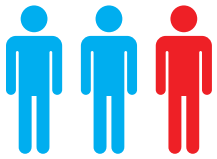


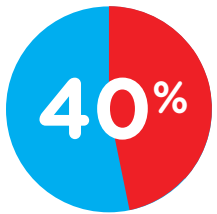
KNEE OSTEOARTHRITIS:

Prevalence, Risks and Treatment Options

PREVALENCE



MORE THAN **1 IN 3**
AMERICANS
OVER 60 HAVE
RADIOGRAPHIC EVIDENCE OF
OSTEOARTHRITIS AND



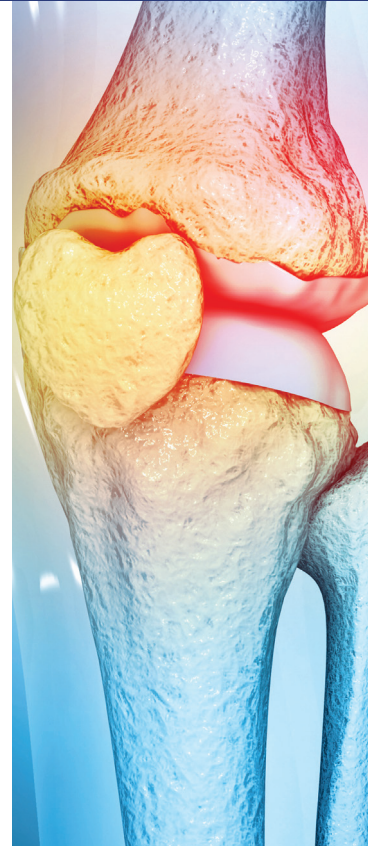
APPROXIMATELY **40%**
OF THEM REPORT
BOTHERSOME
SYMPTOMS¹

WOMEN ARE
MORE LIKELY
TO DEVELOP OSTEOARTHRITIS
AFTER AGE 50²

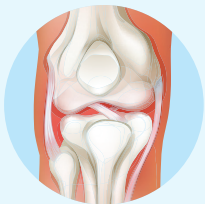


OSTEOARTHRITIS IS A MUCH
MORE COMPLEX
DISEASE THAN PREVIOUSLY
THOUGHT, WITH
INFLAMMATORY MEDIATORS
RELEASED BY CARTILAGE, BONE
AND SYNOVIUM.³

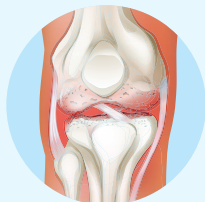
SYNOVITIS IS
NOW ACCEPTED
AS A CRITICAL
FEATURE OF
OSTEOARTHRITIS³,
AND SOME STUDIES HAVE
SUGGESTED THE CONDITION IS A
DRIVER OF THE OSTEOARTHRITIS
PROCESS.



RISK



NORMAL KNEE JOINT



KNEE JOINT WITH
ARTHRITIS

LIFETIME RISK OF DEVELOPING SYMPTOMATIC KNEE OA IS
40% IN MEN AND **47% IN WOMEN.** THAT RISK
RISES TO **60%** IN SUBJECTS WITH A BMI OF 30 OR HIGHER.⁴

SYSTEMIC RISK FACTORS FOR OA INCLUDE:

- AGE
- SEX
- ETHNICITY
- BONE DENSITY
- ESTROGEN REPLACEMENT THERAPY
- NUTRITION
- GENETICS
- OBESITY
- JOINT INJURY/ DEFORMITY
- SPORTS PARTICIPATION

KNEE OSTEOARTHRITIS

TREATMENT

Non-surgical

Nonpharmacologic interventions and NSAIDs are most commonly prescribed to treat the pain associated with OA (conservative management), with alternative pharmacologic therapy only prescribed in the presence of inadequate response and severe pain.⁵

9% of those with knee OA use opioids chronically.⁶

Chronic NSAID use is not without risks in older patients:

- They are responsible for 30% of hospital admissions for adverse drug reactions⁷
- Increased risk of bleeding and cardiovascular disease⁸
- Double the risk of hospitalization due to heart failure⁸
- Can cause GI bleeds⁸
- Risk of impaired renal function⁸

Surgical

600,000 Total Knee Arthroplasty (TKA) surgical procedures are performed in the U.S. annually...

...and that number is projected to rise to over **3 million per year**⁹

More than **2/3 of patients** with severe OA are **unwilling to consider TKA**^{10,11}

...and **20%** of patients who undergo TKA report **dissatisfaction** with the procedure¹²

A NEW AND MUCH-NEEDED OPTION

A new and minimally invasive procedure called genicular artery embolization (GAE) reduces the flow of blood to the synovium—the lining of the knee—which reduces inflammation and the associated pain.

GAE is performed by an interventional radiologist who inserts a tiny catheter into an artery in the upper thigh, and then uses imaging to guide it through the body's blood vessels to the arteries that supply blood to the synovium, where inflammation occurs. Tiny particles are injected through the catheter into these arteries, which reduces the flow of blood. The effect is a significant reduction in the inflammation associated with osteoarthritis, and a reduction in pain.

GAE has a high clinical improvement rate and a low incidence of adverse reactions.^{13,14}

A clinical study performed in 2021 demonstrated that the average pain scores decreased from 8 out of 10 to 3 out of 10 within the first week of the procedure.¹⁵

"Although there are many options for conservative therapy prior to surgery, there is yet to be a treatment modality that provides reliable, sustained relief without the risks of chronic medication. The available data for GAE suggest that it may fill this void."¹⁶

Our physicians are board-certified in vascular & interventional radiology. If you are interested in learning more about GAE or consulting with us about a patient, please call 205-905-8411.

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