

Welcome to the: Orthopaedic Opinion Online Website

The website for the answer to all your Orthopaedic Questions

- **Orthopaedic Opinion Online** is a website designed to provide information to patients who have orthopaedic and musculoskeletal problems and are undergoing treatment.
- **Patient information** is provided in the form of downloadable information sheets.
- **Orthopaedic advice** and second opinions can be provided by our expert internationally renowned Consultant Orthopaedic Surgeons.
- **Online review** of patients' X rays or MRI scans can also be provided and any proposed treatment plans reviewed.
- **Book a clinical consultation** with one of our internationally renowned consultant orthopaedic surgeons in Bristol or London.
- **Orthopaedic reports** can be provided for Injury or Accident Claims and Medical Negligence claims.

This Patient Information Sheet is provided by Orthopaedic Opinion Online

Unicompartmental Knee Replacement

Author:

DAVID P JOHNSON
MB ChB FRCS FRCS(Orth). MD
Consultant Orthopaedic Surgeon
www.Orthopaedics.co.uk
© D P Johnson 2008

Key words: Arthritis, articular cartilage, , anatomy, physiotherapy, glucosamine, joint replacement, anti-inflammatory medication, knee, total knee replacement, unicompartmental knee replacement, uncemented, patello-femoral knee replacement, oxinium, ceramic knee replacement

Unicompartmental Knee Replacement

What is arthritis?

Arthritis is a group of conditions that cause damage to one or more joints.

Your surgeon has recommended a unicompartmental knee replacement operation. However, it is your decision to go ahead with the operation or not. This document will give you information about the benefits and risks to help you make an informed decision.

If you have any questions that this document does not answer, you should ask your surgeon or any member of the healthcare team.

How does arthritis happen?

The most common type of arthritis is osteoarthritis, where there is gradual wear and tear of a joint. In a few cases this is the result of a previous injury but usually it happens without a known cause. Arthritis eventually wears away the normal cartilage covering the surface of the joint and the bone underneath becomes damaged. This causes joint pain and stiffness, which interfere with normal movement.

If only part of your knee is damaged by arthritis, you can sometimes have a unicompartmental knee replacement instead of a total knee replacement.

What are the benefits of surgery?

If your knee replacement is successful, you should have less pain and be able to walk more easily. A unicompartmental knee replacement may bend better and feel more like a normal knee than a total knee replacement.

Are there any alternatives to a knee replacement?

Simple painkillers such as Paracetamol and anti-inflammatory painkillers such as ibuprofen can help control the pain of arthritis. Supplements to your diet, such as cod liver oil or glucosamine, may also help relieve your symptoms. You should check with your doctor before you take supplements.

Using a walking stick on the opposite side to the affected knee can make walking easier. Wearing an elasticated support on your knee can help it feel stronger.

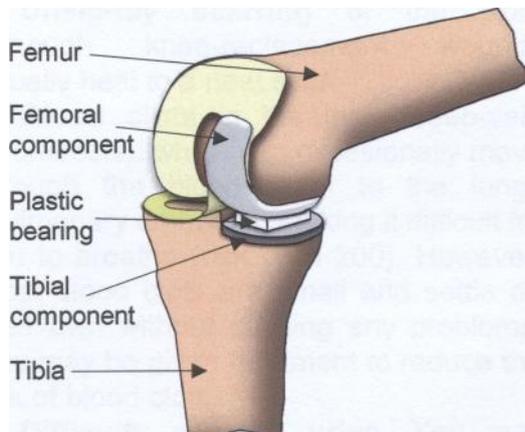
Regular moderate exercise can help to reduce stiffness in your knee. Physiotherapy may help weak muscles. A steroid injection into your knee joint can sometimes reduce pain and stiffness for several months. You may get side effects if you have injections too often.

A keyhole operation (arthroscopy) to clean out the knee joint can give some relief for six to twelve months. This is a lower-risk operation than a knee replacement.

An operation called a tibial osteotomy changes the shape of your leg and can take the load off the worn part of your knee. All of these measures become less effective as your arthritis gets worse and this is when your surgeon may recommend a knee replacement.

What will happen if I decide not to have the operation?

Arthritis of the knee usually, though not always, gets worse with time. Arthritis is not life-threatening in itself but it can be disabling. Arthritis symptoms can be worse at some times than others, particularly when the weather is cold.



- Figure 1
- Unicompartamental knee replacement

What does the operation involve?

A variety of anaesthetic techniques are possible. Your anaesthetist will discuss the options with you and recommend the best form of anaesthesia for you. The operation usually takes between an hour and an hour and a half.

Your surgeon will make a cut on the front of your knee and will check that your knee is suitable for a unicompartamental replacement. If there is any damage in other parts of your knee, you may need to have a total knee replacement instead.

Your surgeon will remove the damaged surfaces of the knee. They will then replace these with an artificial knee joint made of metal, plastic, ceramic, or a combination of these materials (see figure 1).

The knee replacement is fixed to the bone using an acrylic cement or special coatings on the knee replacement that bond directly to the bone. At the end of the operation, your surgeon will close the skin with stitches or clips.

What should I do about my medication?

You should continue your normal medication unless you are told otherwise. Let your surgeon know if you are on **Warfarin** or **Clopidogrel**. Follow your surgeon's advice about stopping this medication before the operation.

What can I do to help make the operation a success?

• Lifestyle changes

If you smoke, try to stop smoking now. Stopping smoking several weeks or more before an operation may reduce your chances of getting complications and will improve your long-term health.

For help and advice on stopping smoking, go to www.gosmokefree.co.uk.

You have a higher chance of developing complications if you are overweight.

For advice on maintaining a healthy weight, go to www.eatwell.gov.uk.

• Exercise

Regular exercise can reduce the risk of heart disease and other medical conditions, improve how your lungs work, boost your immune system, help you to control your weight and improve your mood. Exercise should help to prepare you for the operation, help with your recovery and improve your long-term health.

For information on how exercise can help you, go to www.eidoactive.co.uk.

Before you start exercising, you should ask a member of the healthcare team or your GP for advice.

What complication can happen?

The healthcare team will try to make your operation as safe as possible. However, complications can happen. Some of these can be serious and can even cause death. You should ask your doctor if there is anything you do not understand. Any numbers which relate to risk are from studies of people who have had this operation. Your doctor may be able to tell you if the risk of a complication is higher or lower for you.

The complications fall into three categories.

- 1 Complications of anaesthesia
- 2 General complications of any operation
- 3 Specific complications of this operation

1 Complications of anaesthesia

Your anaesthetist will be able to discuss with you the possible complications of having an anaesthetic.

2 General complications of any operation

- **Pain**, which happens with every operation. The healthcare team will try to reduce your pain. They will give you medication to control the pain and it is important that you take it as you are told so you can move about as advised.
- **Bleeding** during or after surgery. You may need a blood transfusion afterwards.
- **Infection in the surgical wound** (risk: 1 in 600). This usually settles with antibiotics but may occasionally need another operation.
- **Unightly scarring** of the skin, although knee-replacement wounds usually heal to a neat scar.
- **Blood clots** in the legs (deep-vein thrombosis), which can occasionally move through the bloodstream to the lungs (pulmonary embolus), making it difficult for you to breathe (risk: 1 in 200). However, most blood clots are small and settle on their own without causing any problems. You may be given treatment to reduce the risk of blood clots.
- **Difficulty passing urine**. You may need a catheter (tube) in your bladder for a day or two.
- **Chest infection**. If this happens, you may need antibiotics and physiotherapy.

- **Heart attack or stroke.** This can happen because a knee replacement is a major operation. A heart attack or stroke can occasionally cause death.

3 Specific complications of this operation

- **Damage to nerves** around the knee, leading to weakness, numbness or pain in the leg or foot.
- **Damage to blood vessels** behind the knee, leading to loss of circulation to the leg and foot. If this happens, you will need surgery straightaway to restore the blood flow.
- **Bearing dislocation**, where the piece of plastic in the middle of your knee replacement comes out of place (risk: 1 in 100). This can only happen with some types of unicompartmental knee replacement. You will need another operation.
- **Infection in the knee**, which can result in loosening and failure of the knee replacement over a period of a few months. One or more further operations will usually be needed to control the infection (risk: 1 in 200).
- **Severe pain, stiffness and loss of use of the knee** (Complex Regional Pain Syndrome). The cause is not known. If this happens, you may need further treatment including painkillers and physiotherapy. It can take months or years to improve.
- **Loosening** without infection, which may need further surgery to do the knee replacement again (risk: 1 in 70 in the first ten years after the operation). You may need to have a total knee replacement.

How soon will I recover?

• In hospital

After the operation you will be transferred to the recovery area and then to the ward. You will usually have an x-ray to check the position of your knee replacement.

Your physiotherapist will help you to start walking using crutches or a walking frame, usually the day after surgery. Getting the knee to bend takes hard work.

You should be able to go home after one to four days. However, your doctor may recommend that you stay a little longer.

If you are worried about anything, in hospital or at home, ask a member of the healthcare team. They should be able to reassure you or identify and treat any complications.

• Returning to normal activities

Your surgeon, physiotherapist and occupational therapist will tell you when you can return to normal activities. To reduce the risk of problems, it is important to look after your new knee as you are told. You will need to use crutches or walking sticks for a few weeks.

You will often notice a patch of numbness next to the scar on your knee. This is normal after knee replacement surgery and usually becomes less noticeable with time.

Regular exercise should help you to return to normal activities as soon as possible. Before you start exercising, you should ask a member of the healthcare team or your GP for advice.

Do not drive until you are confident about controlling your vehicle and always check with your doctor and insurance company first.

• The future

Most people make a good recovery, have less pain and can move about better. However, an artificial knee never feels quite the same as a normal knee. You can usually expect to be able to bend the knee to 120 degrees or more.

A unicompartmental knee replacement can wear out with time. This depends on your body weight and how active you are. Eventually a worn knee replacement will need to be replaced. About 19 in 20 unicompartmental knee replacements will last ten years.

You can get arthritis in the parts of your knee that have not been replaced. If the pain is severe, you may need another operation to have your unicompartmental knee replacement taken out and a total knee replacement put in (risk: 1 in 50).

You should have an x-ray of your unicompartmental knee replacement at least every five years to check for any problems.

Summary

Arthritis of the knee usually happens without a known cause. It can sometimes affect only part of your knee. If you suffer severe pain, stiffness and disability, a unicompartmental knee replacement should reduce your pain and help you walk more easily.

Surgery is usually safe and effective. However, complications can happen. You need to know about them to help you make an informed decision about surgery. Knowing about them will also help to detect and treat any problems early.

Further information

- NHS smoking helpline on 0800 169 0 169 and at www.gosmokefree.co.uk
- www.eatwell.gov.uk - for advice on maintaining a healthy weight
- www.eidoactive.co.uk - for information on how exercise can help you
- www.aboutmyhealth.org - for support and information you can trust
- Arthritis Research Campaign on 0870 850 500 and at www.arc.org.uk
- Mayo Clinic at www.mayoclinic.com
- American Academy of Orthopaedic Surgeons at www.aaos.org
- NHS Direct on 0845 46 47 (0845 606 46 47 - textphone)

Local information

You can get information locally by contacting the your own hospital or treatment centre.

This document is intended for information purposes only and should not replace advice that your relevant health professional would give you.

Disclaimer: The views expressed in this article are not necessarily those of Orthopaedic Opinion Online or the author. The information is provided for general background reading only and should not be relied upon for treatment. Advice should always be taken from a registered medical practitioner for individual circumstances and for treatment of any patient in any circumstances. No liability is accepted by Orthopaedic Opinion Online, or the author in respect to the information provided in respect of the content or omission or for any reason or as a result of treatment in individual circumstances. This information is not for use in the USA.