Cardiology
Clinical Electrophysiology, Pacing, Neural Control of Circulation

Tri H. Le, M.D.
Gastroenterology & Hepatology
General Gastroenterology, NASH/NAFLD, Hepatitis B

Cleon (Randy) R. Hubbard, M.D.
Internal Medicine

Robert T. Stevenson, M.D.
Internal Medicine

Navin Verma, M.D.
Nephrology
ICU Nephrology, Anemia in Chronic Renal Failure,
Secondary Hypertension

Elichi Furuta, M.D.
Rheumatology

(from left to right) George Maish, M.D., John McGinn, M.D.



Penn State MD Network, our toll-free physician consultation service, is the referring physician's link to Penn State Milton S. Hershey Medical Center specialists. Seven days a week, our MD Network staff can assist with patient referrals and admissions, transfers, and provide you with information about our physicians and services. The MD Network section highlights innovative diagnostic and therapeutic procedures available at the Medical Center.

For more information contact **1-800-233-4082**. Visit our website at www.pennstatehershey.com

MD Network New Physician List

Francisco Xavier Valencia-Flores, M.D.
Rheumatology

Punitha Arunkumas
Infectious Disease
HIV, Tropical Medicine

OPHTHALMOLOGY

Sarah Fink, M.D.
General Ophthalmology

ORTHOPAEDICS/REHABILITATION

Joseph Sizensky, M.D.
Foot & Ankle Orthopaedics
Foot and ankle reconstruction

Jose Herrera, M.D.
Pediatric Orthopaedics

Kelly Vanderhave (Mueller), M.D.
Pediatric Orthopaedics
Pediatric Spinal Deformity, Hip Dysplasia, Sports Medicine & Trauma

Felix Meza, M.D.
Primary Care Sports Medicine
Primary Care Sports Medicine, Family Practice, Adolescent Medicine

John Deitch, M.D.
Sports Medicine
Sports Medicine, Arthroscopy, Knee, Shoulder, and Elbow Injuries.

April Armstrong, M.D.
Hand & Upper Extremity
Shoulder and Elbow Surgery

PATHOLOGY

Cunfeng (Frank) Pu, M.D.
Anatomic Pathology
Neuropathology, Surgical Pathology

PEDIATRICS

Shawna S. Brent, M.D.
Adolescent Medicine
Adolescent Eating Disorders, Adolescent Depression

Richard K. Hammer, M.D.
General Pediatrics
School Health, Adolescent Medicine

Margaret I. Mikula, M.D.
General Pediatrics
Preventative Medicine

Kristen Britton, D.O.
Hematology/Oncology
Late Effects

James R. Powell, M.D.
Hematology/Oncology
Neuro-oncology, New Chemotherapeutic Agents, Sickle Cell Disease

Hema M. Gangam, M.D.
Neurology
Pediatric Neurology, Epilepsy

Gerald Johnson, M.D.
Pediatric Cardiology

PEDIATRICS/HEMATOLOGY/ONCOLOGY

Kenneth G. Lucas, M.D.
Bone Marrow Transplant

PSYCHIATRY

Michael Murray, M.D.



MD Network New Physician List

Adolescent & Child Psychiatry

RADIOLOGY

Leslie B. Scorza, M.D.

CVI & Diagnostic Radiology
Interventional Radiology, Diagnostic Radiology

Pamela L. Brian, M.D.

Musculoskeletal Radiology

Henry Wagner, Jr., M.D.

Radiation Oncology

Rawjinder Singh, M.D.

Musculoskeletal Radiology

SURGERY

James J. Longhi, D.O.

Minimally Invasive
General Surgery

Timothy R. Shope, M.D.

Minimally Invasive
General Surgery

Kimberly S. Harbaugh, M.D.

Neurosurgery
Peripheral Nerve Surgery

Robert E. Harbaugh, M.D.

Neurosurgery
Vascular Neurosurgery

G. Timothy Reiter, M.D.

Neurosurgery
Spine Surgery, Complex Spine Instrumentation, Tumors

James McInerney, M.D.

Neurosurgery
Stereotactic and Functional Neurosurgery, Movement Disorder
Surgery, Stereotactic Radiosurgery

Michele M. Carr, M.D.

Pediatric Otolaryngology

Jonathan D. McGinn, M.D.

Otolaryngology-Head & Neck
Sinus Disease, Laryngeal and Vocal Disorders, Head and Neck

Oncology

Daniel E. Carney, M.D.

General Surgery
Trauma/Critical Care, General Surgery, Surgical Treatment of
Obesity

George O. Maish, III, M.D.

General Surgery
Trauma/Critical Care, General Surgery, Surgical Treatment of
Obesity

Raymond R. Chang, M.D.

Plastic & Reconstructive Surgery
Breast Reconstruction, Head & Neck Reconstruction,
General/Oncologic Reconstructive Surgery

Robert W. Zickler, M.D.

Vascular Surgery
Diagnostic Angiography, Therapeutic Endovascular Procedures,
Noninvasive Vascular Imaging



(from left to right) Robert W. Zickler, M.D., Daniel E. Carney, M.D.

Kyphoplasty for Osteoporotic Spine Fractures

What is Kyphoplasty?



Statistics show that every 45 seconds osteoporosis causes spine fractures, called vertebral compression fractures, which affect more than 700,000 people in the United States every year. Usually, there is no warning before the

patient experiences sudden, severe back pain. The traditional treatment for fractures of the spine caused by osteoporosis has included pain reduction (medication), bed rest, and bracing. Kyphoplasty is a minimally invasive surgical procedure for treating osteoporotic fractures by stabilizing the fracture. Kyphoplasty, approved by the FDA in 1998, provides immediate pain relief in many cases and allows most patients to return to normal daily activities after the procedure.

How Does it Work?

The goal of this procedure is to reduce or eliminate the pain caused by the compression fracture, to stabilize the bone, and to restore lost vertebral body height due to the fracture, thus reducing deformity of the spine.

Two small incisions made in the back through one of which the doctor places a narrow tube. Using fluoroscopy to guide it to the correct position, the tube creates a path through the back into the fractured area through the pedicle of the involved vertebrae. A special balloon, called the KyphX Inflatable Bone Tamp, is inserted and gently inflated inside the fractured vertebrae. As the balloon inflates, it elevates the fracture, returning the pieces to a more normal position. It also compacts the soft inner bone to create a cavity inside the vertebrae. When proper height and alignment have been achieved, the balloon is removed and the surgeon uses specially designed instruments to fill the cavity with a biologically inert orthopedic cement injected directly into

the fractured bone. After being injected, the cement hardens quickly, stabilizing the bone.

Kyphoplasty is performed at under local or general anesthesia, and most patients return home the same day. The procedure takes about one hour for each vertebrae involved. Patients will be observed closely in the recovery room immediately following the procedure and occasionally may spend one day in the hospital.

Recovery

Pain relief will be immediate for some patients. In others, elimination or reduction of pain is reported within two days. At home, patients can return to their normal daily activities, although strenuous exertion, such as heavy lifting, should be avoided for at least six weeks.

Who to Refer

Kyphoplasty cannot correct an established deformity of the spine, and certain patients with osteoporosis are not candidates for this treatment. Patients experiencing painful symptoms or spinal deformities from recent osteoporotic compression fractures are likely candidates for kyphoplasty. The procedure should be completed within eight weeks of when the fracture occurs for the highest probability of restoring height.

For more information or to schedule an appointment please contact the Department of Neurosurgery at (717) 531-8887.

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Medical Education: University of Virginia,
School of Medicine

Residency: University of Virginia

Fellowship: Auckland Hospital, Auckland, New Zealand



Microdecompression for Spinal Canal Stenosis

What is Spinal Canal Stenosis?

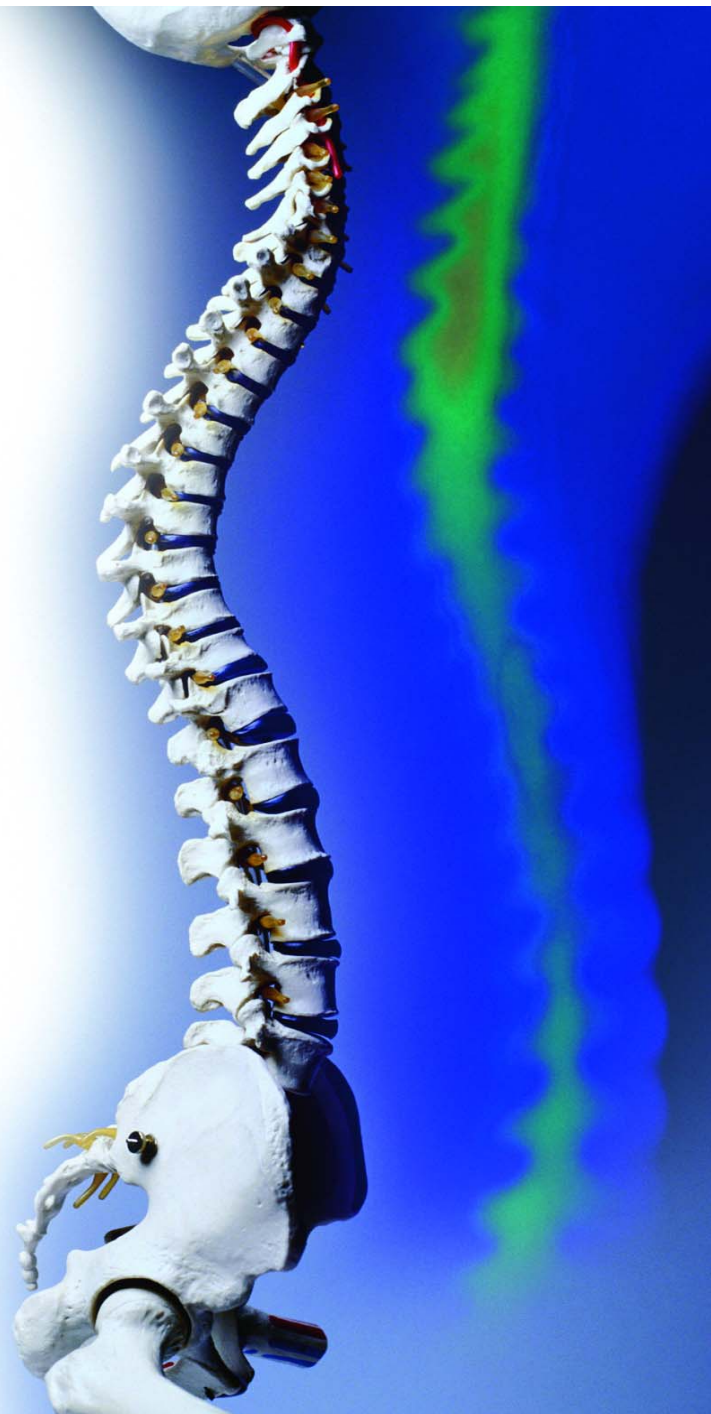
The spinal column is a series of bones that run from the base of the skull to the tailbone. Each bone (vertebra) is separated by a disc that acts as a cushion. Immediately behind this vertebra/disc column is the spinal canal. The spinal canal is the passageway for the spinal nerves that travel within it and then exit, like branches of a tree, to go into the arms and legs to provide strength and sensation. Normally, this spinal canal is about the size of a quarter in adults.

As one gets older, a combination of factors may contribute to a narrowing, or stenosis, of the spinal canal in the lumbar spine (low back). The discs begin to degenerate and, much like squeezing down on a marshmallow, begin to bulge into the canal. The facet joints, which lie at the back of the canal, develop arthritis so that bone spurs and thickening of ligaments compress the nerves. A slipping of one vertebra on another may also contribute to the narrowing.

As a result of this combination of factors, the spinal canal eventually functions much like a garden hose that is being stepped upon. If the garden is small, there may be enough flow of water to get

the job done. If the garden is larger, there is inadequate flow. Accordingly, for the patient with stenosis, sitting is easy—there's enough flow through the nerves. However, walking and standing are significantly limited. Patients with spinal canal stenosis complain of inability to walk distances (usually less than a city block) and inability to stand for a period of time (usually less than five minutes) before their backs and legs become painful, tingly, or weak requiring them to sit down to get relief.

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Microdecompression allows most patients to recover more quickly while providing significant and lasting improvement in the patients' pain, ability to walk distances, and ability to stand.

How is Stenosis Treated?

Non-operative measures such as therapy, anti-inflammatory medications, and steroid injections may provide relief for patients with mild limitations of walking and standing. For patients with more severe limitations, such treatments often only provide temporary relief (weeks) and surgery may be indicated.

What is Microdecompression?

Surgery for spinal stenosis is simple—remove the compression of the nerves to allow the normal flow to return. Traditionally this has been accomplished by 'laminectomy', a technique in which the back portion of the spine (lamina) is removed in its entirety to 'unroof' the canal. While this technique provided an excellent decompression of the nerves, it also caused considerable destruction of the muscles and bones in the back resulting in significant scar formation and potential destabilization of the spine, both leading to further problems for the patient in the future.

With the advent of MRI and the surgical microscope, newer techniques which provide an excellent decompression of the nerves while minimizing injury to the muscles and bones of the spine have been developed. Using the help of x-rays, fluoroscopy, and video endoscopy for magnification and guidance, a portion of the offending disk can be removed through a small tube with special tiny surgical instruments. The procedure is also sometimes used for the removal of small bony spurs. This procedure is different

from standard disk surgery because there is no traumatic muscle dissection, bone removal, or bone fusion. The incision is tiny enough to close with a small bandage. Therefore, most complications that occur with conventional surgery are eliminated with this procedure. Microdecompression allows most patients to recover more quickly (often done as an outpatient or overnight stay) while providing significant and lasting improvement in the patients' pain, ability to walk distances, and ability to stand.

Facts About This Microdecompression

- Minimizes bone resection maintaining spinal integrity while widening the lumbar spinal cord canal
- Is less invasive because it incorporates a small hole through part of the vertebra rather than removing an entire portion of vertebral bone
- Is innovative because it accomplishes effective widening of narrowed spinal cord canals without weakening the spine
- Can be done on multiple levels if necessary
- Avoids the use of metal implants and bone fusion, and allows the patient to be more mobile after surgery
- Is often done on an overnight basis

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Medical Education: Northeastern Ohio University,
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Residency: Summa Health Systems

Fellowship: Royal Adelaide Hospital, Adelaide, Australia



Syndactyly of the Hand

What is it?

Syndactyly is a congenital condition in which the fingers are joined from birth. (Syn=together, dactyly=finger). The fingers share skin and sometimes other tissues as well. The deformity may be simple, which implies that only skin is shared between the digits, or it may be complex, with other tissues such as bone, nerves, blood supply, tendons, or fingernails being shared. The syndactyly can be incomplete, which by definition is only part of the fingers, or complete, which involves the digits all the way out to the tips of the fingers.

What causes Syndactyly?

Many things can cause congenital abnormalities. Some can be explained, while others have no known cause. The process of development of a child from a fertilized egg involves many complicated steps that can go wrong and cause a defect or difference. The upper extremities form between the fourth and sixth week of pregnancy while the baby is approximately an inch long, yet appears much like a miniature baby. It has been estimated that one in twenty babies will have some imperfection. It is thought that syndactyly occurs when normal separation of the fingers does not occur by preprogrammed cell death. Syndactyly may be part of a genetic disorder that can be passed on to other generations. It also may be part of a complex of abnormalities that has been noted and may have a specific name. However, most are isolated findings and cause cannot be determined.

How is it Treated?

The goal in treating syndactyly has two parts—function and cosmesis. Function and use are of paramount importance to the hand. Having the hand appear as normal as possible is also important for the child's psychological development.

Timing of surgery is important. Most incomplete types of syndactyly can wait until the baby is about two years old. This allows the hand time

to grow, making the surgery easier as the hand is larger. It is also safer for the child from an anesthetics standpoint. Surgery at an earlier age may be recommended, however, if border digits such as the small finger are involved and are preventing growth of the attached finger and causing secondary deformity.

The surgery to correct syndactyly involves creating flaps of skin to cover the fingers once separated. Skin grafts are almost always needed because of the geometry of the digits. Full thickness grafts are usually taken from the groin crease since this leaves minimal scarring. A long arm cast is placed to hold the dressings in place and if all goes well after surgery the cast is left in place for two weeks prior to removal. If no complications arise, the grafts and wounds are healed enough after two weeks to allow the hand to be used without further dressings or special care. In cases of complex syndactyly, special splinting or other measures may be recommended by the surgeon and therapist to maximize hand function.

For more information, or to schedule an appointment please call MD Network at 1-800-233-4082

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