

Knee pain and when you may need surgery

Mount Alvernia Hospital's orthopaedic surgeon Alvin Tan shares when a knee replacement may be needed and what are the options available



Knee replacement surgery may be considered when there is significant impairment to daily activities. PHOTO: GETTY IMAGES

Degeneration of the cartilage in the knee joint can cause discomfort, resulting in significant disruption to daily activities. Mount Alvernia Hospital's orthopaedic surgeon Alvin Tan discusses knee replacement surgery and the types of procedures available.

Q What is knee replacement surgery, and what medical conditions could it be helpful for?

Knee replacement surgery is a procedure where a damaged knee joint is replaced with an artificial implant. It is usually performed for conditions such as osteoarthritis, rheumatoid arthritis and other inflammatory arthritis such as psoriatic arthritis. Occasionally, it is also performed for acute fractures when a surgical repair might not be feasible.

The purpose of a knee replacement is to help relieve pain, restore function, and to correct any abnormalities in the alignment of the lower limb. When the pain in your knee is causing significant impairment to your activities of daily living, such as walking, stair climbing and squatting, you may want to consider a knee replacement surgery.

Many patients are concerned they are too young for the procedure. While there are issues of longevity and failure when the artificial knee is implanted in a very young patient, there is no age cut off for a patient who has to undergo a joint replacement surgery. Measures such as computer-aided and robotic surgery have also been shown to potentially improve the longevity of implants in young patients.

Q What are the key types of knee replacement procedures available?

The primary types of procedures include total knee replacement and a partial knee replacement. Both of these types of surgery can be carried out either conventionally, or with the help of computer

navigation and robotic-assisted surgery.

The knee joint is divided into three compartments, namely the medial tibiofemoral compartment (the inside of the knee), the lateral tibiofemoral compartment (the outside of the knee) and the patellofemoral compartment (the kneecap). When all three are affected by arthritis, for example, a total knee replacement is usually performed. However, when only one or two are affected, then performing a partial knee replacement could be a viable option.

The decision on which surgery to perform also depends on how severe the deformity of the knee is, the integrity of the ligaments inside the knee, as well as the patient's overall health, and lifestyle.

Q How should you care for your knee after surgery?

Knee wounds are typically covered in a waterproof dressing after surgery, but these will still need to be kept clean and dry for two weeks to allow healing. Painkillers are also often prescribed to help patients participate fully with rehab exercises. Other important medications may include any blood thinners to reduce the risk of developing blood clots.

Most patients will require a walking stick or frame for a few weeks after surgery. You will also be taught how to manage stairs and curbs. It is important to continue with exercise to keep the muscles around the knee strong, as well as to regain the range of motion of the knee.



Dr Alvin Tan Chin Kwong
 Orthopaedic surgeon
 Pinnacle Orthopaedic & Sports
 Centre (Alvernia)
 Medical Centre D #05-55
 Mount Alvernia Hospital