

NewYork-Presbyterian Advances Orthopedics

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New York's #1 Hospital
18 Years in a Row

Center for Athletic Hip Injuries and Hip Preservation: Addressing Hip Pain in Young Adults

While hip pain is a more common condition in older adults, in recent years it has been shown that younger athletic adults are also prone to hip problems that were once considered merely groin or muscle injuries. "In the last 10 to 15 years we've been able to improve our understanding of athletic hip pain with more advanced imaging, such as MRI and ultrasound, that allows us to get a more refined look into the hip joint to recognize subtle findings that can cause pain," says **T. Sean Lynch, MD**, Director of the new Center for Athletic Hip Injuries and Hip Preservation in the Department of Orthopedic Surgery at NewYork-Presbyterian/Columbia University Irving Medical Center.

Dr. Lynch, who specializes in the nonoperative and operative treatment of hip and knee disorders in athletes of all levels, notes the Center brings together specialists, including a non-operative sports medicine team, physiatrists, physical therapists, musculoskeletal radiologists, as well as open and arthroscopic hip surgeons, who are focused on providing joint-preserving treatment for young, active adults.

"Our goal is to maximize our non-surgical care through rest and anti-inflammatories, physical therapy, or physical therapy with an injection, so we can identify the source of the patient's pain, but also try to help them recover without surgery."

— Dr. T. Sean Lynch

"These patients are typically complex and having colleagues who can provide different areas of expertise and different insights is



Dr. T. Sean Lynch

paramount to determining the diagnosis and planning treatment," says Dr. Lynch. "I've treated a number of older athletes who have hips that are physiologically 20 years younger than what they are, and then I've seen patients who have hips that are 20 years older than their biological age. So, the first thing we assess is whether this is an arthritis problem or are we dealing with a young adult athletic hip injury more in the form of labral tears than the femoroacetabular impingement."

"We see a spectrum of conditions, but predominantly it is femoroacetabular impingement, otherwise known as FAI, in which abnormal bone is present around the hip joint placing increased stresses on the cartilage and labrum," continues Dr. Lynch. "We typically start our management utilizing the least invasive options, including rest, activity modification, and physical therapy to build up the patient's core, lower back, and hip. We can also offer intra-articular injections of either cortisone or platelet-rich plasma to alleviate symptoms."

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Addressing Hip Pain in Young Adults (continued from page 1)

The increasing prevalence of FAI in the adolescent population is due to several reasons, notes Dr. Lynch. “We have kids in their teenage and adolescent years playing a lot of sports and putting major stress on their hips, particularly on the growth plate on the femoral neck,” he explains. “The body’s natural reaction is to lay some bone next to it to help offload the area, and once the patient stops growing, they are left with that bump. The hip joint is supposed to be a round peg sitting into a round hole, but with hip impingement, it becomes a square peg trying to fit into a round hole, placing abnormal stress onto the labrum and the cartilage that leads to the tears that cause pain.”

In some cases, he says, the pain causes individuals to modify their walk so that they’re not taking as long of a walking stride. “They can also have pain with just normal daily activities – putting on their socks and shoes, sitting in class, and going up and down stairs. And obviously the pain causes some limitations of their sporting activities.”



A repaired labrum

“The hip is a complex area,” continues Dr. Lynch. “These conditions are typically not straightforward where, for example, with an injured ACL, rotator cuff, or meniscus, you can pick up on the diagnosis easily through the patient’s history and physical exam. With the hip, you have to tease through a lot of information, not only what the patient’s limitations are or where their pain is, but also how it is affecting them.”

“If a patient has dealt with this pain for a while, they can have soft tissue compensating issues, such as developing tight

muscles in their back, knee pain, as well as pelvic floor pain,” says Dr. Lynch. “There are different layers of complexity – they may have a labral tear or possibly a sports hernia. Our goal is to maximize our non-surgical care through rest and anti-inflammatories, physical therapy, or physical therapy with an injection, so we can identify the source of the patient’s pain, but also try to help them recover without surgery.”

Patients who have not been successful with nonoperative treatment approaches may require minimally invasive hip arthroscopy or an open hip preservation procedure, such as periacetabular osteotomy or a proximal femoral osteotomy. “With the arrival of Dr. Jakub Tatka [see page 4], an orthopedic surgeon who specializes in complex adult hip and knee reconstruction and hip preservation, we can offer patients the full range of surgical treatment options,” says Dr. Lynch.

“When patients come to us, we want to make sure they understand that our number one goal is to get them better by applying the least invasive methods possible,” adds Dr. Lynch. “However, for patients who require surgical intervention, hip arthroscopy is a great option to shave this extra bone off the femur and acetabulum while repairing the labrum. It is our hope that by treating this group of younger adults and addressing these issues earlier, we will be able to decrease the chance for their needing a hip replacement down the line.”

Reference Article

Best Practice Guidelines for Hip Arthroscopy in Femoroacetabular Impingement. Dr. T. Sean Lynch. ISHA Annual Scientific Meeting. October 4, 2018.

For More Information

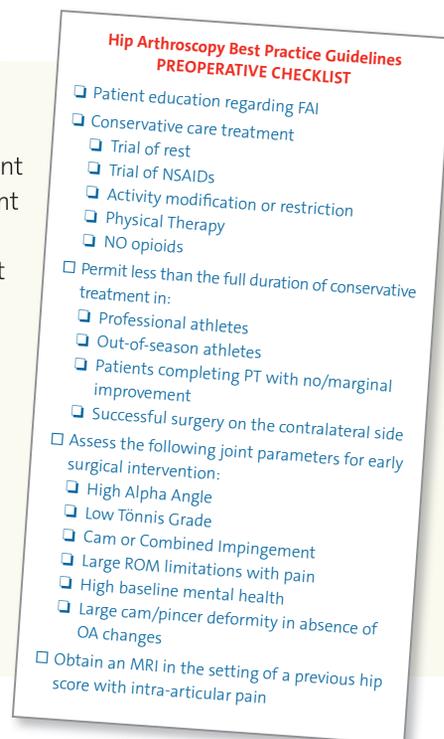
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Developing Best Practice Guidelines for Hip Arthroscopy

Treatment algorithms for the arthroscopic management of femoroacetabular impingement remain debated due to a paucity of evidence-based guidance, and thus there is significant variability in clinical practice among practitioners. To address this, Dr. T. Sean Lynch led 15 hip arthroscopists from 14 institutions across the country to formally develop the first national consensus-based Best Practices Guidelines in Hip Arthroscopy driven by meta-analysis and a systematic literature review by a panel of experts.

“We utilized a Delphi approach, a way of helping to gather consensus on topics where the literature or the research is still lacking,” says Dr. Lynch. “We wanted to put together a safety checklist for providers who either might not be seeing a lot of these conditions or who are just starting off in their practice.”

The guidelines, which include 27 preoperative recommendations, 15 intraoperative practices, and 10 postoperative protocols, provide standardization of nonoperative and surgical management of FAI. As evidence becomes available, Dr. Lynch and the team will update the guidelines accordingly.



The Perry Initiative: Encouraging Young Women to Enter Orthopedics

Despite the increasing number of women entering medical and graduate school, women make up only 6.1 percent of fully accredited practicing orthopedic surgeons in the U.S., according to a 2014 survey by the American Academy of Orthopaedic Surgeons. In an effort to increase the pool of women who might be interested in pursuing a career in the field, the Columbia University Department of Orthopedic Surgery partnered with The Perry Initiative to host an outreach program for 39 high school students on October 20, 2018.

The Perry Initiative is committed to inspiring young women to be leaders in orthopedic surgery and other science, technology, engineering, and mathematics fields. The Perry Initiative is named in honor of Dr. Jacquelin Perry, one of the first 10 women orthopedic surgeons in the country and a mentor to countless women and men in the field throughout her career. Since its inception in 2009, the program has joined with institutions to conduct outreach programs across the country for women students in high school, college, and medical school.

Christen M. Russo, MD, a Columbia pediatric orthopedic surgeon, served as Program Director for the day-long event, with volunteer assistance by Columbia orthopedic faculty and residents, including **Stephanie Shim, MD**, PGY-5.

“In general, medicine is still a male dominated field, however, that is changing in that there are more female students than male students entering medical school,” says Dr. Russo. “Orthopedic surgery is still overwhelmingly male. One reason is that if you don’t see anybody that looks like you in the field, you’re less likely to think that you might be part of that profession. The whole reasoning behind getting that early exposure in high school is so young women can see that there are women who are engineers and who are orthopedic surgeons.”



Dr. Christen M. Russo

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The program consisted of a didactic session with motivational lectures presented by representatives from The Perry Initiative, as well as talks by Columbia engineers and orthopedic surgeons describing their respective fields. “Throughout the day, we also conducted six hands-on workshop modules with the students, demonstrating orthopedic techniques such as casting and external fixation,” says Dr. Russo. “They learned about the biomechanics and ligaments of the knee as we explained ligament reconstruction. We also showed them how to affix a plate on a complex fracture and insert scoliosis screws. It was a very unique experience.”

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High school students join their instructors at the end of the day-long program. They include Dr. Christen Russo (front row, sixth from right) and Dr. Stephanie Shim (front row, second from left).

Focus on Faculty (continued from page 5)



Jakub Tatka, MD

“I’ve always had a passion for fixing and making things,” says Dr. Jakub Tatka, who specializes in complex adult hip and knee reconstruction and hip preservation. “My parents were both architects, and my father could fix anything. In medical school, I was open-minded, but I just loved my

rotation in orthopedics, and, in particular, the hip and knee replacement experience.”

Born in Krakow, Poland, Dr. Tatka came to the U.S. at the age of three. He studied music and technology at Connecticut College, after which he earned his medical degree and completed residency training in orthopedic surgery at SUNY Stony Brook. Dr. Tatka then completed the Joel Matta Fellowship in Pelvis, Hip, and Knee Reconstruction and Preservation at the Steadman Clinic in Colorado, where he focused on anterior approach hip replacement, pelvic osteotomy and hip preservation, and knee replacement surgery.

“Dr. Matta was my mentor and arguably one of the most famous hip surgeons in the world,” says Dr. Tatka, who then went on to pursue the Bernese Hip Preservation Fellowship at Inselspital in Bern, Switzerland.

Dr. Tatka joined Columbia in November 2018 and practices primarily at NewYork-Presbyterian Lawrence Hospital, where he is focused on the operative and non-operative management of athletic injuries and arthritic, post-traumatic, and developmental disorders of the pelvis, hip, and knee. He also has a particular interest in hip preservation, leveraging special surgical techniques to treat a variety of congenital and acquired disorders in order to preserve healthy joint surfaces.

As one of the traveling physicians for the US Ski Team, Dr. Tatka has participated in training events and Olympic trials all over the world.

Dr. Tatka’s research interests center on improving the diagnosis and treatment of hip disorders and on the precision of accurate implantation of hip replacement components, with current work underway on enhancing the understanding of cup position.

“Today, with minimally invasive techniques and computer guidance we can do very sophisticated surgeries with minimal tissue dissection and trauma to the joints,” adds Dr. Tatka. “These surgeries do much more than just treat pain. They give the patient their life back to do the activities that make them happy.”

The Perry Initiative: Encouraging Young Women to Enter Orthopedics (continued from page 3)

Dr. Shim was eager to participate in the event and appreciates the leadership taken by the Department of Orthopedic Surgery to draw more young women to the field. “As I went around the country interviewing for residency programs, I noticed they were primarily staffed by men,” she says. “We’ve been very lucky at Columbia, especially having a champion like Dr. William Levine, our Chair, as we’ve had so many women come through its orthopedic residency program. It is certainly one of the reasons that attracted me to come here.”

Dr. Shim believes that a lack of women mentors is one contributing factor to fewer women entering orthopedics. “Young women need exposure to great female mentors who nurture them along,” she says.

“There are still so many stereotypes about our field – especially that it is more appropriate for men, which is absolutely false,” continues Dr. Shim. “The program provided the opportunity to debunk some of the rumors about orthopedics, particularly the idea that you can’t succeed unless you come in with a comfort level using power tools, have a larger physique, and are physically very strong. I think, unfortunately, that turns away a lot of women. They don’t realize that men and women don’t generally arrive to residency with those skills – we’re taught them. You don’t have to be a certain size or bench press a certain weight. It’s



Dr. Lauren H. Redler was among the orthopedic faculty to take part in The Perry Initiative program.

more about the skills you learn and how to use them.”

Dr. Shim will soon begin fellowship training at Brigham and Women’s Hospital and plans to stay involved in The Perry Initiative. “We have a responsibility to pay it forward to help bring up the next generation of female orthopedic surgeons,” she says.

For More Information

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Focus on Faculty



Louis F. Amorosa, MD

With the arrival of Dr. Louis F. Amorosa in 2018, NewYork-Presbyterian Hudson Valley Hospital can now offer Westchester residents the same advanced, least-invasive spinal surgical techniques available at NewYork-Presbyterian/Columbia University Irving Medical Center.

Dr. Amorosa, who specializes in complex spinal reconstruction, minimally invasive surgery, and cervical spine surgery, joins the Department of Orthopedic Surgery from Montefiore Medical Center and Albert Einstein College of Medicine, where he was Assistant Professor of Orthopedic Surgery.

“I am excited about the challenge and opportunity to bring state-of-the-art spinal care to NewYork-Presbyterian Hudson Valley Hospital,” says Dr. Amorosa, who also previously served as an orthopedic trauma and spine trauma surgeon at Jacobi Medical Center and Westchester Medical Center.

Dr. Amorosa earned his medical degree at the University of Pittsburgh School of Medicine, where he was a member of Alpha Omega Alpha. He completed an orthopedic surgery residency at NewYork-Presbyterian/Columbia serving as chief

resident and was presented with the Harrison McLaughlin Award for Excellence in Orthopedic Trauma Care. He then pursued a fellowship in orthopedic trauma at Hospital for Special Surgery, followed by a combined orthopedic and neurosurgical spine surgery fellowship at Thomas Jefferson University Hospitals and the Rothman Orthopaedic Institute.

“I try, whenever possible, to offer my patients the most minimally invasive, motion-sparing spine surgery,” says Dr. Amorosa, who is also skilled in complex pelvic and acetabular fractures, and generally performs the very complex spine and trauma cases at the Och Spine Hospital at NewYork-Presbyterian Allen Hospital. “Our goal at Hudson Valley is to offer local residents cutting-edge orthopedics and spine surgery in their own community so that they don’t have travel to New York to see experts in the field. However, if we feel that they require a higher level of complex care postoperatively, or even intraoperatively, we will transfer them to Columbia.”

Dr. Amorosa plans to partner with **Nadine O. Chahine, PhD**, Associate Professor of Bioengineering in Orthopedic Surgery and Biomedical Engineering. “Dr. Chahine is a prestigious researcher. Our translational research, which is in the planning stages, will focus on the causes of spinal stenosis,” he says.



Nicole S. Belkin, MD

In January 2019, Dr. Nicole S. Belkin was appointed Chief of Orthopedic Surgery at NewYork-Presbyterian Hudson Valley Hospital. Dr. Belkin, an orthopedic surgeon and sports medicine specialist in nonoperative and operative treatment of injuries

and conditions affecting the knee, shoulder, and hip, brings to her new position a depth of experience and training.

After earning her medical degree from the University of Florida School of Medicine, Dr. Belkin completed her residency in orthopedic surgery at the University of Pennsylvania. She conducted laboratory research for an additional year there, winning the Orthopedic Research and Education Foundation’s Resident Clinician Scientist Award, achieving both national and international recognition. In 2016, Dr. Belkin completed a fellowship in Sports Medicine and Shoulder Surgery at Hospital for Special Surgery, gaining experience treating complex articular cartilage injuries, meniscal injury and deficiency, ligamentous injuries and patellofemoral conditions of the knee; shoulder conditions, including instability, separations, rotator cuff tears and arthritis; and femoroacetabular impingement.

Dr. Belkin, a former athlete herself, has served as an assistant team physician for the New York Giants, an associate team physician for Iona College Athletics, and an orthopedic

consultant to the New York Public School Athletic League.

It was during her training at the University of Pennsylvania that she briefly gained exposure to community orthopedics as an elective and remembers “what a wonderful working environment it was.”

“Being at NewYork-Presbyterian Hudson Valley affords me the best of both worlds,” notes Dr. Belkin. “Everyone knows each other and there are more smiles and greetings in the hallway. And our orthopedic team is an extension of NewYork-Presbyterian/Columbia, bringing advanced care to patients in the community. The perception I have from patients is that they appreciate the convenience and comfort of being able to obtain care that they need in a community where they’re comfortable. With this in mind, we have plans to expand our program in the coming years to ensure that every orthopedic and musculoskeletal need of the community can be addressed by our department.”

Dr. Belkin also plans to pursue research in the treatment of injuries of knee articular cartilage. “This tissue itself has no intrinsic capacity to heal, so coming up with more refined and biologically advanced treatments could have a tremendous impact on the future of a patient’s knee, limiting or eliminating disease progression and avoiding larger surgeries with more morbidity, such as knee replacement.”

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