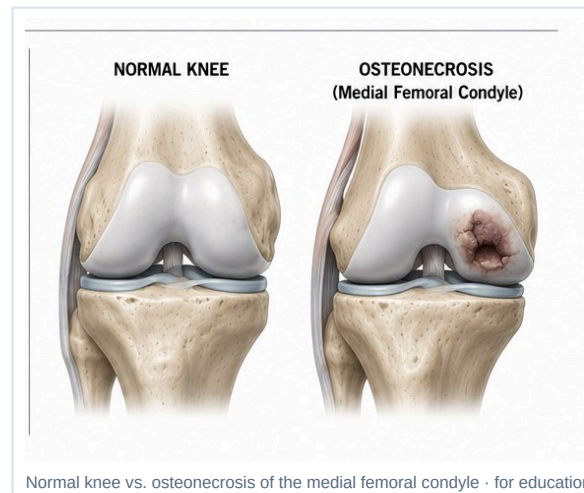


KNEE CONDITION

Osteonecrosis of the Knee

SPONK / Subchondral Insufficiency — Patient Condition Guide

OVERVIEW

Osteonecrosis of the knee occurs when a region of bone just beneath the joint surface loses blood supply and begins to fail. The most common form (SPONK — spontaneous osteonecrosis of the knee) affects patients over 50, often on the inner side of the knee, and frequently follows a subtle insufficiency fracture of weakened bone.

SYMPTOMS

- Sudden onset of focal, often severe inner-knee pain — frequently without injury
- Night pain out of proportion to activity
- Tenderness directly over the inner femoral condyle
- Swelling and pain with weight-bearing

DIAGNOSIS

Early X-rays may be normal; MRI is the key test, showing bone edema and the lesion's size — the strongest predictor of how it will behave.

TREATMENT OPTIONS

Small, early lesions often heal with protected weight-bearing, anti-inflammatory management, and bone-health optimization (including vitamin D and evaluation for osteoporosis). Larger or progressing lesions may need surgery — from joint-preserving options (unloading procedures, subchondroplasty, cartilage restoration) to partial or total knee replacement when the surface has collapsed. Dr. Pettit's Mako robotic partial knee replacement is particularly well suited to isolated inner-compartment collapse.

RECOVERY OUTLOOK

Caught early, many lesions heal over 3–6 months of protection. When replacement is needed, outcomes are excellent — partial knee patients are typically walking the same day and back to most activities by 6–8 weeks.



SCAN FOR THE LATEST VERSION ONLINE

robertpettitmd.com/handouts/knee-osteonecrosis.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.

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Osteonecrosis (Avascular Necrosis) of the Knee

Avascular necrosis of the medial femoral condyle



What is Osteonecrosis?

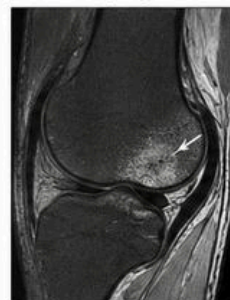
Osteonecrosis occurs when blood flow to part of the bone is interrupted, causing the bone tissue to die. Over time, the dead bone can weaken, collapse, and lead to arthritis.

Common Causes

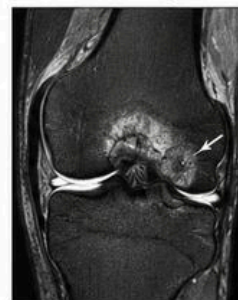
- Traumatic injury (e.g., fracture, dislocation)
- Prolonged steroid use
- Excessive alcohol use
- Blood disorders (e.g., sickle cell disease)
- Connective tissue diseases (e.g., lupus)
- Unknown (idiopathic)

MRI APPEARANCE (Medial Femoral Condyle)

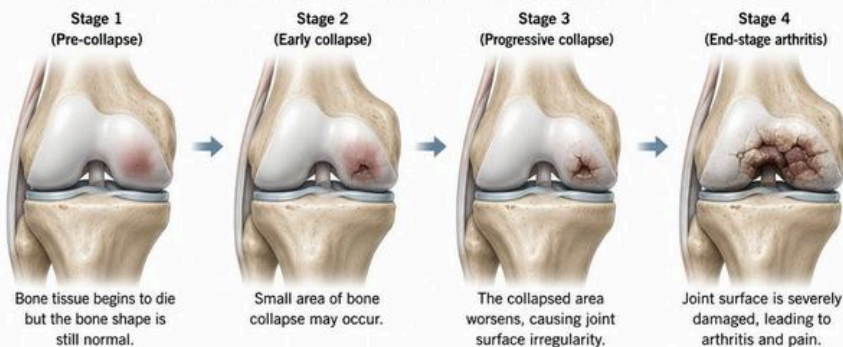
Early Stage



Advanced Stage



PROGRESSION OF MEDIAL FEMORAL CONDYLE OSTEONECROSIS



NORMAL KNEE



OSTEONECROSIS (Medial Femoral Condyle)



For patient education; your anatomy may differ.