

KNEE · PREPARING FOR SURGERY

Preparing for Your Microfracture

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

Cartilage defect on the femur — microfracture stimulates a healing scar-cartilage patch over the damaged area.

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. Microfracture is a highly effective procedure, but 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 microfracture, 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 MICROFRACTURE

PROCEDURE ILLUSTRATION



Knee anatomy · for education; your anatomy may differ

Microfracture treats a focal area of damaged cartilage by making tiny openings in the underlying bone. This releases healing cells that form a durable scar-cartilage patch over the defect. It is done arthroscopically and is often combined with a biologic scaffold such as BioCartilage.

Microfracture is an arthroscopic cartilage restoration technique in which small holes are made in the bone beneath a cartilage defect, releasing marrow cells that form a repair tissue to fill the damaged area.

Want to see how the procedure is done? Watch an animation and read more at [Orthopedia patient education](#).

03 IS THIS THE RIGHT PROCEDURE FOR YOU?

Why it may be recommended

- Small-to-moderate focal cartilage defects
- Defects with healthy surrounding cartilage and stable underlying bone
- Patients seeking a less invasive, single-stage cartilage procedure

What it is intended to achieve

- Minimally invasive, single-stage procedure
- Can meaningfully reduce pain and improve function for appropriate defects
- Shorter initial recovery than some other cartilage restoration options

04 RISKS TO UNDERSTAND

Risks include infection, stiffness, and formation of repair tissue that is less durable than natural cartilage, which can wear over time. Dr. Pettit will discuss whether microfracture or another cartilage procedure best fits your defect.

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
- Arrange a ride home and help for the first few days
- Follow fasting instructions 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

- Depending on the location of the defect, you may be kept off weight (or limited) on the leg for several weeks, sometimes with a brace or a motion machine
- Physical therapy emphasizes early gentle motion to nourish and shape the new cartilage while protecting it from load
- Return to impact activity is gradual over several months to allow the repair tissue to mature
- Follow protected weight-bearing instructions closely to protect healing tissue
- Use a continuous passive motion (CPM) machine if prescribed
- Ice and elevate to manage swelling
- Begin physical therapy per your protocol

Recovery timeline

- Weeks 0–6: protected weight-bearing, often with CPM use
- Months 2–4: progressive strengthening

- Months 4–9: gradual return to impact activity
- Full maturation of repair tissue can take up to a year

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/arthroscopic-knee-microfracture-condyle-biocart.pdf

08 POST-OP QUICK REFERENCE

Keep this section for after your surgery. These highlights are drawn from Dr. Pettit's Arthroscopic Knee Surgery with Cartilage Repair 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 Antibiotic:** You will be given a prescription antibiotic, IF you do not stay overnight in the hospital, as a precaution for 7 days. Take twice a day with food.

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

- Generally, following a Knee Arthroscopy with Microfracture of the femoral condyle, you will be limited to toe-touch/partial weight bearing (about 20–30% of your body weight) for 6–8 weeks, progressing per Dr. Pettit
- However, if you have undergone a microfracture of the patella or the trochlear groove, you can be weight bearing as tolerated with your brace locked in extension (with your leg straight). Dr. Pettit will tell you which procedure you had

Follow-up appointment

- Your first post-operative appointment will be scheduled 7-10 days following your surgical procedure. Typically dissolvable sutures are used during surgery, and do not need to be removed. If you do not have a post-operative appointment scheduled when you leave following surgery, please call 513-354-3700 confirm the appointment. ***

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 until the repair tissue matures?

It continues to mature and strengthen for up to 12 months, which is why high-impact activity is reintroduced gradually.

Is microfracture right for every cartilage defect?

No — defect size, location, and your activity goals help determine whether microfracture or another cartilage restoration option is best.

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/microfracture.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.