

This program is for patients who –

- Have symptomatic osteoarthritis of the knee and are considering nonsurgical or surgical treatment.

This program is NOT for patients who –

- Have forms of arthritis other than osteoarthritis
- Have health problems that make surgery too risky.

Summary

This program presents information for patients facing choices about physical, medical or surgical treatments for knee osteoarthritis. The goal of treatment is to relieve pain, improve joint function, and improve quality of life. Nonsurgical treatments help many people manage their symptoms. Knee replacement surgery is most effective in relieving pain and restoring more normal knee function. Surgery has the most risks and longest recovery. Over time, the artificial joint may need to be replaced.

Key messages

- The amount of arthritis seen on x-ray relates little to how much pain a person feels.
- Treatment choice depends on how arthritis pain and stiffness affect your life.
- Many people can manage their pain and stiffness using a combination of nonsurgical treatments.
- Some nonsurgical treatments pose little risk, although medicines can have serious side effects.
- Some people choose surgery because they believe it provides the best chance of pain relief and a more active life, despite the increased risks and long recovery time.
- Over 10 to 18 years, 43 of 100 people who chose nonsurgical treatments either had no change or had improvement in their level of pain or function.
- For people who had knee replacement surgery, one recent study showed that 96 out of 100 implants lasted at least 15 years, and 82 lasted at least 23 years.

TREATMENT OPTIONS

1. PHYSICAL TREATMENTS FOR PAIN RELIEF

Treatment	Effect
Weight Loss	Reduces weight on joint which may lessen pain
Exercise- Physical Therapy can help plan a safe and effective program.	Strengthen muscles around the knee helping to support the joint, improve flexibility, increase range of motion, and reduce pain
Shoe inserts (orthotics) and knee braces	May improve joint alignment which reduces pain
Walking aids/Canes	Helps people move more easily by taking weight off the knee
Heat	Used to get a stiff joint moving before exercising
Cold packs	Ease pain from sore muscles after physical activity
Capsaicin cream	Relieve pain when applied to knee several times per day

2. ORAL PAIN MEDICATION BENEFITS AND SIDE EFFECTS

MEDICATION	Acetaminophen	NSAIDS	Narcotics	Glucosamine/ Chondroitin
Benefits	Safest of meds Short term pain relief for some.	Higher dose available Short term pain relief for some people.	Recommended only if NSAIDS or acetaminophen don't help	Usually safe at recommended dosage, but no proven benefit.
Side effects				
Drug allergy or intolerance, including dizziness/headaches		X	X	
Interacts with warfarin	X	X	X	
Stomach pain, ulcer, bleeding		X		
Liver/kidney damage	X	X		
High blood pressure, heart attack, stroke		X	X	

Leg swelling		X		
Physical dependence			X	
Other			May not be more effective than acetaminophen for hip osteoarthritis	Not approved or monitored by FDA

3. INJECTIONS FOR PAIN RELIEF

MEDICATION	Hyaluronic Acid	Corticosteroid
Benefits	Recent studies lack agreement on effectiveness in relieving pain.	<ul style="list-style-type: none"> Reduces swelling 78 of 100 have less pain at 1 week 57 of 100 have less pain at 6 weeks
Method	3 injections, 1 week apart	Single injection
Side effects		
Discomfort or swelling	X	X
Temporary inflammation	X	X
Small risk of infection	X	X
Allergic reaction (pain, swelling)	X	X
Possible cartilage damage from repeat injections		X

4. RESULTS WITH TOTAL KNEE REPLACEMENT SURGERY*

Benefits	Out of 100 people with replacement surgery
Nearly all of pain relieved after recovery	89
Some pain persists after surgery	10
Severe pain persists after surgery	1
Replacement lasts at least 15 years	96†
Replacement lasts at least 23 years	82
Recovery time (Commitment to intensive rehabilitation and avoidance of high impact activities.)	<ul style="list-style-type: none"> 3 months to walk without cane or limp. 9-12 months for complete healing.
Risks	
Blood clot in legs or lungs when anti-clotting therapy used	4
Deep joint infection	<1 within 4 years 1 within 13 years
Death in people who are 65 or older	<1

*Additional surgical options include:

- Minimally invasive surgery uses a smaller incision resulting in a shorter scar and quicker recovery, but it is still too early to tell whether complication rates and long term results are similar to those of standard surgery.
- Partial knee replacement is appropriate for people who have damage in only one area of the joint. This procedure may take less time for surgery and rehabilitation.
- Arthroscopy is commonly used in younger people with knee injuries. It is generally not helpful for older people with arthritis.
- Osteotomy realigns the leg bones to reduce deformities. It is more often done in younger people to relieve stress and pain and may slow down arthritis and delay the need for a total knee replacement.

†People who weigh more, are more active, and those who are younger tend to wear out artificial knees more quickly.

Reference: "Treatment choices for Knee Osteoarthritis" shared decision-making program©, Foundation for Informed Medical Decision Making/Health Dialog, Inc. 2007.

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