ACL Reconstruction

MOIRA McCARTHY MD

ORTHOPAEDIC SURGERY & SPORTS MEDICINE

Surgical Locations:

HSS Main Campus - Main Hospital
535 East 70th Street
New York, NY 10021

HSS ASC of Manhattan
1233 2nd Avenue
(bwt. 64th and 65th St.)
New York, NY 10065

HSS Orthopaedics at Stamford Hospital
Tully Health Center
32 Strawberry Hill Ct
Stamford, CT 06902

Your guide to ACL injury, treatment options, and recovery — from your first visit to your return to sport.

No. 1
HSS is ranked No. 1 in orthopedics by *U.S. News & World Report* — 17 years in a row

~1 hour
Typical surgery time

Same day
Most patients go home after surgery

Day 2
Physical therapy begins

WHY PATIENTS CHOOSE DR. MCCARTHY

- **Personalized care:** Dr. McCarthy tailors every part of your care and spends time with you before and after surgery
- **A clear recovery roadmap** and **a graft chosen** for your sport and goals
- **Extra infection-prevention steps:** special drapes during surgery and extra fluid irrigation of the knee joint
- **Usually no general anesthesia** — most patients breathe on their own during surgery
- **Two office locations** — New York and Stamford, CT
- **Three surgical locations** — HSS Main Campus, HSS ASC of Manhattan, and Stamford Hospital

Schedule your consultation

CALL · NEW YORK **646-714-6360**	CALL · STAMFORD **203-705-0900**
SELF-SCHEDULE ONLINE **hss.edu**	MESSAGE US **MyChart app**
EMAIL **mccarthyoffice@hss.edu**	

UNDERSTANDING YOUR ACL INJURY

WHAT IS THE ACL?

- The anterior cruciate ligament (ACL) is one of the 4 major ligaments in the knee.
- It controls the knee's forward (anterior) and rotational stability.
- Injuries commonly happen when the leg is planted and there is a sudden twist or change of direction.
- An ACL tear may come with injuries to other parts of the knee, such as the MCL, menisci, or cartilage.

COMMON SYMPTOMS

- A "pop" or "snap" in the knee at the time of injury
- Immediate pain and swelling, and a sense that the knee is unstable
- Difficulty straightening and bending the knee at first

YOUR TREATMENT OPTIONS

Non-surgical (conservative) treatment

May be an option if you mainly want to do daily activities and straight-line exercise (walking, running).

- Anti-inflammatories (NSAIDs such as Aleve or Advil) for pain and swelling
- Physical therapy to improve range of motion and strength
- A functional ACL brace is helpful
- You may still need surgery if you have instability or pain

ACL reconstruction surgery

Recommended if you are an athlete or hope to return to activities that involve cutting, pivoting, or sports.

- Restores stability to the knee
- Helps prevent future episodes of instability, which can cause further damage to the cartilage and menisci

Dr. McCarthy will talk through both options with you and help you decide what is right for your knee, your activities, and your goals.

CHOOSING YOUR GRAFT

During ACL reconstruction, your torn ligament is replaced with a graft — a piece of tendon that becomes your new ACL. Dr. McCarthy will recommend the graft that best fits your body, your sport, and your goals.

Graft	What it is	Best suited for	Advantages	Drawbacks
Patellar tendon autograft your own tissue	Pieces of bone from the kneecap (patella) and shin (tibia), connected by the central third of the patellar tendon	Athletes who want to return to a high level of competition	The "gold standard" graft for ACL reconstruction in athletes	More pain early after surgery; harder to regain quadriceps function; can cause pain at the front of the knee if strength doesn't recover; difficulty kneeling and some numbness at the front of the knee
Quadriceps tendon autograft your own tissue	The central part of the quadriceps tendon, just above the kneecap	Patients who want a very strong graft with less front-of-knee pain	Very strong, solid graft; less front-of-knee pain, difficulty kneeling, and numbness than the patellar tendon graft	Quadriceps strength may be slower to return
Hamstring autograft your own tissue	Two hamstring tendons (semitendinosus and gracilis) from the back of the thigh	Recreational athletes and patients who need stability for daily activities	A strong graft that provides significant stability	Hamstrings from one leg may not be large enough; may need tendons from the other leg or donor tissue added
Allograft donor tissue	Tendon from a donor (cadaver)	Patients who need a stable knee but have lower activity demands	No tendon is taken from your own leg	Low chance the body rejects the tissue, which would cause graft failure and repeat surgery; not advised for young patients or high-level athletes

Added protection for high-risk knees: lateral extra-articular tenodesis (LET)

ACL reconstruction generally gives good results with excellent front-to-back stability. However, some patients still have a degree of **rotational** looseness afterward. LET adds reinforcement on the outer side of the knee — using a strip of the iliotibial (IT) band, or by reconstructing the anterolateral ligament — to improve rotational stability and reduce the risk of the new ACL graft tearing.

Most likely to benefit: patients with very loose joints, revision (repeat) ACL surgeries, pivoting athletes, and patients with a high-grade (IKDC grade III) pivot shift on exam.

RISKS OF SURGERY

Every surgery has risks. Here is what to know about ACL reconstruction.

Bleeding	The risk of bleeding with this surgery is low. We do obtain consent for a blood transfusion in case bleeding occurs.
Infection	The risk is very low at HSS. We take the usual HSS precautions, including IV antibiotics within 1 hour before surgery and strict sterile conditions. In addition, **Dr. McCarthy uses special drapes during surgery and irrigates the knee joint with extra fluid**. If an infection does occur, it requires further surgery and IV antibiotics.
Graft failure	Studies show that the overall chance of the new ACL tearing again (re-rupture) is **5–7%**. Some patients are at higher risk because of their activities.

PREPARING FOR SURGERY

BEFORE SURGERY

- If you are **40 or older**, or have any significant medical problems, you will need medical clearance, including basic lab work and clearance from your primary care doctor.
- Your knee must have nearly normal range of motion (0–120 degrees) before surgery. Some patients need a few sessions of physical therapy first.

THE DAY OF SURGERY

- You will meet with Dr. McCarthy and the anesthesiologist to discuss the surgery and answer your questions.
- **Anesthesia** will likely be a spinal injection to numb your legs, plus medicine to help you sleep. Most patients do not need general anesthesia, so they breathe on their own during surgery.
- Surgery takes about **1 hour**.
- You will wake up in the recovery room in a **locked knee brace**.
- **Most patients go home the same day**, once they have feeling in their legs, have met with the therapist, are able to use the bathroom, and have their pain under control.
- Your medications — narcotic pain medication, an anti-inflammatory, Tylenol, and aspirin — are explained in detail in your *Surgery Instructions* booklet.

YOUR RECOVERY

THE FIRST WEEKS

- **Physical therapy** begins 2 days after surgery.
- **Walk right away** with crutches and the brace locked straight. Weight bearing may be limited if a meniscus repair is performed.
- **Follow-up visit 2 weeks after surgery** to remove sutures, discuss the surgery, and review images.

BRACE & CRUTCHES

- **Brace:** wear it when walking and sleeping. You may unlock it once your quadriceps is strong enough (10 perfect straight-leg raises). We will discuss stopping the brace at your 6-week visit, depending on your progress.
- **Crutches:** usually needed for 2–4 weeks. You may stop once the brace is unlocked and you are walking normally.

YOUR ROAD BACK TO SPORT

General guidelines — your own timeline depends on your surgery and progress.

2 weeks	6 weeks	3–4 months	6 months	9–12 months
Incisions well healed Knee straightens fully	Walking normally without brace or crutches	Begin running progression	Begin agility, side-to-side movement, jumping and landing	Full recovery and return to sport or activity

Before returning to sport, you may need a return-to-sport / quality-of-movement assessment to check your risk of another injury.

Ready to take the next step? Schedule a consultation with Dr. McCarthy

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For non-emergent questions, the most efficient way to reach us is a portal message through the **MyChart** app.

NOTES & QUESTIONS FOR DR. MCCARTHY