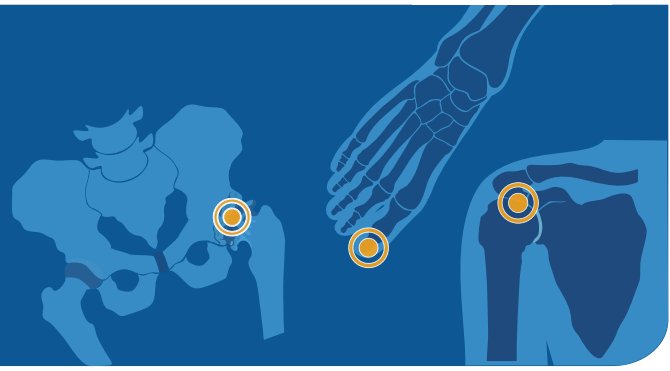


What to Expect from Surgery



So you're having joint surgery. What should you expect?

Once you're ready to move ahead with surgery, there are a few things you should know about what to expect from your procedure. The process, potential complications and even what the surgeon does can differ based on the type of surgery you're having. Read on to learn more about what's involved in different types of surgery.

Traditional, Open Procedures vs. Minimally Invasive Surgery

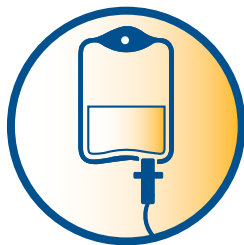
In traditional, open joint surgery procedures, a surgeon will fully open up the area to be operated on to get a clear view of the joint. In minimally invasive surgery, the surgeon will make a smaller incision and use special tools to help them see what they are doing in the joint. Minimally invasive surgery may lead to quicker recovery times and reduce surgery-related pain but may not always be right for you. Your surgeon will discuss options based on your condition.

Surgery Processes

In some cases, surgery can be done as an outpatient procedure, without an overnight hospital stay. If there is a hospital stay involved, it is usually one or two days.



Surgery can take 1 - 2 hours or more, depending on the affected area and type of surgery.



An intravenous (IV) line will be inserted into a vein in your arm or hand to give you fluids and required medicine during surgery.



You will receive an anaesthetic and/or sedative which will make you sleep through the surgery.



Your vital signs such as heart rate and blood pressure will be monitored to ensure surgery can proceed safely.

Types of Surgery

Arthroplasty (Joint Replacement)

This is done when other treatments have not worked and joint function is limited. It involves surgery to resurface or replace the ends of bones in a damaged joint to create new joint surfaces. The artificial joint (prosthesis) is usually made of metal and plastic, which is fitted to the end of the bones in the affected joint to replace the worn-out joint surface. The prosthesis may be kept in place using cement for bones or through a coating that encourages bone growth onto the implant. The joints most often replaced are the hip, knee, and shoulder. Other joints such as the elbow and ankle can also be replaced.



An incision is made over the affected area.



The surgeon removes the damaged areas of bone and cartilage around the joint.



The joint surface is replaced with metal and plastic components.



The incision is closed and a dressing applied.

Arthrodesis (Joint Fusion)

This procedure fuses two bones together in a damaged joint. The result is a joint that no longer moves, which reduces pain by eliminating movement between the damaged joint surfaces. Fusion procedures are most commonly used to treat arthritis of the spine, ankles, hands and feet.



An incision is made at the affected area.



The surgeon removes damaged cartilage and bone, removing the joint surfaces.



The bones on either end of the joint are fused together. Metal implants such as pins, plates and screws as well as bone grafts may be used to stabilize the bone ends to ensure healing. Pins are often later removed.



The incision is closed and a dressing applied.

Osteotomy

An osteotomy involves cutting and realigning a bone. This is done to correct certain deformities, especially around the hip and knee. By realigning the joint, abnormal forces in the joint can be reduced, slowing down the progression of arthritis. In most cases, osteotomies are done in active younger people who want to delay surgery to replace a hip or knee joint.



An incision is made at the affected area.



The surgeon cuts the affected bone.



The bone is realigned to correct the shape and reduce abnormal forces through the joint.



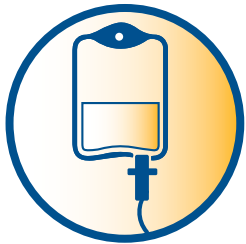
The bone is then secured using pins and/or plates and screws until the bone has healed in the new position. If needed, a bone graft (a small piece of bone) is added.



The incision is closed and a dressing applied.

Other procedures may be indicated in some cases and you should discuss the details with your surgeon.

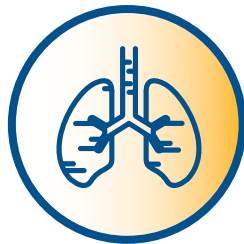
Depending on the type of surgery, your immediate recovery may include:



Your IV remaining in for a period of time after surgery to deliver pain medicine and sometimes other medicines as needed.



Measures taken to manage swelling, such as compression stockings (for hip and knee surgery).



Learning deep breathing exercises to prevent lung congestion.



Learning how to move around safely after surgery and learning how to use a mobility aid, if required. You might also learn exercises that will help with your recovery (e.g. bending and straightening your leg after knee surgery).



Learning how to manage your pain safely after surgery. Adequate pain control means that you are able to look after yourself and do your usual daily tasks. In addition to medications, you will also use techniques such as icing and elevating the affected area to minimize pain.

Using a variety of different techniques to manage pain will help you to avoid or minimize the need for strong opioid pain medications during recovery.

Discharge from hospital

Most surgery patients will be ready for discharge within one to two days or even on the day of surgery. Generally, you will be able to leave the hospital when your vital signs are normal, your pain is controlled, you can tolerate food and you are able to move around safely. Additionally, your care team will first want to ensure you can manage daily activities such as bathing and dressing during your recovery.

Complications

Any surgery comes with a risk of complications. This might be due to prior health issues, the anesthetic you receive, or the stress on your body from undergoing surgery. Here are a few things you can do to help prevent or diminish complications:

- ▼ **Infection** - Infections in the skin around the wound or inside the affected joint are rare, but can be very serious when they occur. If you develop a serious infection, you may require additional surgery. You can do the following things to reduce your risk of infection:
 - Be well-nourished (patients who are either very thin or who are very overweight are at increased risk of infection)
 - Quit smoking (at least 6 weeks prior to the surgery date)
 - If you are diabetic, ensure your blood sugar is well controlled (check with your family doctor if you are unsure)
 - Take your pre-operative shower with chlorhexidine soap (prescribed by your surgeon or provided by your hospital)
 - Listen to and follow the instructions provided to care for your wound after surgery.
- ▼ **Anemia** (lack of healthy red blood cells) – To reduce the risk of low hemoglobin levels when you lose blood during surgery, get your body in the best shape for surgery beforehand. Your hemoglobin level should be tested before surgery and if it is low, it should be addressed before surgery to reduce the risks associated with transfusion (receiving blood), which may increase risk of other complications. Your doctor may suggest taking an iron supplement before and/or after surgery. If your hemoglobin is very low, you may need to take other medications to build it up before surgery.
- ▼ **Blood clots** – These can develop after surgery, especially in people with other risk factors or who are inactive. Be sure to move frequently and perform activities that increase blood circulation. If you have joint replacement (hip or knee) surgery, you will need to take a medication to prevent blood clots for at least two weeks after surgery.
- ▼ **Lung complications** – Fluid in the lungs or pneumonia could result from prolonged bed rest. Remember to take deep breaths regularly and get out of bed and move as soon as you can after surgery.

- ▼ **Delirium** – Sometimes a period of confusion can occur after surgery. There are several causes for this, but one of the most common causes is the use of opioid medications for pain management. To help reduce the chance of delirium, minimize how much strong opioid pain medication you take. If you wear glasses or hearing aids, remember to use these so you can safely interact with your surroundings.
- ▼ **Pain** – Opioids are powerful medications that may be used to manage your pain after surgery, but they come with significant side effects. For some larger surgeries, you may need to use opioids for a brief period of time after surgery. However, you should always use a combination of other pain medications (such as acetaminophen and anti-inflammatory medications) to address your pain first and only use strong opioid medications if necessary. To reduce the risk of overdose or abuse, you should use opioid medications in the smallest possible dose for the shortest possible time.

Other complications can occur with specific surgeries. Be sure to speak with your surgeon before planning a surgery to make sure that you understand all of the potential risks of surgery as well as the likely benefits.

Sources

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This information was reviewed in June 2019 with expert advice from:

Dr. Sarah Ward, MD, FRCSC | Orthopaedic Surgeon, St. Michael's Hospital
Assistant Professor, Department of Surgery, University of Toronto

arthritis.ca | 1-800-321-1433



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