PROCEDURE

Knee arthroscopy

Knee arthroscopy is minimally invasive surgery using a small camera to examine and sometimes treat problems inside the knee

PURPOSE
Examine or treat damage inside the knee

PROCEDURE TYPE
Diagnostic and therapeutic minimally invasive surgery

WHERE IT IS DONE
Operating theatre or ambulatory surgery centre

ANAESTHESIA
General, spinal, or local with sedation

HOW LONG IT TAKES
Usually 30 to 60 minutes

PREPARATION
Fasting and review of medicines, including blood thinners

RECOVERY
Usually same day; no driving while impaired or restricted

MAIN RISKS
Infection, blood clots, bleeding, stiffness

RESULTS
Findings usually immediate; laboratory results take several days

Overview

Knee arthroscopy is a type of keyhole surgery. A surgeon puts a thin instrument called an arthroscope through a small cut near your knee. Its camera sends pictures from inside the joint to a screen.

The surgeon may make one or more additional small cuts for surgical instruments. Depending on the problem, they may repair or remove damaged tissue, remove a loose piece of bone or cartilage, or wash out the joint.

Arthroscopy causes less damage to nearby tissue than open surgery, but it is still an operation. It is not helpful for every type of knee pain. In particular, routine arthroscopy is not recommended for most knee pain caused by osteoarthritis, which is gradual wear and change within the joint.

Why the procedure is performed

Knee arthroscopy may be offered when your symptoms, examination, and scans suggest a problem that can be treated through small cuts.

Reasons include:

Arthroscopy used only to diagnose a problem is less common now because an MRI scan can show many knee structures without surgery. However, MRI cannot treat the problem and does not always provide a complete answer.

- Repairing some tears of the meniscus, the shock-absorbing cartilage in the knee
- Trimming unstable meniscal tissue when repair is not possible
- Removing loose bone or cartilage that catches in the joint
- Treating certain areas of damaged joint cartilage
- Reconstructing a torn ligament, such as the anterior cruciate ligament
- Removing inflamed joint lining in selected conditions
- Washing out an infected knee joint
- Examining or taking a sample of abnormal tissue

Who should and should not have it

You may be a candidate if there is a clear problem inside your knee that is likely to improve with arthroscopic treatment. Your surgeon should explain what they expect to find, what they plan to do, and how that treatment may help you.

Arthroscopy may not be the right choice if your symptoms are mainly from osteoarthritis without a separate treatable problem. Washing out the knee or smoothing worn surfaces usually does not provide lasting benefit for degenerative knee disease.

The procedure may be avoided or delayed if you have:

Age alone does not decide whether arthroscopy is suitable. The decision should be based on the type of knee damage, your symptoms, your overall health, and the likely benefit compared with other options.

- An active infection on or near the knee, unless surgery is needed to treat infection inside the joint
- A medical condition that makes anaesthesia or surgery unsafe until stabilised

- A blood-clotting problem that has not been assessed
- Blood-thinning medicine that cannot yet be safely managed
- Significant swelling or skin damage that affects safe surgery
- No realistic way to follow essential rehabilitation or weight-bearing restrictions

How to prepare

Your treating facility's own instructions take priority because preparation differs with the planned operation and type of anaesthesia.

You may be asked not to eat or drink for a set time before surgery. Follow the exact fasting times you receive. Taking food or drink outside those instructions can cause the procedure to be delayed.

Give the surgical team a current list of medicines, supplements, allergies, and medical conditions. Ask specifically what to do with blood thinners like warfarin or apixaban , diabetes medicines, and anti-inflammatory pain medicines. Do not stop a prescribed medicine unless the team responsible for your procedure tells you to.

Arrange for an adult to take you home. If you will have sedation or a general anaesthetic, you may also need someone to stay with you for the first night.

Wear loose clothing that will fit over a dressing. Follow instructions about bathing, skin preparation, braces, and crutches. Tell the team before surgery if you become unwell or develop a cut, rash, or infection near the knee.

What happens during the procedure

Before surgery, the team confirms your identity, the knee being treated, and the planned procedure. The surgeon may mark the correct leg.

Many knee arthroscopies use general anaesthesia, which means you are unconscious. Other options include spinal anaesthesia, which numbs the lower body, or local anaesthesia with sedation. Your anaesthesia clinician will discuss the planned approach.

The surgeon makes a small cut and inserts the arthroscope. Sterile fluid is passed into the knee to expand the joint and improve the view. The surgeon examines structures such as the menisci, cartilage, ligaments, and joint lining.

Small instruments may be inserted through other cuts to repair, trim, remove, or sample tissue.

What can safely be done may change if the findings differ from the scans.

At the end, the instruments and fluid are removed. The cuts are closed with stitches, strips, or small dressings. A larger bandage is placed around the knee.

Recovery and what to expect afterward

Pain: Some soreness, swelling, and stiffness are expected. Use the pain relief recommended by your team. Elevating the leg and applying a wrapped cold pack may help if your instructions allow it. Pain should gradually improve rather than become more severe.

Eating: You can usually start with fluids and light food once you are awake and not feeling sick. You can return to your normal diet as tolerated unless you receive different instructions.

Activity: You will usually go home the same day. You may need crutches for a short period, but a meniscal repair, ligament reconstruction, or cartilage procedure can require longer restrictions. Follow the specific instructions about weight-bearing, braces, wound care, exercises, and physiotherapy. Do not soak the cuts until the team says they have healed.

Driving: Do not drive home. After anaesthesia or sedation, avoid driving for at least the period stated by your facility. You must also be able to control the vehicle safely, perform an emergency stop, and be free from medicines that impair alertness. Check any brace restrictions and your insurer's requirements.

Work: Return depends on what was done and whether your job is seated or physical. Desk work may be possible sooner than work involving lifting, climbing, kneeling, or prolonged standing. Ask for a plan based on your operation and job duties.

Risks and possible complications

Most people do not develop a major complication, but possible risks include:

Arthroscopy cannot reverse widespread osteoarthritis. Even when surgery goes as planned, it may not fully relieve symptoms.

- Infection in the skin cuts or inside the knee
- A blood clot in a deep leg vein, which can travel to the lungs
- Bleeding into the joint or ongoing wound bleeding
- Knee stiffness or loss of movement
- Injury to nearby nerves, blood vessels, cartilage, or ligaments

- Problems related to anaesthesia
- Persistent pain, swelling, catching, or instability
- Failure of repaired tissue to heal or a need for further surgery

Results and follow up

The surgeon can usually explain the main findings after the procedure. If you had a general anaesthetic or sedation, you may not remember this conversation clearly, so written information or having another adult present can help.

Laboratory testing takes longer. Samples sent for culture, which checks for infection, or pathology, which examines tissue under a microscope, may take several days or more.

Routine follow-up checks wound healing, movement, swelling, and progress with rehabilitation. It is also a chance to review photographs or findings from the operation and discuss when you can return to work, driving, exercise, and sport.

Alternatives

The real alternatives depend on what is causing your knee problem.

Activity changes and time avoid surgical risk and may allow some injuries to settle. The trade-off is that symptoms may continue, and a repairable injury could become harder to treat if surgery is delayed.

Physiotherapy and strengthening can improve movement, stability, and function without surgery. Progress may take weeks or months, and therapy cannot remove a loose body or repair every unstable tear.

Pain medicines or anti-inflammatory medicines may reduce symptoms but do not repair damaged tissue. They can also cause side effects and may not be suitable for everyone.

Joint injections may provide temporary symptom relief in selected conditions. They do not mechanically repair a torn meniscus or ligament.

MRI or further assessment may provide more information without an operation. A scan can miss some abnormalities and cannot treat what it finds.

Open surgery or joint replacement may be more suitable for damage that cannot be treated through an arthroscope. These operations are larger and usually require a longer recovery. Knee replacement is generally considered for advanced joint damage rather than an isolated

repairable injury.

When to call your healthcare team

Contact your surgical team promptly if you have increasing redness, warmth, drainage, fever, worsening swelling, pain that is not controlled as expected, persistent vomiting, or bleeding that soaks through the dressing. New calf pain or one-sided calf swelling also needs urgent assessment.

Seek emergency medical help for trouble breathing, chest pain, coughing up blood, fainting, or sudden severe weakness. Also seek immediate help if your foot becomes cold or pale, or you develop a sudden major loss of feeling or movement.

Mild bruising, swelling, and soreness are usually discussed at routine follow-up if they are steadily improving. Use the contact instructions provided by your facility if you are unsure whether a change is expected.

Common questions

Will I be asleep for knee arthroscopy?

Many people have a general anaesthetic and are asleep. Spinal or local anaesthesia with sedation may be suitable for some procedures. The planned option will be discussed before surgery.

Can I drive myself home?

No. Arrange for someone to take you home. Resume driving only after the anaesthesia restriction has passed and you can control the vehicle safely.

How painful is knee arthroscopy?

Pain is usually manageable with the treatment plan provided by your team, but it differs according to what was done. A repair or ligament reconstruction generally causes more discomfort and requires a longer recovery than a simple inspection.

When will I know what the surgeon found?

The main findings are usually available immediately after surgery. Results from tissue samples or tests for infection take longer.

Will I need crutches?

You may need them for comfort or to protect the knee. How long you use them is based on

whether tissue was removed, repaired, or reconstructed.

How long until my knee feels normal?

Swelling and stiffness can last for several weeks. Full recovery may take longer after a meniscal repair, cartilage treatment, or ligament reconstruction. Rehabilitation is an important part of recovery.

Sources

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