ROBERT PETTIT, MD

Restoring Function. Maximizing Performance.

ORTHOPAEDIC SPORTS MEDICINE · BEACON ORTHOPAEDICS & SPORTS MEDICINE

CINCINNATI, OH · FORT THOMAS, KY

(513) 354-3700

FELLOWSHIP-TRAINED · BOARD CERTIFIED (ABOS) · MAKO ROBOTICS CERTIFIED · CINCINNATI REDS TEAM PHYSICIAN

KNEE · PREPARING FOR SURGERY

Preparing for Your Multiligament Knee Reconstruction

A Guide to Your Surgery

PROCEDURE	SETTING	ANESTHESIA	RECOVERY
Knee surgery	Typically outpatient — most patients go home the same day	General or regional — reviewed with anesthesia	Personalized week-by-week protocol

Multiligament knee reconstruction — two or more torn knee ligaments are rebuilt with tendon grafts in one coordinated operation to restore stability.

01 A MESSAGE FROM DR. PETTIT

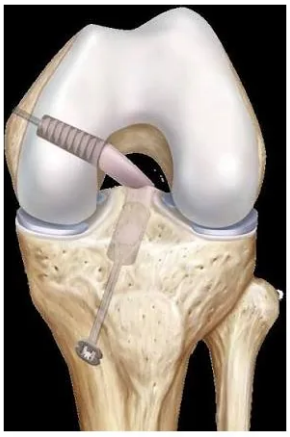
Thank you for the opportunity to take part in your care. Our number one goal, along with our team at Beacon Orthopaedics and Sports Medicine, is to improve your quality of life through our knowledge, skill, experience, and — most importantly — compassionate care. Multiligament knee reconstruction is a major but highly effective procedure, and we recognize that surgery can be stressful, and we hope to make this process as smooth as possible.

This guide is a resource to help you and your loved ones understand your surgery, prepare for the day of surgery, and know what to expect during your recovery. Please keep it with you up to your date of surgery and beyond. Our team is always here to answer your questions — please do not hesitate to contact us about anything.

Sincerely,
Robert J. Pettit, MD

02 ABOUT YOUR MULTILIGAMENT KNEE RECONSTRUCTION

PROCEDURE ILLUSTRATION



Knee anatomy · for education; your anatomy may differ

A multiligament knee injury means two or more of the knee's main stabilizing ligaments (the ACL, PCL, MCL, and/or the posterolateral corner) have been torn — usually from a significant twisting injury, a sports collision, or a knee dislocation. These injuries do not heal reliably on their own, and reconstruction rebuilds the torn ligaments with tendon grafts passed through bone tunnels and fixed in place to restore stability.

Multiligament knee reconstruction is usually performed in a single stage, combining arthroscopic (camera-guided) and open techniques depending on which ligaments are involved. Dr. Pettit reconstructs each torn ligament with a graft — commonly a combination of autograft (your own tendon) and allograft (donor tissue) — chosen for your injury pattern, age, and activity level. Associated injuries such as meniscus tears or cartilage damage are addressed at the same operation.

03 IS THIS THE RIGHT PROCEDURE FOR YOU?

Why it may be recommended

— Two or more torn knee ligaments (ACL, PCL, MCL, or posterolateral corner) with instability

— Knee dislocation or high-energy injury with multidirectional laxity

— Giving-way that limits daily activity despite bracing and therapy

What it is intended to achieve

— Restores stability in all injured directions so the knee no longer gives way

— Allows a staged return to work, daily activity, and — for many patients — sport

— Protects the meniscus and cartilage from ongoing damage caused by an unstable knee

— Addresses all injured structures in one coordinated operation whenever possible

04 RISKS TO UNDERSTAND

As with any surgery, risks include infection, blood clot, stiffness, graft failure or re-tear, persistent instability, numbness near the incision, and the small possibility of needing additional surgery. Dr. Pettit will review your individual risk factors in detail before surgery.

05 IN THE WEEKS BEFORE SURGERY

— Complete your pre-operative clearance. Depending on your age and health, you may need lab work, an EKG, or a visit with your primary care doctor or cardiologist. Our surgery scheduler will tell you exactly what is required

— Review your medications with us. Blood thinners (such as warfarin, Eliquis, Xarelto, Plavix, or aspirin) and certain supplements may need to be stopped before surgery

— but never stop a prescribed medication without instruction from the prescribing doctor

— Stop nicotine. Smoking and vaping slow healing. Stopping even a few weeks before surgery improves your recovery

— this is especially important for tendon, ligament, cartilage, and bone healing

— Arrange a ride and a helper. You cannot drive yourself home after anesthesia. Plan for a responsible adult to drive you and to stay with you the first night

— Prepare your home. Set up a comfortable recovery area with everything within reach, clear tripping hazards and loose rugs, and stock easy meals. If you will use crutches, a walker, a sling, or a brace, practice with it ahead of time

— Fill prescriptions early. If Dr. Pettit sends pain medication or other prescriptions before surgery, fill them ahead of time so they are ready when you get home.

— Stop NSAIDs and blood thinners as directed by our office

— Arrange a ride home and help at home for the first few days

— Begin "prehab" exercises if prescribed, to optimize strength and motion before surgery

— Follow fasting instructions given by anesthesia the night before surgery

06 THE DAY OF SURGERY

Sandy Evans, our surgery scheduler, will give you your exact arrival time and location, and will tell you when to stop eating and drinking — generally nothing to eat or drink after midnight the night before, unless you are told otherwise. Take only the medications we tell you to take, with a small sip of water. Leave jewelry and valuables at home, wear loose, comfortable clothing, and bring your photo ID, insurance card, and this guide. Most of our procedures are outpatient, meaning you go home the same day. You will meet the anesthesia team before your procedure to review your anesthesia plan and answer any questions.

07 WHAT TO EXPECT AFTER SURGERY

— You will go home the same day, usually in a brace and on crutches. Weight-bearing and brace settings depend on whether a meniscus repair was also performed

— Physical therapy begins within the first week to restore motion, regain quadriceps control, and reduce swelling

— Return to running is typically around 3–4 months, with return to cutting and pivoting sports usually 9–12 months, guided by strength and functional testing
— Use crutches and your brace exactly as directed
— Elevate the leg and use ice or cryotherapy to control swelling
— Keep the incision clean and dry until your follow-up visit
— Take pain medication as prescribed and begin weaning off narcotics early
— Attend your first post-op visit and begin formal physical therapy per your protocol

Recovery timeline

— Weeks 0–6: hinged brace locked in extension for walking and sleeping; weight-bearing as tolerated with crutches; therapy works on motion with the brace off
— Weeks 6–12: brace unlocked and weaned, crutches weaned, progressive motion and strengthening
— Months 3–6: strengthening, balance, and normal walking mechanics
— Months 6–9: advanced strengthening and low-impact conditioning
— Months 9–12+: sport-specific training and return-to-activity testing based on strength and stability

> Your detailed, week-by-week recovery instructions come in your **post-op protocol**, which Dr. Pettit and our team will review with you and provide in print and online at **robertpettitmd.com/protocols/pcl-with-plc.pdf**

08 POST-OP QUICK REFERENCE

Keep this section for after your surgery. These highlights are drawn from Dr. Pettit's PCL-based multiligament (PCL + posterolateral corner) post-operative protocol — your procedure may use a different variant, so always follow the copy you receive at surgery.

Medication management

You have been given a regional anesthetic block prior to your operation; this will wear off in the evening following your surgery. We recommend taking pain medication once you feel the block wearing off. You may find it beneficial to sleep in a recliner or propped up with pillows in the days following surgery.

1. **Pain Medication**: Tylenol 1000mg every 8 hours and, unless discussed otherwise, you have been prescribed a narcotic pain medication (Oxycodone 5mg) to take every 4-6 hours as needed.
   — DO NOT drive/use any heavy machinery, drink alcohol, make any life-changing or legal decisions (i.e. sign a will), or participate in activities that require a lot of physical skill, as narcotics may change your mental acuity. On rare occasions they may cause confusion or disorientation, we advise you to discontinue this medication should that occur.
   — Narcotics can be addictive. Dispose of any excess medication at a police/fire station.
   — Take a stool softener (e.g. Colace) while taking narcotic medication, as narcotics may cause constipation. If this does not help alleviate your constipation, you can try adding miralax or milk of magnesia. Please call our office if this regimen does not alleviate your constipation.
   — If you have any questions or concerns about narcotic strength medications, please contact us.
2. **Anti-nausea**: Zofran (Ondansetron): Take as prescribed if needed for nausea
3. **Anti-Inflammatory**: Unless contraindicated due to other health reasons, you have been prescribed a non-steroidal anti-inflammatory drug (Ibuprofen 800mg) for use postoperatively. If you have no personal history of adverse response to anti-inflammatories (NSAIDs), take as prescribed: Ibuprofen every 8 hours with food to help reduce swelling and pain. **Do not take other NSAIDs (Celebrex, Advil, Aleve, etc) with Ibuprofen.**
4. **Muscle relaxer**: Flexeril (Cyclobenzaprine) for muscle spasms. Take this as needed, it will make you drowsy.
5. **Blood clot prevention (DVT prophylaxis)**: If you can take Aspirin without any difficulty and are NOT CURRENTLY on any anticoagulation, take **Aspirin 81 mg twice daily for 4 weeks, starting the day after your surgery**. If you were on 81 mg of Aspirin prior to surgery, please resume this dose after 2 weeks. If you take a prescription blood thinner, restart it only as directed.

Tylenol and Celebrex/Ibuprofen are the foundation for your pain control regimen. Example dosing: 1000mg Tylenol then 4 hours later 800mg Ibuprofen then 4 hours later repeat — every 4 hours alternate between Tylenol and Ibuprofen. Oxycodone as needed for

breakthrough pain. *You should not exceed 3,000mg of Tylenol or 3,200mg of Ibuprofen in 24 hours.

Crutches & Weight Bearing Status

Following a multiligament knee reconstruction, you will wear your hinged knee brace locked in full extension for walking and sleeping for the first 6 weeks, putting weight on the leg as tolerated with crutches unless Dr. Pettit tells you otherwise.

At 6 weeks the brace is unlocked and you will wean off the crutches as directed. Your physical therapist will remove the brace to work on knee motion; you may also remove it for showering and dressing.

Home exercise program

Home Exercise Program — Start Immediately

Begin these as soon as you get home unless told otherwise. They protect the knee, restore the quadriceps, and reduce the risk of blood clots.

Quad Set
2 sets × 10, rest 60 sec between sets

Tighten the muscles on top of the thigh as hard as possible and hold. Pull your toes back, push the back of your knee down toward the floor, and push out and up through the heel. Hold 10 seconds, tightening further each second, then relax 5 seconds.

Straight Leg Raise
2 sets × 10, rest 1 min between sets

Tighten the thigh muscles as hard as possible and hold. Raise the whole leg keeping the knee locked straight. Hold 5 seconds, lower, and rest 2 seconds.

Calf Pumps
5–10 each foot, several times daily

Keeping your foot in line with the ankle, knee and hip: point the foot away from you, then flex it back so the heel pushes away and the toes come toward you. Move slowly through both directions.

Heel Slides
5–10 repetitions

Lie on your back with both legs out straight. Keeping your heel on the floor, slide your foot toward your backside as far as is comfortable, then slowly slide it back out until the leg is straight.

Signs & Symptoms to Immediately Report
Call **911** and go to the nearest hospital if you are having chest pain or trouble breathing.
Call the office at **513-354-3700** to report any of the following:

- Persistent fever (101 or greater)
- Sudden increase in pain and swelling
- Wound redness or drainage (besides blood)
- Increased skin temperature around incision
- Deep calf pain and swelling
- Severe abdominal pain

Your home exercise program. Dr. Pettit will guide you through a staged exercise programme after surgery. The full **Knee Home Exercise Program**, with photographs and dosages for every exercise, is available at **robertpettitmd.com/exercise-programs/knee.pdf** — follow the specific instructions you are given at your visits.

09 COMMON QUESTIONS

How long will I be on crutches?Usually about 6 weeks — you walk with the brace locked and crutches until Dr. Pettit unlocks the brace, then wean off them over 1–2 weeks.

Typically 2–4 weeks, depending on your graft type (about 4 weeks with a patellar-tendon graft, about 2 weeks with a quadriceps-tendon or donor graft) and any associated procedures.

When can I drive?Once you are off narcotic pain medication and can safely control the leg — for a right knee this is usually after the brace is unlocked around 6 weeks.

Usually once you are off narcotic pain medication and have adequate control of the operative leg — often around 2–4 weeks with a quadriceps-tendon or donor graft, and 6–8 weeks with a patellar-tendon (BTB) graft on the right knee.

Will I need physical therapy?

Yes. Structured physical therapy is essential to a successful outcome and will follow Dr. Pettit's specific post-operative protocol.

10 QUESTIONS & SCHEDULING

Once you and Dr. Pettit decide on surgery, **Sandy Evans**, our surgery scheduler, will handle your surgery date, insurance authorization, pre-operative clearances, and exact arrival instructions. **Maria Dodd, PA-C** helps manage your recovery — medications, imaging, and questions — throughout.

Surgery scheduling & direct office line: (513) 441-5639 · Main office: (513) 354-3700

SCAN FOR THE LATEST VERSION ONLINE

robertpettitmd.com/handouts/prepare/multiligament-knee-reconstruction.pdf

This guide is for general patient education and does not replace personalized medical advice. Always follow the specific instructions given by Dr. Pettit and your care team.