

ROBERT PETTIT, MD

Restoring Function. Maximizing Performance.

ORTHOPAEDIC SPORTS MEDICINE · BEACON ORTHOPAEDICS & SPORTS
MEDICINE

CINCINNATI, OH · FORT THOMAS, KY

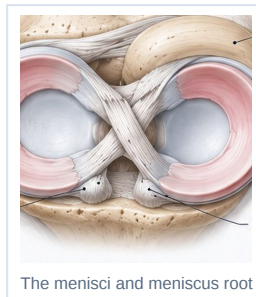
(513) 354-3700

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

KNEE CONDITION

Meniscus Root Tear

Meniscus Root Injury — Patient Condition Guide



The menisci and meniscus root for education; your anatomy may differ

OVERVIEW

The meniscus root anchors the meniscus firmly to the tibia. A root tear detaches this anchor, causing the meniscus to lose its ability to distribute load across the knee — functionally similar to having no meniscus at all in that compartment.

ANATOMY

The medial and lateral menisci each have anterior and posterior root attachments. The posterior medial root is the most commonly injured, often from a simple squatting or twisting motion rather than high-energy trauma.

SYMPTOMS

- A sudden pop, often during a deep squat or twist
- Significant swelling
- Pain deep in the back of the knee
- Rapid onset of arthritis-like symptoms if untreated

DIAGNOSIS

MRI is the primary tool for diagnosing a root tear, often showing a characteristic "ghost sign" or meniscal extrusion. Prompt diagnosis matters, since delayed treatment allows cartilage damage to progress.

TREATMENT OPTIONS

In appropriate candidates, root repair reattaches the meniscus to its anchor point using suture anchors placed arthroscopically, restoring load distribution. In patients with significant existing arthritis, repair may not be appropriate and other options are considered.

RECOVERY TIMELINE

- Weeks 0–6: protected, limited weight-bearing to allow healing
- Months 2–4: progressive strengthening and motion

- Months 4–9: gradual return to impact and pivoting activity
- Long-term joint protection is emphasized given the tear's impact on cartilage load

FAQS

Q Why is a root tear treated differently than a regular meniscus tear?

The root anchor is essential for the meniscus to function; without repair, load distribution is lost and arthritis can progress quickly.

Q Is weight-bearing restricted after root repair?

Yes, protected weight-bearing for several weeks is typically required to protect the healing repair.



SCAN FOR THE LATEST VERSION ONLINE

robertpettitmd.com/handouts/meniscus-root-tear.pdf

This handout 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.



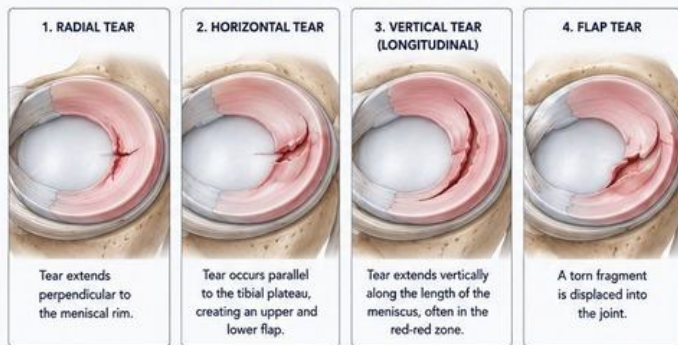
ROBERT PETTIT, MD

ORTHOPAEDIC SURGERY & SPORTS MEDICINE

NORMAL KNEE ANATOMY



TYPES OF MENISCUS TEARS



MENISCUS TEARS

The menisci are C-shaped cartilages that act as shock absorbers, provide stability, and help protect the knee joint.

ADDITIONAL TEAR PATTERNS



TEAR LOCATION: BLOOD SUPPLY ZONES

- **RED-RED ZONE**
Outer 25% of meniscus
– good blood supply
– better healing potential
- **RED-WHITE ZONE**
Middle 25-50%
– moderate blood supply
– variable healing
- **WHITE-WHITE ZONE**
Inner 25%
– no blood supply
– poor healing potential

MEDIAL MENISCUS (LEFT KNEE)

LATERAL MENISCUS (LEFT KNEE)



EVIDENCE. EXPERIENCE. EXCEPTIONAL CARE.

robertpettitmd.com

For patient education; your anatomy may differ.