

Should I Have Knee Replacement Surgery?

You can use this tool to talk with your doctor or loved ones about your decision.

1. Get the facts
2. Compare your options
3. What matters most to you?
4. Where are you leaning now?
5. What else do you need to make your decision?

1. Get the facts

Your options

- Have surgery to replace your knee.
- Don't have this surgery. Instead, use other treatments, like exercise, weight loss (if you're overweight), medicines, or another type of surgery.

Key points to remember

- The decision you and your doctor make depends on your age, health, and activity level, and on how much pain and disability you have.
- Most people have knee replacement only when they can no longer control arthritis pain with medicine and other treatments and when the pain really interferes with their lives.
- Rehabilitation after knee replacement requires daily exercises for several weeks.
- Most knee replacements last for at least 15 years. Some people need to have the knee replaced again.
- If you wait so long to have a knee replacement that you have already lost much of your strength, endurance, and ability to be active, then after the surgery you might have a harder time returning to your normal activities.

FAQs

What is osteoarthritis?

Osteoarthritis is a problem that affects all parts of the joint. For example, when cartilage breaks down, the bones start to rub against each other. This causes damage to tissue and bone. The symptoms of osteoarthritis include joint pain, stiffness after inactivity, and limited motion.

What is knee replacement surgery?

Knee replacement surgery (See Appendix) may be used when a person can no longer control knee pain with other treatments and when the pain disrupts his or her life.

The surgeon covers the ends of the damaged thighbone and lower leg bone, and usually the kneecap, with artificial (man-made) surfaces that are lined with metal and plastic. The artificial pieces are usually cemented to the bones.

Rehabilitation, or rehab, is usually intense after surgery. Most people start to walk with a walker or crutches the day of surgery or the next day. And they begin physical therapy right away. Your doctor may advise you to ride a stationary bike to strengthen your leg muscles and improve how well you can bend your knee. Rehab will take several weeks, but you should be able to start walking, climbing stairs, sitting in and getting up from chairs, and doing other daily activities within a few days.

Surgery is only for people with severe osteoarthritis who do not get pain relief from medicine, home treatment, or other methods and who have lost a lot of cartilage. Surgery relieves severe, disabling pain and may restore the knee's ability to work properly.

What other surgeries are used to treat osteoarthritis?

Besides knee replacement, the other types of surgeries used are:

Other types of surgery	
Surgery	Description
Arthroscopy	Arthroscopy may be used to smooth a rough joint surface or remove loose cartilage or bone fragments. But it is not usually recommended for osteoarthritis of the knee.
Osteotomy	This surgery corrects knee problems such as bowleg and knock-knee. It is usually done for younger, active people who have mild arthritis and who want to delay knee replacement.

What other treatments are available?

There are a number of treatments for arthritis in the knee that don't involve surgery:

- **Medicine.** If your pain is mild, over-the-counter pain medicines may help. These include acetaminophen (for example, Tylenol) and nonsteroidal anti-inflammatory

drugs, such as ibuprofen (for example, Advil, Motrin) or naproxen (for example, Aleve). But if these don't get rid of your pain, you may need a stronger prescription medicine. Be safe with medicines. Read and follow all instructions on the label.

- **Pain-relieving gels or creams**, such as capsaicin.
- **Steroid shots.** Steroid shots may provide rapid pain relief. But for some people, this benefit only lasts a few weeks.
- **Ice or heat.** Heat may help you loosen up your joints before an activity. Ice is a good pain reliever after activity or exercise.
- **Exercise.** Exercise helps because it makes your muscles stronger, which lowers the stress on your knees. But make sure to talk to your doctor about what kind of activity is best for you.
- **Losing weight, if you're overweight.** Losing weight helps take some of the stress off of your joints.
- **Physical therapy.** This includes specific exercises that can help you stretch and strengthen your muscles and reduce pain and stiffness.
- **Walking aids.** There are many devices you can use to take some of the stress off of your knee. These include crutches, walkers, braces, and tape. You may also be able to reduce the stress on your knee by wearing the right shoes or by adding insoles to your shoes. Talk to your doctor or physical therapist about what would be best for you.

Some other things that you may try include:

- **Acupuncture.** It involves putting very tiny needles into your skin at certain places on your body to try to relieve pain. Some people find that acupuncture helps. But there is not a lot of medical research to support the use of acupuncture for knee arthritis.
- **Dietary supplements**, such as glucosamine and chondroitin, fish oil, or SAM-e. Some people feel that these supplements help. But medical research does not prove that they work. Talk to your doctor before you take these supplements.

What are the risks of knee replacement surgery?

Most people have much less pain after knee replacement surgery and are able to return to many of their activities. But as with any surgery, there are some risks, including:

- **Lack of good range of motion.** After surgery, some people can't bend their knee far enough to do their daily activities, even after several weeks.
- **Dislocated kneecap.** If this happens, the kneecap may move to one side of the knee, and it will "pop" back when you bend your knee. It usually needs to be treated with another surgery. But this problem is not common.
- **Blood clots.** These can be dangerous if they block blood flow from the leg back to the heart or move to the lungs. They are more common in older people, those who are very overweight, those who have had blood clots before, and those who have cancer.

- **Wound-healing problems.** These are more common in people who take steroid medicines or who have diseases that affect the immune system, such as rheumatoid arthritis and diabetes. People who have any sort of artificial material in their bodies, including artificial joints, have a risk of infection around the material. But infection is rare. There is also a small risk of infection with any surgery.
- **Instability in the joint.** The knee may be unstable or wobbly if the replacement parts are not properly aligned. You may need a second surgery to align the parts correctly so that your knee is stable.
- **The usual risks of general anesthesia.** Problems from anesthesia are not common, especially in people who are in good health overall. But all anesthesia has some risk.

What do numbers tell us about the benefits and risks of knee replacement?

Results of knee replacement surgery	
Outcomes after surgery	Number of people
All or almost all pain goes away within 6 months after surgery	80 out of 100
Need for repeat surgery within 10 years	5 to 12 out of 100
Heart attack within 3 months after surgery	1 out of 100
Blood clot in lung within 3 months after surgery	1 out of 100
Serious joint infection within 3 months after surgery	Less than 1 out of 100
Death within 3 months after surgery	Less than 1 out of 100

Pain relief with surgery

The evidence about knee replacement surgery suggests that most people are happy with the results.

Take a group of 100 people who have the surgery (See figure 1 in appendix) . Six months later, 80 out of 100 say that all or almost all of their pain is gone. This means that 20 out of 100 will still have some pain after 6 months.¹

Need for repeat surgery

Most artificial knees last for many years. But they can wear out or have other problems. Some people have to repeat the surgery to have the joint replaced again.

Take a group of 100 people who have the surgery (See figure 2 in appendix) . Within 10 years after surgery, about 5 to 12 out of 100 will need to have the knee replaced again.^{2, 3, 4, 5, 6}

Problems after surgery

The evidence suggests that, like most surgeries, knee replacement may have some risks.

Take a group of 100 people who have the surgery (See figure 3 in appendix) . Serious problems that can occur include:

- **Serious joint infection.** Within 3 months after surgery, 1 out of 100 people will get a serious infection. This means that 99 people out of 100 will not get an infection.^{108, 9}
- **Heart attack.** Within 3 months after surgery, 1 out of 100 people will have a heart attack. This means that 99 out of 100 will not have a heart attack.^{7, 8, 9}
- **Blood clot in the lung.** Within 3 months after surgery, 1 out of 100 people will have a life-threatening blood clot in the lung. This means that 99 out of 100 will not have a life-threatening blood clot in the lung.^{7, 8, 9}
- **Death,** which may or may not be caused by the surgery itself. Within 3 months after surgery, less than 1 out of 100 people will die. This means that more than 99 people out of 100 who had the surgery will not die within 3 months.^{7, 9, 8}

Why might your doctor recommend knee replacement surgery?

Your doctor might recommend knee replacement if:

- You have very bad arthritis pain, and other treatments have not helped.
- You have lost a large amount of cartilage.
- Your knee pain is keeping you from being active enough to keep up your strength, flexibility, balance, or endurance.
- You don't have health problems that would make it dangerous for you to have surgery.

2. Compare your options

	Have knee replacement surgery	Try other treatment
	What is usually involved?	What is usually involved?

<ul style="list-style-type: none"> • You may be asleep during this surgery. Or you may be awake but numb from the waist down. • You will probably have a short stay in the hospital, but some people go home the day of surgery. • You will need several weeks of physical therapy, including exercises you can do at home. • It usually takes people 2 to 3 months to get back to doing their usual activities. But it may take a little longer than that for some people. A full recovery may take 6 to 12 months. 	<ul style="list-style-type: none"> • You can try exercise, weight loss (if you're overweight), medicines, joint injections, or, in some cases, another type of surgery. • You can try using crutches, braces, and other types of walking support to help ease the stress on your knee.
<p>What are the benefits?</p> <ul style="list-style-type: none"> • Most people have much less pain and are able to do many of their daily activities more easily. 	<p>What are the benefits?</p> <ul style="list-style-type: none"> • You avoid the risks and side effects of surgery. • You avoid months of physical therapy, although exercise is still important.
<p>What are the risks and side effects?</p> <ul style="list-style-type: none"> • Risks include: <ul style="list-style-type: none"> ○ A blood clot. ○ Infection or wound-healing problems. ○ A heart attack. ○ Instability in the joint. ○ Dislocated kneecap. ○ The usual risks of general anesthesia. • Possible side effects: <ul style="list-style-type: none"> ○ Your knee won't bend as far as it did before you started having knee 	<p>What are the risks and side effects?</p> <ul style="list-style-type: none"> • The strong medicines used for severe pain may cause constipation, mental confusion, drowsiness, and nausea and vomiting. • Steroid injections can cause pain and swelling in the knee. • There are no bad effects from home treatments such as staying at a healthy weight, exercising, and using heat and cold therapy.

	<p>problems.</p> <ul style="list-style-type: none"> ○ You may need to avoid activities that put a lot of stress on the joint, like running or playing tennis. ○ You may eventually need another replacement, because the artificial joint can wear out. 	<ul style="list-style-type: none"> • If you decide to have surgery later, and your limited activity has already caused you to lose strength, flexibility, balance, or endurance, it may be harder to return to your normal activities.
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Personal stories

Are you interested in what others decided to do? Many people have faced this decision. These personal stories may help you decide.

Personal stories about knee replacement surgery for osteoarthritis

These stories are based on information gathered from health professionals and consumers. They may be helpful as you make important health decisions.

"I've skied competitively since I was 6 years old. In my 20s, I had several knee injuries and surgeries. About 7 years ago, I started having a lot of pain in one knee, and my doctor said the only surgery left to do was to replace the knee. If I have the knee replaced, I won't be able to ski or run or do anything that puts a lot of stress on it. I can't do any of those things now because of the pain anyway. I don't know how I'm going to deal with that, since being an athlete has always been a big part of who I am. I'm worried about having my knee replaced when I'm so young, but with the amount of pain I'm having, I don't see any other choice."

— Chuck, age 45

"The pain in my knees, especially my left one, has gotten steadily worse in the last 20 years. The medicines just weren't working. It got so bad last year that I gave up on my flower garden. My doctor and I discussed knee replacement, but I consider that my last resort. My doctor and I developed a plan of swimming and healthy eating habits that will help me take off the extra weight I've put on. We agree that's the best thing I can do to keep my osteoarthritis from getting worse. We're going to try some different medicines too."

— Esmerelda, age 61

"I feel like I'm too young to have my knee replaced. But I definitely need something other than Tylenol for the pain. I asked my doctor about my other options. She said we can try joint injections and see how that works. I can always have the surgery later if I need it, but I'd sure like to put it off for as long as I can. I'll see if these joint injections make the pain better. My doctor says that as long as I can handle the pain, we can hold off on the surgery."

— George, age 57

"I was an avid tennis player for years, and it finally caught up with my knees. I had an osteotomy years ago, and it helped for a while. But now so much of my time is focused on the pain. I'm an active grandmother with no intention of missing out on my grandkids' activities. I know that surgery will mean a long period of exercising and rehabilitation, but it will be worth it to lose this stiffness and discomfort."

— Jean, age 71

3. What matters most to you?

Your personal feelings are just as important as the medical facts. Think about what matters most to you in this decision, and show how you feel about the following statements. . Compare the statement on the left with the statement on the right. Which statement is closest to how you feel? Put an "X" in the box that represents the strength of your feelings.

I want to be able to do low-impact activities like swimming, golf, or housework chores

My knee doesn't really prevent me from doing the physical activities I like/need to do

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More important

Equally important

More important

I have more bad days than good

I have more good days than bad

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More important

Equally important

More important

I'm not worried about the chance of needing another knee replacement in the future

I'm worried about needing another surgery in 10 years

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More important

Equally important

More important

I'm ready and willing to do several weeks of physical therapy after surgery

I don't want, or I won't be able, to have several weeks of physical therapy after surgery

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More important

Equally important

More important

Getting relief from pain and use of my knee is worth any potential problems with my surgery/recovery

I'm very worried about problems that may occur from surgery

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More important

Equally important

More important

My other important reasons to have surgery

My other important reasons not to have surgery

<ol style="list-style-type: none"> 1. 2. 3. 4. 5. 6. 7. 	<ol style="list-style-type: none"> 1. 2. 3. 4. 5. 6. 7.
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More important

Equally important

More important

4. Where are you leaning now?

Now that you've thought about the facts and your feelings, you may have a general idea of where you stand on this decision. Show which way you are leaning right now.

Having knee replacement surgery

NOT having knee replacement

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Leaning toward

Undecided

Leaning toward

5. What else do you need to make your decision?

Check the facts

1. Knee replacement surgery should be my first choice if I have osteoarthritis of the knee.

- Yes
- No**
- I'm not sure

You're right. Knee replacement surgery should be considered only when other treatments—such as exercise, medicines, physical therapy, and a change in your daily activities—haven't worked to ease your symptoms.

2. I will be able to return to all my normal activities right after I have this surgery.

- Yes
- No**
- I'm not sure

You are right. Rehabilitation after knee replacement surgery is usually intense and requires daily exercises for several weeks.

3. Although most surgeries last for at least 15 years, I may need to have my knee replaced again.

- Yes**
- No
- I'm not sure

You are right. Most knee replacement surgeries last for at least 15 years. But some people do need to have another replacement later.

Decide what's next

1. Do you understand the options available to you?

- Yes

- No

2. Are you clear about which benefits and side effects matter most to you?

- Yes
- No

3. Do you have enough support and advice from others to make a choice?

- Yes
- No

Certainty

1. How sure do you feel right now about your decision?

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Not sure at all

Somewhat sure

Very sure

2. Check what you need to do before you make this decision.

- I'm ready to take action.
- I want to discuss the options with others.
- I want to learn more about my options.

Use the following space to list questions, concerns, and next steps.

1. 2. 3. 4. 5. 6. 7. 8.
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References

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Appendix

Topic Images

Figure 1

Pain Relief With Knee Replacement Surgery (80 of 100 patients)



The information shown here is based on the best available evidence.

Figure 2

Need for Repeat Knee Replacement (5 – 12 of 100 patients)



The information shown here is based on the best available evidence.

Figure 3

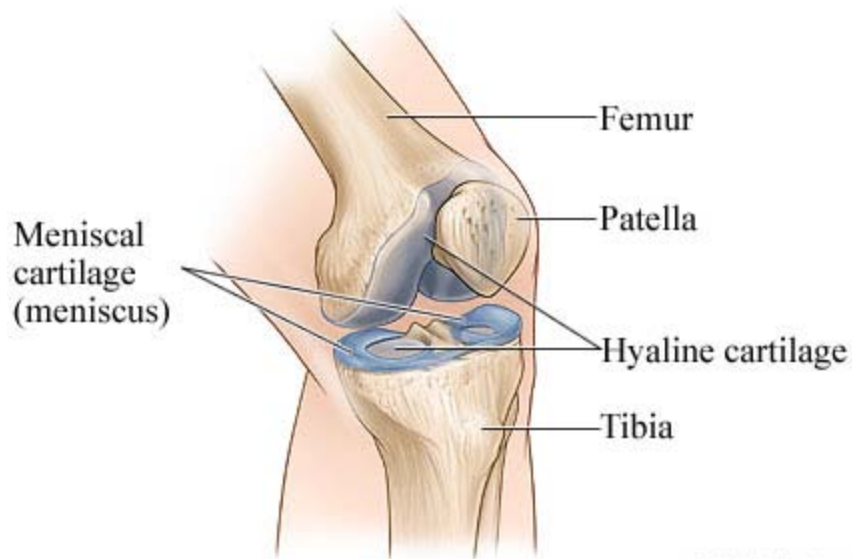
Risks From Knee Replacement Surgery (4 of 100 patients)



The information shown here is based on the best available evidence.

Figure 4

Normal knee joint

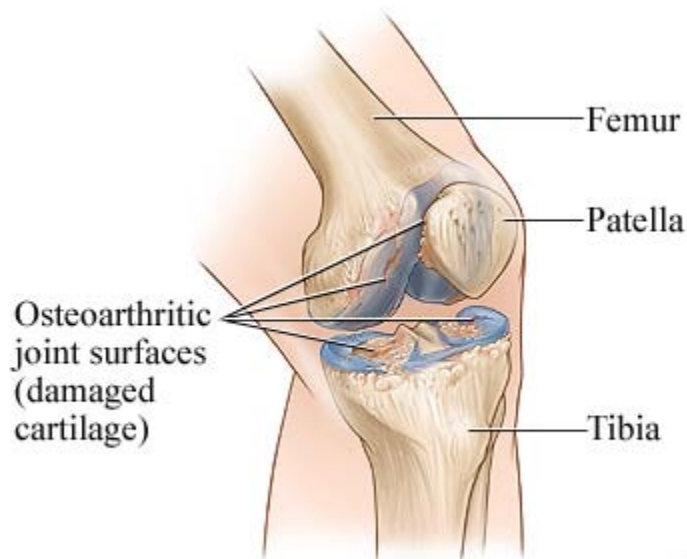


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Inside a normal knee joint, thick cushioning (cartilage) covers and protects the ends of your bones. This is called hyaline cartilage. Another type of cartilage, called meniscal cartilage or meniscus, acts like a shock absorber between the bones and keeps the knee joint stable by spreading out the load evenly across the joint. The two menisci (plural of meniscus) protect and cushion the surface of the joint and the ends of your bones.

Figure 5

Osteoarthritis of the knee

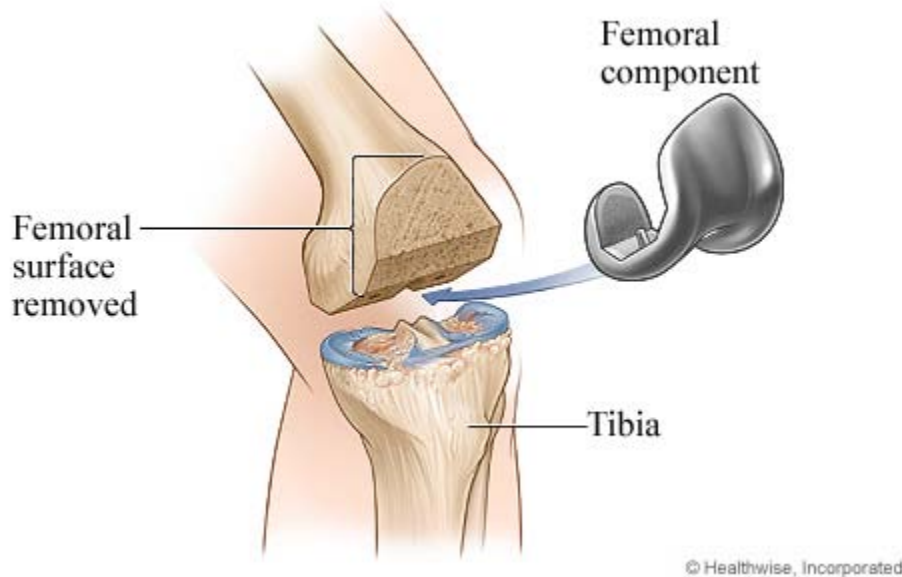


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In osteoarthritis, the cartilage that protects and cushions the knee joint breaks down over time. As the cartilage wears down, the bone surfaces rub against each other. This damages the tissue and bone, causing pain. Osteoarthritis is common in the knee joints.

Figure 6

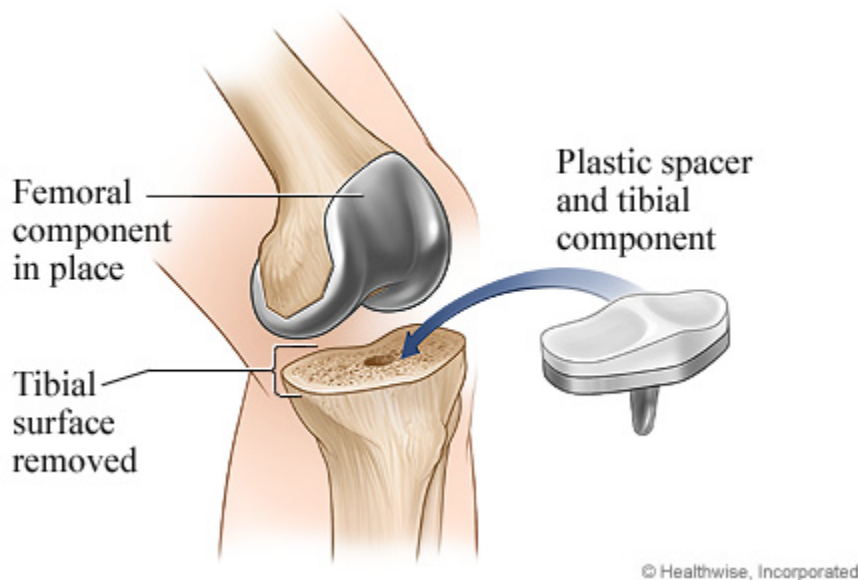
Femoral component is placed



Removal of damaged cartilage from the lower end of the femur and placement of the femoral component

Figure 7

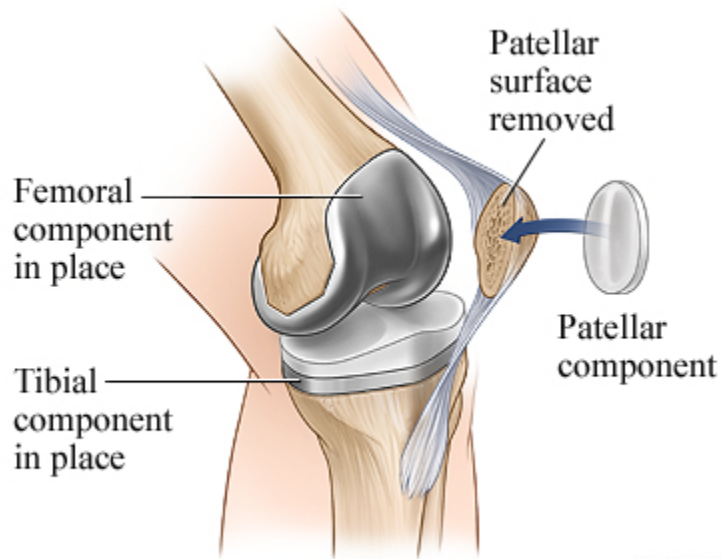
Tibial component is placed



Removal of damaged cartilage from the upper end of the tibia and placement of the tibial component

Figure 8

Patellar component is placed



Removal of damaged cartilage from the patella and placement of the patellar component

Figure 9

Knee replacement surgery is complete

