

# Procedure: Joint Replacement

## What is it?

Joint replacement (also known as arthroplasty) is a surgery in which parts of a joint are replaced by a man-made prosthetic device. The knee and hip are the most common joints replaced, but other joints that can be replaced include the ankle, shoulder, elbow, wrist, fingers, and big toe.

## Indications for Joint Replacement

Joint replacement is most commonly performed for severe osteoarthritis. Other conditions that can cause joint damage requiring joint replacement include rheumatoid arthritis, other types of inflammatory arthritis, post-traumatic degenerative disease, or osteonecrosis (destruction of the bone due to medications, radiation treatment, sickle cell disease, lupus, injuries).

For those living with these conditions, the indications for joint replacement are severe degenerative disease accompanied by persistent pain and/or limitations in function that are inadequately managed with other treatments. Other treatment options that are recommended before surgery might include physical therapy, medications, bracing, joint injections, other surgeries (arthroscopy, osteotomy, hip resurfacing, or partial joint replacement), and assist devices (cane, walker). Joint replacements typically last 10-20 years, so healthcare providers recommend waiting until the surgery is absolutely necessary in order to avoid having to have multiple joint replacements over time.

When indicated, joint replacement surgery improves pain, improves functional abilities, and improves quality of life.

## What's involved in joint replacement surgery?

Joint replacement surgery typically involves an incision over the joint, removal of part of the damaged joint, and placement of the prosthetic joint device, which is made out of metal, ceramic, and/or plastic. The knee joint is a hinge joint, and part of the femur (thigh bone) and tibia (shin bone) are replaced by a prosthetic hinge joint. For the ball-and-socket hip joint, the prosthetic "socket" is placed within the pelvic bone, and the prosthetic "ball" is placed at the top of the femur bone.

If you have joint replacement, you will likely be in the hospital for a few days. Potential complications of this surgery include infections, blood clots, or failure of the joint device.

Preventive measures are taken to help avoid these complications including antibiotics prior to surgery to prevent infections and blood thinners and compression stockings/boots to prevent blood clots. You will be given pain medication while in the hospital and to take at home. Some people may stay in a rehabilitation center after surgery, and others may go straight home. Physical therapy after joint replacement is crucial in the recovery process. It may take up to 6 weeks to return to normal activities after knee replacement, and up to 6 months after hip replacement.

## Weight Stigma and Joint Replacement Surgery

Many people with severe OA and associated pain and functional limitations are denied joint replacement surgery due to their BMI being above a certain threshold. They are instead advised to lose weight first before they can qualify, and some are even advised to have weight loss surgery before joint surgery.

The reason cited for denial of joint replacement surgery for people with a high BMI is concern for a greater risk of surgical complications. Though the research does generally show a greater chance of infections after surgery among people in larger bodies compared with smaller bodies, the absolute risk is still low (about 1% risk in “normal” weight people vs about 2% risk in higher weight people). Research also shows that people in larger bodies have the same or better outcomes in terms of improvement in joint pain and function after joint replacement.

The technical aspects of joint replacement surgery among people in larger bodies, including longer operative time, are cited as reasons for the higher rate of infections. Some joint implant devices are not designed to accommodate the mechanical load of all bodies and may also lead to higher joint replacement failure rates. Weight bias in the development of surgical equipment and techniques is an underlying problem in surgical outcomes rather than body size itself.

The recommendation for weight loss prior to joint replacement surgery is not evidence-based. Studies of weight loss interventions prior to joint surgery have found either no difference in surgical infections or a higher risk of infections with weight loss interventions. Similarly, bariatric surgery prior to joint replacement surgery does not decrease the risk of surgical complications, and in some studies increases the likelihood of complications. Malnourishment at the time of surgery causes problems with healing and greater infection risk, irrespective of one’s body size.

Fat people can be counseled about the potential for a higher chance of complications after surgery, but this should not preclude them from having this necessary surgery that can significantly improve quality of life. Medical and surgical care should be designed to accommodate and benefit all bodies rather than asking people to make their bodies conform to a certain size in order to receive treatment.

If you are being denied joint replacement surgery due to body size, the resources here may be helpful: <https://bit.ly/DwFJointReplacement>

## Overall

Joint replacement surgeries are one of the areas of medicine which are most greatly impacted by weight stigma. It can help to remember that people with sports injuries are very often given these surgeries even if they actually did cause their injuries, and even though their replacements are likely to fail sooner due to the wear and tear of them returning to sports. Regardless, people of all sizes deserve equity in healthcare, including joint replacement when they are necessary with all of the quality-of-life improvement they can bring.