

PHILADELPHIA INTERNATIONAL MEDICINE® NEWS BUREAU

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November 30, 2007

For immediate release:

In this month's edition

- 1. Jefferson Specialist Only Orthopedist in Philadelphia Region and One of Few in Country Preserving Hips with New Surgery**
- 2. Three University of Pennsylvania Medical Center Professors Named 2007 AAAS Fellows**
- 3. Temple University Hospital Designated as "Center of Excellence;" Recognized for High-Quality Care in Bariatric Surgery**
- 4. Higher Doses of Radiation for Prostate Cancer Do Not Decrease Sexual Function Compared to Conventional Dose**

Editors note: Research, new techniques and improved facilities by Philadelphia International Medicine hospitals and physicians may lead to new ways to treat some of our most challenging diseases. Below are just some examples from our hospitals.

**Jefferson Specialist Only Orthopedist in Philadelphia Region
and One of Few in Country Preserving Hips with New Surgery**

Philadelphia – Javad Parvizi, MD, joint specialist at the Rothman Institute at Thomas Jefferson University Hospital, is the sole orthopaedic surgeon in the Philadelphia region and one of only about a dozen in the United States performing two new innovative procedures that preserve a patient's native hip joint, rather than replace or resurface it. The surgery is used to treat the pain and loss of mobility associated with hip dysplasia and impingement (femoral acetabular impingement) in younger individuals.

"Prior to preservation techniques, patients as young as 14 had no options but to try medications like non-steroidal anti-inflammatory drugs (NSAIDs), or to have a replacement or resurfacing procedure," says Dr. Parvizi, who is also associate professor of Orthopaedic Surgery at Jefferson Medical College, Thomas Jefferson University.

"A replacement is basically cutting the joint and throwing it away, so if five or 10 years from now we develop a way to restore or substitute cartilage, or discover other forms of treatment, replacement patients will not be candidates," adds Dr. Parvizi. "Preservation is a win-win for younger, qualified patients, not only because it reduces pain and restores mobility, but also because it allows for a wide range of future options if arthritis progresses down the road."

These options include both hip resurfacing and total hip replacement because the patient comes out of surgery with their own anatomy intact. Unlike hip replacement or hip resurfacing, hip preservation does

not require implants or devices to be positioned in place of the natural joint.

There are two types of hip preserving procedures. The first, a periacetabular osteotomy, is used for patients with hip dysplasia, a condition where the head of the femur (the thigh bone) only loosely or partially fits into the acetabulum (concave socket in the pelvis) and the femoral head or acetabulum is misshapen, causing abnormal wear and tear within the joint as it moves. Hip dysplasia is caused by a combination of genetic and environmental factors and is one of the leading causes of degenerative arthritis. As the more complicated of the two procedures, the periacetabular osteotomy usually involves making several cuts in the pelvis to realign the angle of the acetabulum so that the femoral head can fit properly into place. It may also involve smoothing of a misshapen femoral head to eliminate the friction caused by its movement. Recovery takes up to three months.

The second surgery is a femoroacetabular osteoplasty. It was developed by Dr. Parvizi and is used for patients with hip impingement, a disorder becoming more recognized as a cause of hip pain in active adults and a previously unrecognized cause of arthritis in young adults. Impingement is caused by a lack of room between the neck of the femur and the rim of the acetabulum, causing the neck and rim to jam together as the hip is flexed (as in sitting or running). This jamming leads to pain manifested in the hip or groin region and may lead to early degenerative arthritis of the hip. The procedure itself focuses on smoothing the surface in the space between the neck and the head of the femur. It takes about six weeks to recover.

Eligible patients should be under 50 years of age. If arthritis is already present, it must not have progressed past stage three.

Though the preservation procedures can be more technically difficult, there are clear benefits to keeping your own joint, says Dr. Parvizi. "Patients can go back to regular activities without limitations and there is less risk of post-operative infection than with replacement surgery. Additionally, there is little to no risk of the joint dislocating."

Three University of Pennsylvania Medical Center Professors Named 2007 AAAS Fellows

Three faculty members of the University of Pennsylvania have been named Fellows of the American Association for the Advancement of Science (AAAS).

This year AAAS recognized 471 members for their scientifically or socially distinguished efforts to advance science or its applications. The new Fellows will be officially inducted February 16 during the 2008 AAAS annual meeting in Boston.

The new Penn AAAS Fellows are:

Morris J. Birnbaum, MD, PhD, associate director, Institute for Diabetes, Obesity and Metabolism, and investigator with the Howard Hughes Medical Institute.

Citation: distinguished contributions to our understanding of the regulation of glucose transport and metabolism and aspects of cellular regulation relevant to insulin resistance and diabetes.

Yale E. Goldman, MD, PhD, director, Pennsylvania Muscle Institute and professor of Physiology

Citation: distinguished contributions in molecular motor research, development of new technologies for biophysics, and service in scientific societies, journal editing, and organization of scientific meetings.

Mark Liberman, PhD, professor of Linguistics

Citation: major contributions to phonological theory, the computational analysis of language, and the practical applications and popular understanding of linguistics.

Temple University Hospital Designated as “Center of Excellence;” Recognized for High-Quality Care in Bariatric Surgery

Temple University Hospital (TUH) has been named an American Society for Metabolic and Bariatric Surgery (ASMBS) Bariatric Surgery Center of Excellence. The ASMBS Center of Excellence designation recognizes surgical programs with a demonstrated track record of favorable outcomes in bariatric surgery.

“Due to the increasing prevalence of morbid obesity and the inherent health risks in this patient population, there is a real need for this kind of surgery in 2007 and we are proud to be able to provide excellent surgical care in this evolving field to our patients,” said John Meilahn, MD, director of Bariatric Surgery at TUH. “We believe that the ASMBS Centers of Excellence program will serve as a catalyst, driving strong programs like ours to get even better. We want to continue to provide the highest quality of care for our patients in this emerging arena of surgery.”

According to a report released in 2007 by the Agency for Healthcare Research and Quality, the number of bariatric surgeries has grown from 16,000 procedures performed in 1992 to 170,000 performed in 2005. Faced with clinical evidence that the most experienced and best-run bariatric surgery programs have by far the lowest rates of complications, the ASMBS Centers of Excellence program was created to recognize bariatric surgery centers that perform well and to help surgeons and hospitals continue to improve the quality and safety of care provided.

To earn a Center of Excellence designation, TUH underwent a series of site inspections during which all aspects of the program’s surgical processes were closely examined and data on health outcomes was collected. TUH and other centers receiving the Bariatric Surgery Center of Excellence designation agree to continue to share information on clinical pathways, protocols and outcomes data.

Surgical Review Corporation (SRC), an organization dedicated to pursuing surgical excellence, formulates and establishes the rigorous standards with which TUH and other centers of excellence must comply, thoroughly inspecting and evaluating each candidate for designation. Upon review, the SRC recommends approval of the designation for those surgeons and facilities whose practices and outcomes meet

the stringent demands set forth by SRC for ASMBS.

Obesity has become a significant national health issue, with the Centers for Disease Control and Prevention (CDC) reporting that 66 percent of all U.S. adults are overweight or obese. Morbid obesity is closely correlated with a number of serious conditions that severely undermine the health of overweight patients, including heart disease, high blood pressure, diabetes, and metabolic syndrome. Studies demonstrate that only 5 percent of morbidly obese patients can achieve long-term weight loss using diet and exercise alone.

Bariatric surgery can help obese patients manage or resolve these conditions. Studies have demonstrated that bariatric surgical procedures are able to provide sustained weight loss for the morbidly obese. Surgeons with ASMBS Center of Excellence designations have shown long-term consistently excellent outcomes from bariatric surgery.

- Patients considered morbidly obese (having a body mass index greater than 40) or those with co-morbidities (with a body mass index over 35) are candidates for bariatric surgery.
- Bariatric Surgery is most effective when paired with lifestyle changes in diet and exercise. Patients are encouraged to deal with emotional and psychological issues that may have contributed to their condition.
- According to the National Institutes of Health, bariatric surgery is the only long-term effective therapy for morbid obesity and its complications. A variety of surgical procedures can provide significant resolution of many co-morbidities, such as diabetes, asthma, hypertension, sleep apnea, hypertriglyceridemia, cardiopulmonary failure, infertility and stress incontinence.
- While complications are possible in any surgery, the rate of complications from surgery performed at an ASMBS Bariatric Surgery Center of Excellence is low. Excellent outcomes are possible with preoperative evaluation and preparation, careful surgical technique, and ongoing postoperative follow-up.

Higher Doses of Radiation for Prostate Cancer Do Not Decrease Sexual Function Compared to Conventional Dose

Recent advances in the delivery of radiation therapy for prostate cancer are fueling a new trend of providing higher radiation doses over shorter periods of time. But does the daily increase in radiation lead to more sexual dysfunction than the conventional dose? New research by physicians at Fox Chase Cancer Center says it does not. They presented their study at the American Society for Therapeutic Radiology and Oncology's 49th Annual Meeting in Los Angeles.

IMRT, or intensity-modulated radiation therapy, is a technique for delivering radiation that more precisely targets the tumor. Because of this precision, physicians can increase the dose of radiation, which is

shown to cure more prostate cancers, without increasing side effects of radiation such as rectal bleeding, cramps or diarrhea.

“Sexual dysfunction can be a result of radiation treatment for prostate cancer,” said Mark Buyyounouski, MD, attending physician in the radiation oncology department at Fox Chase Cancer Center and lead author of this study. “IMRT is revolutionizing how we treat men with prostate cancer because it improves our ability to avoid normal tissue. As a result, more radiation dose can be delivered to the prostate by increasing the amount of radiation each day. Increasing the radiation used each day is particularly attractive because it also shortens the treatment time by several days.

“We need to make sure there’s a balance between risk and benefit, and sexual function is a major consideration. Fortunately, this study shows no decrease in sexual function from the higher doses of radiation.”

For the study, 155 men with intermediate- to high-risk prostate cancer were prospectively randomized to receive 2 Gy in 38 fractions or sessions (seven weeks, three days), totaling 76 Gy, or a short course of 2.7 Gy in 26 fractions (five weeks, one day), totaling 70.2 Gy. IMRT planning was used in both arms. Men who received androgen-deprivation therapy were excluded from the analysis. Sexual function was reported by patients using questionnaires before treatment and at six, 12 and 24 months after treatment.

Seventy-seven men received the seven and a half week treatment and 78 men received the shorter regimen with higher daily dose. There was no significant difference in sexual function scores between the two groups at six, 12 months or 24 months following treatment. Older age and poorer sexual function prior to treatment were related to a decline in sexual function after treatment. The shorter arm was not associated with erection quality or frequency at two years.

“There continued to be no difference in sexual function between the two groups at six, 12 or 24 months” concluded Buyyounouski. “Men who had low sexual function before treatment were most likely to have a decline in sexual function after treatment. Increasing radiation dose with hypofractionation and IMRT does not appear to increase that risk.”

In addition to Buyyounouski, other authors include Tianyu Li, Eric. M. Horwitz, MD, and Alan Pollack, MD, PhD, of Fox Chase Cancer Center and Deborah Watkins-Bruner, R.N., PhD, of the University of Pennsylvania.

Philadelphia International Medicine is an organization that provides medical and patient support services to international patients. It also provides continuing medical education and health care training and education to international physicians, administrators and other practitioners. As the international department of several Philadelphia-area hospitals, international patients gain access to physicians and hospitals rated among the best in the world through one telephone call to PIM. You can reach PIM by calling 1-215-563-

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