Comprehensive Sports Medicine at St. Charles Hospital
St. Charles Hospital’s History is steeped in compassionate care with a focus on rehabilitation. The mission that four Sisters of the Order of the Daughters of Wisdom began in 1907 has today grown to include centers of excellence in maternity, rehabilitation and orthopedics. In fact, St. Charles Hospital is a leader in Suffolk County in orthopedic procedures, performing more than 1,000 each year in specialized surgical fields such as foot and ankle, hip and knee, hand and upper extremities, pediatrics, spine, and trauma.

According to Brian McGinley, M.D., attending orthopedic surgeon at St. Charles Hospital, the orthopedics department has also established and nurtured a strong sports medicine program. This dedicated area of expertise provides patients of all ages and activity levels access to a complement of nonoperative treatments — such as bracing, injections, physical therapy and return-to-play protocols for concussions — and cutting-edge surgical interventions for injuries, including articular cartilage damage, complex knee dislocations, meniscus tears and shoulder rotator cuff tears.

“During the last 10 years, we’ve significantly added to our sports medicine department with subspecialists in many different aspects of sports medicine,” says Dr. McGinley. “We filled a significant need in Suffolk County — where there weren’t subspecialty, fellowship-trained orthopedic surgeons — with physicians trained in New York City, Boston and right here on Long Island.”

From the First X-ray ...

The sports medicine physicians at St. Charles Hospital see a diverse mix of patients, ranging from middle school, high school, college and semi-pro athletes to weekend warriors of all ages. When a patient is referred to St. Charles Hospital, the initial visit with the appropriate specialist involves completing a thorough medical and injury history, performing a physical examination and, typically, ordering X-ray images of the injured area. The nature of the injury may necessitate further imaging utilizing technology such as St. Charles Hospital’s 3-tesla magnetic
“Both young and mature athletes have significantly increased their levels of competition in the last decade. This has resulted in a dramatic increase in both the number and complexity of shoulder injuries treated by the sports medicine community. Because of its subspecialization and commitment to cutting-edge technology, the St. Charles Hospital sports medicine team is uniquely able to keep these athletes functioning at their highest levels.”
— Philip Schrank, M.D., orthopedic surgeon and President, St. Charles Hospital’s Medical Staff and Medical Board

resonance machine, which has increased surgical precision and accuracy.

As a primary care sports medicine physician, Hayley Queller, M.D., board-certified internist and pediatrician at St. Charles Hospital, can create a regimen of home exercises to utilize conservative avenues of care and engage the patient in his or her recovery. When appropriate, Dr. Queller and her colleagues may also prescribe injections to reduce inflammation in older patients and physical therapy for patients of all ages before turning to surgery.

“In the great majority of cases, we are able to treat people nonoperatively, and that is certainly the goal — to get people better without surgery,” says Gregg J. Jarit, M.D., orthopedic surgeon at St. Charles Hospital. “My main goal is to get these people back to doing what they want to do — whether it’s sports, work, or just their daily hobby and activities — as quickly as possible and have them pain free.”

In the case of a patient with a fracture that does not require surgical reduction, Dr. Queller’s main objective is to immobilize the bone within two days of injury. She fits the patient with a fiberglass cast or a waterproof fracture brace, which is especially useful for children during the summer months. Dr. Queller generally follows up with patients one week after casting to ensure fracture alignment and again at the conclusion of their healing.

... to the Operating Room

When surgical intervention is indicated, the sports medicine physicians’ approach aligns with the orthopedic movement away from traditional, larger procedures to procedures requiring smaller incisions performed with more delicate instrumentation. Arthroscopic surgery allows surgeons to access a joint through a puncture or a very small incision rather than an opening that requires cutting the skin, muscle and ligaments to expose the bone. These small incisions have the ability to close on their own following the procedure and dramatically reduce a patient’s healing time.

As Dr. McGinley explains, the orthopedic discipline has driven the development of instruments needed to perform technically sophisticated movements — implanting screws or tying ligaments together — through minimal openings. Several sports medicine and orthopedic specialists at St. Charles Hospital maintain consulting agreements with equipment manufacturers to participate in the development of total joint and arthroscopic implants and instrumentation.
Two procedures the sports medicine specialists at St. Charles Hospital have followed closely are articular cartilage restoration and reconstruction for patellar instability. Dr. McGinley brings to bear both the expertise of a surgeon and the perspective of a patient when performing the former procedure. Having undergone three articular cartilage restorations in his right knee, he is empathetic to patients undergoing the treatment. The procedure itself involves autografts and allograft osteochondral transplantations, through which surgeons essentially fill the divot in the cartilage at the end of a bone.

As cartilage has difficult healing potential, there are several techniques to address the damaged area, including transplanting donor cells — as is the case with allografts — or transferring cartilage from a non-weight-bearing area of the knee, as is the case with autografts. The ultimate goal is to ensure patients have full function of their knees over their lifetime and avoid the development of degenerative disease.

“Because we’re putting new cartilage in, you have to let that cartilage assimilate to the knee. That allows the cartilage to not only fill the pothole, but actually conform to the rest of the knee as well,” says Dr. McGinley. “It’s not always perfect, but it has shown to improve function, and we’ve been very successful at getting people back to sport and function.”

For patella instability — an injury that occurs commonly in younger patients — Dr. Jarit first prescribes a course of bracing and physical therapy. If those conservative measures fail to re-establish stability, he can utilize an autograft approach.

“There are a tremendous number of surgical techniques employed to try to restore the stability of the patella,” says Dr. Jarit. “The successful technique I’ve been using involves taking a hamstring tendon and reconstructing the medial patellofemoral ligament, which helps prevent the patella from dislocating laterally.”

This procedure allows patients to bear weight immediately, as tolerated, with the support of a brace that is worn for six weeks. Typically, crutches are used for only a week or two following surgery. This is followed by six weeks of physical therapy before transitioning to sports-specific training or the patient’s main activity.

... to the First Game Back

In addition to providing primary sports medicine care, Dr. Queller — who holds a certificate of added qualification in sports medicine — is an integral member of the concussion management program at St. Charles Hospital. She explains that when she came to Long Island, the community was at a loss for how to appropriately identify and treat concussions in the student athlete population. Seeing the need for a subspecialization,

“The sports medicine physicians at St. Charles Hospital can treat sports medicine injuries with the latest techniques used at university hospitals and specialty centers around the country. We all attend national meetings to learn the latest techniques and ensure our patients are getting the most advanced care possible.”

— Gregg J. Jarit, M.D., orthopedic surgeon at St. Charles Hospital
Dr. Queller undertook additional certification in concussion management and spent time at University of Pittsburgh Medical Center’s Sports Medicine Concussion Program shadowing the country’s leading neuropsychologists.

“I then started lecturing and talking to people on Long Island about the importance of concussion management and engaging pediatricians in the community, trying to gauge where the need was. It was obvious that there were a lot of primary care practitioners who didn’t feel comfortable treating concussions,” says Dr. Queller. “Some of my colleagues and I decided we would be the ones to take that on because we’re the ones on the sidelines who need to make sure these kids are safe.”

Partnering with St. Charles Hospital, a concussion management program that employs a traditional physical examination coupled with an in-depth educational component for athletes and their parents was implemented. Dr. Queller and her colleagues at St. Charles Hospital also utilize neurocognitive testing (ImPACT testing). This testing tool features five sections that gauge an athlete’s attention span, nonverbal problem-solving, reaction time, response variability and working memory. After interpreting the results, physicians can make appropriate treatment recommendations and assess return-to-baseline or normative neurocognitive status.

As Dr. Queller explains, the most effective therapy is rest. Patients require full cognitive and physical rest, which can translate to a temporary break from school or work and abstinence from stimulations such as television, texting and reading. Before returning to their normal activities, patients must remain symptom-free at rest and symptom-free while performing cognitive and physical exertion.

The return-to-play pathway also includes a five-stage progression as outlined by the 2008 Third International Conference on Concussion in Sport that should be overseen by a physical therapist or athletic trainer. Patients begin with light aerobic exercise, during which they never exceed 40% of their maximum heart rate. As they progress through the stages, they gradually increase their aerobic capacity, lifting routines and plyometric exercises until they progress to participation in noncontact training drills, followed by full-contact participation.

If a patient moves through the protocol without demonstrating a relapse of concussion symptoms, the athlete is cleared for competition. Throughout the initial evaluation, rest and the return-to-play protocol, sports medicine specialists are collaborating with a number of providers and people in the patient’s life.

“Generally, the people who are involved are the parents, the students and then the athletic trainers or physical therapists,

THE CONCUSSION CAMPAIGN

WHILE THE U.S. GOVERNMENT has yet to pass the Protecting Student Athletes from Concussions Act of 2011 and the Centers for Disease Control and Prevention protocols for prevention and treatment are due out in 2013, states are not waiting to develop their own legislation. In addition to New York, 38 states have passed mandates similar to Washington State’s Lystedt Law — the first piece of concussion-prevention legislation in what has become a movement supported by national sports and educational organizations.

The majority of the state-level acts require an increased level of education for athletes, coaches and parents; the immediate removal of a player from a game or practice at the first sign or suspicion of a concussion; and written clearance from a health care provider before the athlete is allowed to return to play. In New York, the Concussion Management and Awareness Act was signed into law in September 2011. It mandates the creation of guidelines in a joint effort by education and health commissioners for their districts and the dissemination of educational materials to parents, followed by their written acknowledgement of receipt of the material.

In addition, the legislation has driven the organization of concussion management teams, which can include an athlete and his or her family, primary care physicians and specialists, certified athletic trainers, and school personnel — such as coaches, school nurses, teachers and school administrators — who have received specific training to identify mild traumatic brain injuries.

Hayley Queller, M.D., examines a patient for concussion symptoms.

Philip Schrank, M.D., prepares a patient for diagnostic imaging following a sports injury.
Training makes perfect

In its focus on elevating the level of specialty sports medicine care in its orthopedics department, St. Charles Hospital has built a roster of physicians with the expertise and extensive training necessary to properly identify a patient’s injury and perform the advanced surgical procedures available at the Long Island campus.

Brian J. McGinley, M.D.

An orthopedic surgeon specializing in articular cartilage injuries, Dr. McGinley earned his medical degree at Columbia University and began his postgraduate training with an internship and residency in orthopedic surgery at St. Luke’s-Roosevelt Hospital Center. He then completed a fellowship in orthopedics at the Insall Scott Kelly Institute for Orthopaedics and Sports Medicine. Dr. McGinley gained courtside experience as an assistant for the team physician of the New York Knicks.

Gregg J. Jarit, M.D.

An orthopedic surgeon specializing in sports medicine injuries of the knee and shoulder, as well as reconstruction for patellar instability, Dr. Jarit earned his medical degree at Albert Einstein College of Medicine. He completed a residency in orthopedic surgery at New York University Hospital for Joint Diseases, including a one-year research fellowship. Dr. Jarit undertook a sports medicine fellowship at the University of Virginia, where he also gained hands-on experience as the assistant team orthopedist for both James Madison University and the University of Virginia.

Hayley Queller, M.D.

The first primary care sports medicine physician at Orthopedic Associates of Long Island, Dr. Queller earned her medical degree at Georgetown University School of Medicine and began her postgraduate training with a dual residency in internal medicine and pediatrics at Christiana Care Health System. She added to her expertise with a primary care sports medicine fellowship at Christiana Care Health System. Dr. Queller’s management of sports injuries also draws from her own athletic experience as an All-American soccer player during her undergraduate career at Franklin & Marshall College.

“...and well trained to provide appropriate care for any level of injury. If someone comes to me with a complicated hand injury, I send him or her to the hand specialist at St. Charles Hospital. I’m not going to treat that patient, because I have access to experts within every field who can perform any sort of surgical procedure necessary. In the department, we cover all aspects of sports medicine care.” — Brian McGinley, M.D., attending orthopedic surgeon at St. Charles Hospital

depending on who’s going to perform the athlete’s return-to-play progression. Certainly, we make sure the coaches are in the know, and we send letters back and forth to the school nurse,” says Dr. Queller. “There’s a fair bit of communication when it comes to concussions, making sure that everyone is on the same page — including teachers, guidance counselors and even principals — to ensure everybody knows what’s going on from academic and physical standpoints.”

The concussion management program at St. Charles Hospital began with four school districts and today works with 32 districts.

To learn more about sports medicine and the orthopedic department at St. Charles Hospital, visit www.stcharles.org.