



Non-surgical care for knee arthritis

The treatments below are grouped by how well each one is supported by current research studies and clinical guidelines. This reflects how confident doctors and scientists are that a treatment relieves knee arthritis pain, for people who are not yet ready for joint replacement surgery or are not candidates for it.

Strongly supported	Moderately supported	Unlikely to be harmful	Not recommended
Research studies consistently show these help	Research studies suggest these help, with less certainty	Research studies have not shown clear benefit, but the risk is low	Research studies show little or no help, or possible harm

Strongly supported

Recommended for most people with knee arthritis

Exercise and physical therapy	Strengthening, balance work and low-impact activity: walking, a stationary bike, swimming, water classes, tai chi or yoga. A course of physical therapy is a reasonable way to learn the program before continuing it independently.
Weight management	Each pound of body weight places several pounds of force across the knee when walking. Losing 5 to 10 percent of body weight reduces knee pain, and larger losses help more.
Anti-inflammatory gels (Voltaren)	Rubbed onto the knee. Ask your doctor before combining with other oral anti-inflammatory medications.
Anti-inflammatory medications (NSAIDs)	Ibuprofen, naproxen, meloxicam, diclofenac, celecoxib and others. Taken at the lowest effective dose for the shortest period needed. Certain conditions may affect which one is most appropriate.
Acetaminophen (Tylenol)	Mild pain relief with few side effects at labeled doses. Can be taken on its own, alongside an anti-inflammatory medication, or when anti-inflammatory medications are not an option.
Arthritis education programs	Structured classes, often through a hospital system or outside programs, covering activity pacing, flare management, sleep and medication use.

Moderately supported

Worth trying in addition to the treatments above. How much they help varies from person to person

Cortisone injections	Also called a steroid injection. Most people get a few weeks to a few months of relief. If a knee replacement is coming up, the injection should be at least three months before surgery.
Knee braces	An unloader brace shifts load off the worn side of the knee. A sleeve or hinged brace can help when the knee feels unstable.
Canes and walkers	Carried in the hand opposite the sore knee, a cane shifts roughly a quarter of body weight away from that joint with each step.
Heat and cold therapy	A heating pad before activity to loosen the joint, ice afterward to settle swelling and soreness.
Duloxetine	A prescription medication that acts on how the nervous system processes pain signals. Most useful when the pain has been there a long time or is spread beyond the knee.

Capsaicin creams

Made from chili pepper extract and applied to the skin. A burning sensation is common at first, and several weeks of regular use are usually needed before any effect.

Unlikely to be harmful

Reasonable to try alongside other treatments if they appeal to you, though research studies have not shown a clear benefit

Acupuncture

Fine needles placed at specific points by a licensed practitioner, usually over several sessions.

Massage and manual therapy

Hands-on treatment of the knee and surrounding muscles by a therapist or massage therapist. Used alongside an exercise program rather than in place of one.

Supplements

Glucosamine, chondroitin, turmeric, ginger, fish oil, vitamin D, collagen and CBD products. Paid out of pocket and not regulated as prescription medications are, so dose and purity vary by brand. Some interact with other medications, including blood thinners, so review them with your pharmacist or physician.

Injections other than steroid medications

Gel (hyaluronic acid) shots, platelet-rich plasma and stem cell injections. Usually paid out of pocket, and preparation is not standardized between clinics. Serious side effects are uncommon.

Electrotherapy devices

TENS units, therapeutic ultrasound, low-level laser, magnetic field and shockwave treatment, usually given in a therapy office or bought as a home device.

Wedge shoe insoles

Insoles built up along the inner or outer edge to tilt the foot and shift load across the knee. Available over the counter or custom made.

Knee nerve procedures

Radiofrequency ablation heats the small sensory nerves around the knee; genicular artery embolization blocks small arteries feeding the joint lining. Both remain under study and are not part of standard care.

Not recommended

Research studies show these do not help, or that the risks outweigh any benefit

Long-term opioid medications

Including tramadol. Pain relief fades with continued use, while drowsiness, constipation, falls and dependence accumulate.

Arthroscopy for arthritis

Trimming or cleaning out the joint through small incisions. In an arthritic knee it does not reduce pain or improve motion, and it carries the risks and recovery of surgery.

Needle lavage

Flushing the joint with saline through a needle. It changes neither pain nor motion in an arthritic knee.

GUIDELINES REFERENCED

AAOS. Knee OA, Non-Arthroplasty, 3rd ed, 2021 | AAOS. Surgical Management of Knee OA, 2022 | AAOS. Hip OA, 2023 |
ACR / Arthritis Foundation. Hand, Hip & Knee OA, 2019 | ACR / AAHKS. Timing of Hip & Knee Arthroplasty, 2023 |
VA / DoD. Non-Surgical Hip & Knee OA, 2026 | NICE NG226. Osteoarthritis in Over 16s, 2022 |
OARSI. Non-Surgical Knee, Hip & Polyarticular OA, 2019 | EULAR. Non-Pharmacologic Core Management, 2023 | APTA. Hip OA, 2025

This handout is general information and is not a substitute for individual medical advice. Every treatment listed here carries its own risks, interactions and dosing considerations, and what is appropriate depends on your other medical conditions and medications. Discuss any medication, injection, supplement or device with your physician or pharmacist before starting it. If pain and loss of function continue despite these treatments, ask your physician whether knee replacement is a reasonable next step.