

Osteoarthritis of the knee:

Knee replacement surgery – Yes or no?

Osteoarthritis of the knee can lead to pain and other problems, like stiff knee joints. The symptoms usually remain stable for many years or slowly get worse. Sometimes there are phases with worse symptoms and phases with fewer or no symptoms. Osteoarthritis can't be cured, but there are ways to relieve the symptoms.

Your doctor may have recommended knee replacement surgery. Conservative treatments can help too. They can sometimes delay or completely eliminate the need for surgery. It is important to stay active: Strong muscles protect the joint. Exercise ensures that the cartilage gets nutrients.

The aim of this decision aid is to help you choose a suitable treatment together with your doctors. You also have the right to seek a second medical opinion.

THESE ARE THE TREATMENT OPTIONS:

 Exercise therapy with strengthening and mobility exercises Anti-inflammatory painkillers (creams or tablets) Conservative You can read (non-surgical) Aids such as shoe insoles and knee bandages about the pros treatments: and cons of these Losing weight treatments on the Injections into the joint next few pages. Total knee replacement (total knee arthroplasty): All joint surfaces are replaced with a prosthesis (an implant). Surgery Partial knee replacement (uni-compartmental knee arthroplasty): Parts of the joint surfaces are replaced with a prosthesis.

There is another option known as corrective osteotomy. This surgery corrects misalignments that put too much strain on one part of the knee and are causing the osteoarthritis. Partial knee replacement and corrective osteotomy are not an option for everyone. For instance, they can only be done if osteoarthritis is limited to one area of the knee.

MAKING AN INFORMED DECISION

This decision aid probably won't include all of the information that you need. It is intended to help you prepare for your doctor's appointments, not to replace them. Other factors will affect the treatment decision, too. They include age, the severity and duration of the symptoms, the success of other treatments, other medical conditions you may have, and your personal goals and expectations.



Even if you find the symptoms very distressing, take the time to find out what you want to know and don't let anyone pressure you into making a decision.

TREATMENT OPTIONS

	Conservative treatment	Surgery
What does the treatment involve?	One key element of the treatment is exercise. You can learn suitable exercises – for example, in physical therapy, special functional fitness training groups or rehabilitation exercise groups – and then continue doing them on your own. It is important to do regular exercise and stick with it. If needed, other treatments can help alongside regular strength and mobility exercises: Painkillers such as ibuprofen (creams or tablets) For overweight people: 5 to 10% weight loss Shoe insoles, knee bandages or knee splints Injections into the joint It is also advisable to wear well-fitting shoes with thick, sturdy soles.	Parts of the knee joint are replaced during surgery. The surgery is done under general anesthesia and takes about 1 to 2 hours. Mobility exercises are usually started on the day of the operation itself. Depending on how well the joint is healing and the type of joint replacement, a three-week follow-up rehabilitation program (inpatient or outpatient) might be prescribed. There you also learn what needs to be taken into account in daily life with a knee replacement. You can start putting more weight on the knee after about six weeks. Depending on your job and the healing process, you can return to work and do knee-friendly sports again after about 2 to 3 months. The healing process is complete after about 6 to 9 months.
Who is the treatment suitable for?	For people who have osteoarthritis of the knee, particularly if they have mild to moderate symptoms. Some might not be able to take anti-inflammatory painkillers – like people with certain other medical conditions such as chronic kidney disease.	 For people who have osteoarthritis of the knee, if the knee is very painful on multiple days per week over several months, other effective conservative treatments haven't helped enough, even after several months, and quality of life is greatly affected by the symptoms, for instance due to a lack of mobility or independence. Jobs that involve a lot of kneeling, crouching or working on uneven floors are difficult to do with a knee replacement.

PROS AND CONS OF THE TREATMENTS

	Conservative treatment	Surgery
How effective is the treatment?	 A well-rounded conservative treatment approach can relieve symptoms effectively – even in advanced osteoarthritis. It relieves pain and improves joint function in 50 to 80 out of 100 people. About 70 out of 100 people can delay surgery by at least two years. If conservative treatment doesn't help enough, you can still have joint replacement surgery later. 	 Knee replacement surgery can relieve the symptoms of advanced osteoarthritis very effectively: It relieves pain and improves joint function considerably in 70 to 90 out of 100 people. But some people still have problems such as pain or restricted knee function (for example, an unstable knee or problems with the kneecap). Joint replacement is more effective in advanced osteoarthritis than conservative treatments are, and can greatly improve your quality of life.
What are the possible disadvantages?	Tablets containing painkillers can cause stomach problems and belly ache. When taken over the long term, they increase the risk of stomach ulcers. So it's a good idea to take as low a dose as possible and to not take them for a long time. Taking high doses over the long term can also lead to cardiovascular disease. This happens in about 1 out of 100 people each year. Injections into the joint can lead to a joint infection. This complication is very rare, but it can be serious.	In about 5 out of 100 people, the knee becomes stiff after the operation and further treatment is needed. In about 1 out of 100 people, the knee becomes infected after the operation. Then another procedure is needed, where the prosthesis sometimes has to be replaced too. There is an increased risk of heart attack and stroke in the week following surgery – particularly in older people and people who already have certain other illnesses. But less than 1 out of 100 people have a heart attack or stroke. As in any major surgery, complications can occur (such as thrombosis or poor wound healing).
What can you expect in the long run?	Conservative treatment can often delay the need for surgery or even avoid it altogether. Delaying surgery reduces the likelihood of having to replace a prosthesis later on in life.	About 5 to 10 out of every 100 prostheses have to be replaced within ten years. The younger you are when the prosthesis is implanted, the more likely it is that it will need to be replaced.

HELP WITH YOUR DECISION

You may still be unsure about which treatment you would prefer. You can write down your thoughts and questions on the following two pages.

Which treatment would I consider?		What do I like about it?	What don't I like about it?
Conservative treatment			
Surgery			

IF YOU STILL AREN'T SURE: WHAT ELSE DO YOU NEED TO BE ABLE TO MAKE A DECISION?

With all the different pros and cons to consider, it can be hard to choose a treatment.

If you need more help:

- You will find links to further information on the next page.
- You can talk to your doctor again.
- You also have the right to seek a second medical opinion. You will find information about this option on the next page, too.
- Talking to friends and family can help you get a clear idea of what you want and expect.
- Support groups and information centers offer advice and useful information, as well as the chance to talk with other people in similar situations.

OU WILL I	-IND IN-DEPTH INFORMATION ABOUT THE FOLLOWING TOPICS ON THE INTERNET
	Osteoarthritis of the knee: www.informedhealth.org/osteoarthritis-of-the-knee.html
	Safe use of painkillers: www.informedhealth.org/painkillers-safe-use
	Second medical opinion: www.informedhealth.org/SecondOpinion
REPARINO	G FOR THE DOCTOR'S APPOINTMENT
ou may hav	ns unanswered? What concerns do you still have? Write down any questions or thoughts ve, and take this decision aid with you to the appointment. You can ask the doctor about u would like to know, or discuss anything you are worried about.
	t of possible questions here:
ww.inforn	nedhealth.org/questions



PUBLISHING DETAILS

This decision aid was developed by the Institute for Quality and Efficiency in Health Care (IQWiG, Germany). You will find information about our work and the sources used here:

www.informedhealth.org/our-approach

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