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Your Journey With Arthritis...Now Gets Easy



Is surgery the only alternative? Is it safe?



**My father has stage IV
osteoarthritis and he
has been advised knee
replacement surgery....
Is surgery the only
alternative? Is it safe?
How can I help my father?
What do I need to know?**



Do your loved ones really need surgery?

Osteoarthritis (OA) is the most common form of progressive joint disease. It may lead to pain (during or after movement), tenderness, stiffness (upon waking up in the morning or after a period of inactivity) and loss of flexibility of the affected joint. Although OA mostly occurs in the knee, hips and spine, any joint of the body can be affected.

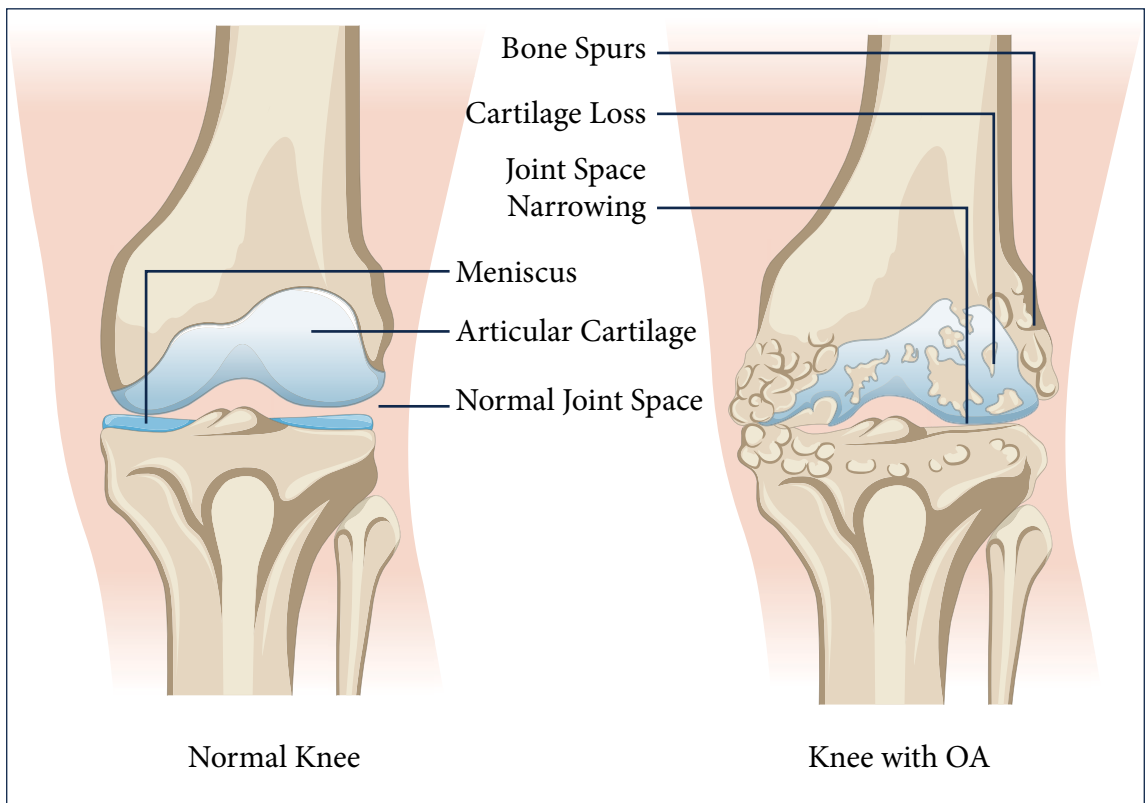
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OA develops when the cartilage lining the ends of the femur and shinbone wear off and bone-to-bone contact occurs, which then gives rise to inflammation, severe pain, tenderness, bony spurs and fluid build-up in the joint space.

As the condition tends to worsen with time, an affected individual may find it difficult to:

- Perform daily activities.
- Take part in routine activities.
- Walk without help.

A doctor would prescribe knee replacement surgery when there is severe joint damage accompanied with persistent pain (even at rest), stiffness and functional limitations. Your surgeon would prescribe knee replacement surgery only when alternate treatments are not likely to give permanent relief.



What would happen to my father's knee if I do not choose surgery now?

Knee replacement surgery will not add *Years to Your Life*, but will for sure add *Life to Your Years*.

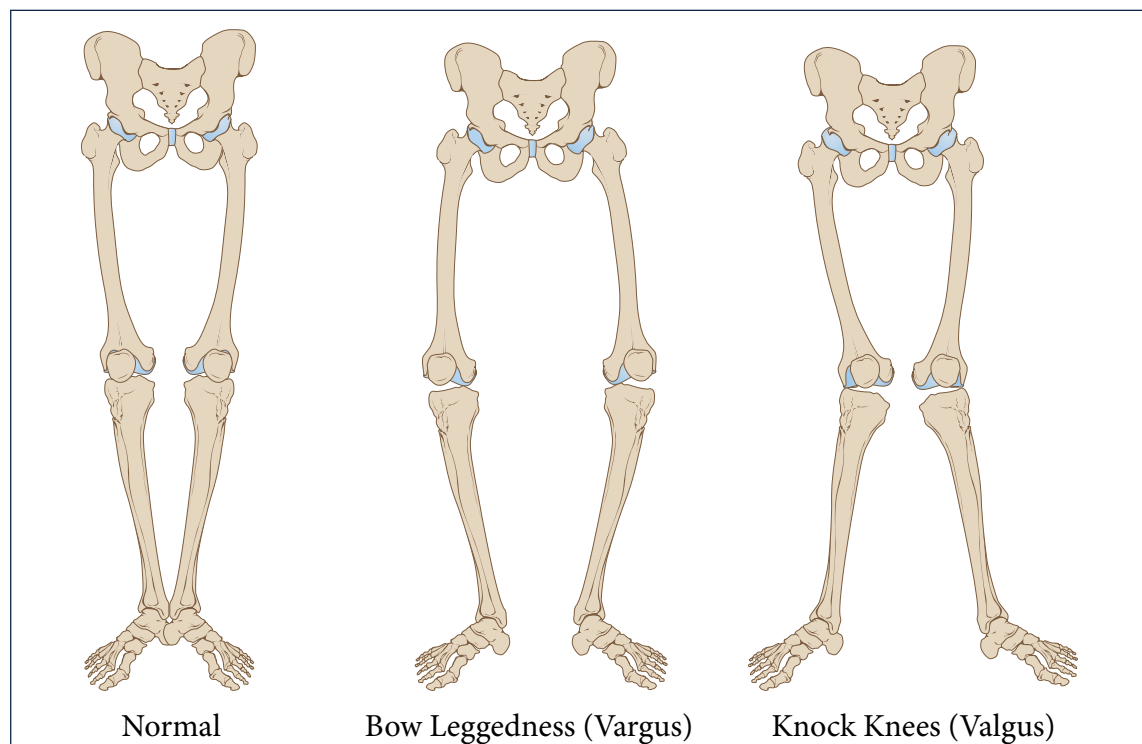
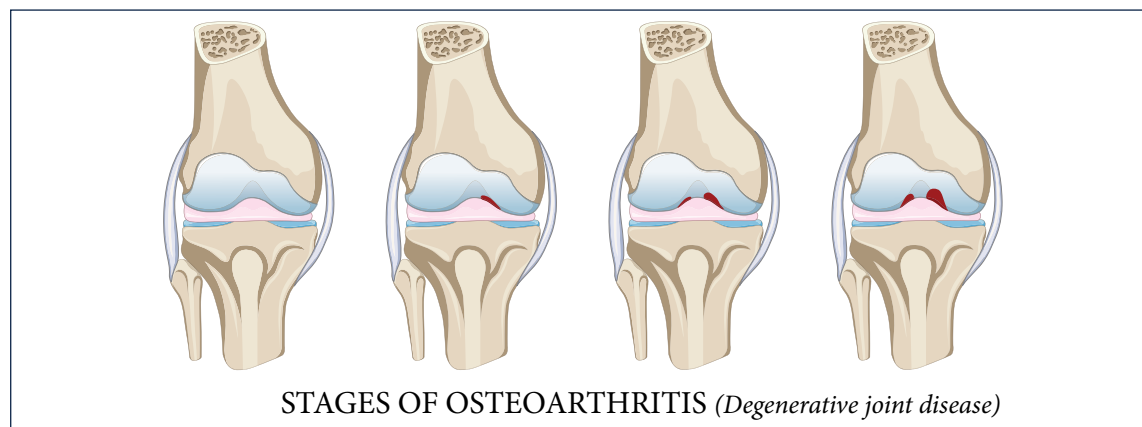


Figure: In the advanced stage of OA, the condition worsens leading to deformities of the joint, ultimately resulting in knee damage. This causes inability to walk without support.

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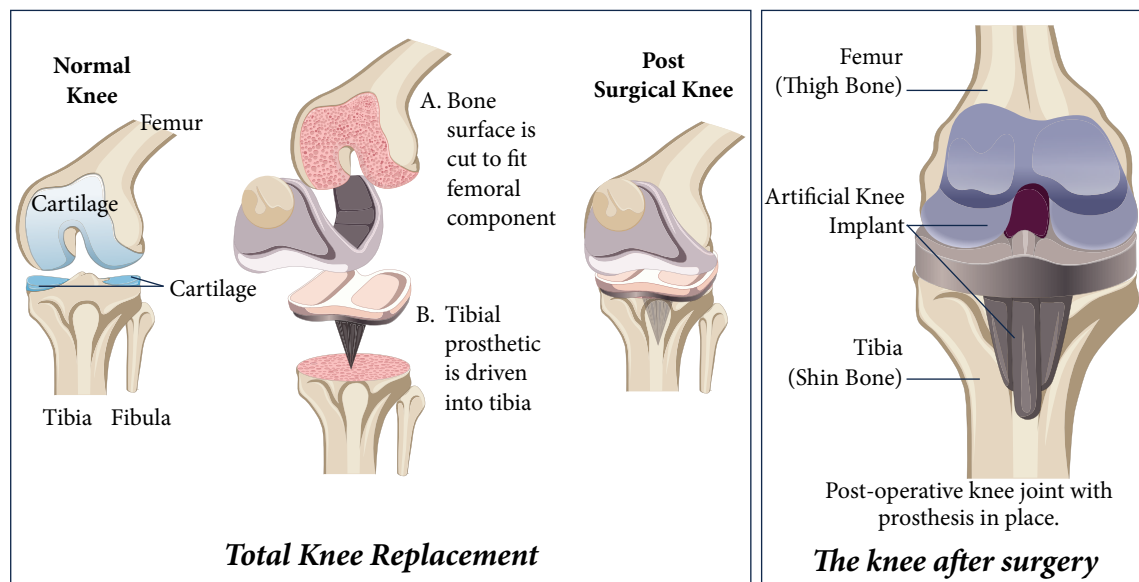
If OA in stage IV is left unmanaged, it may lead to deformities of joints, such as bowed leg (vagus) and knock knees (valgus), and inability to walk even a few steps without support. Advanced stage of OA will result in excruciating pain and functional limitation, thereby affecting the quality of life. Surgery is advised in view of progressive disorder and it (surgery) being the only permanent solution to all the problems. It is a one-stop solution to all the problems of advanced OA, which are pain, swelling, deformity, stiffness and restricted range of motion. This surgery is never an emergency, but is a planned one. However, one thing is for sure that at this stage, you will definitely need surgery at some point in your life. If you are convinced with this point, the simple logic is 'Why delay'? This is a surgery that is not going to add years to your life, but will for sure add life to your years. Hence, if it is delayed, it can lead to several associated problems such as depression and loneliness. Excessive delay in surgery for such patients may impact the surgical outcomes. In short, what result your surgeon can give you today will not be the same what he can give you if you get operated after a year (the latter one would be far more inferior). The best result is obtained if the surgery is perfectly timed and executed and hence, if advised by your surgeon, do not delay the surgery.

Your doctor will take into account the condition of your joint as well as pre-existing conditions that you might already have, such as diabetes, cardiac history, lifestyle and other parameters, prior to making a recommendation.

If you are the caregiver of a patient who requires knee replacement surgery, it is important to realize that you will play a major role in the recovery and rehabilitation of such a patient. It is imperative that the decision of surgery is taken by the patient himself/herself and may not be imposed by anybody, but it is the caregiver who is going to play a crucial role in the overall improvement and the end result of the procedure.

What is knee replacement surgery?

Knee replacement surgery is a surgical procedure to replace severely damaged and diseased knee with an artificial prosthetic joint. The artificial joint, made up of metal and plastic, works in a manner similar to a normal, healthy joint.



As shown in the image, the procedure for implanting an artificial knee joint is a routine operation. Technological advancements over the years have made this procedure absolutely safe and effective. Millions of patients across the world benefit from the surgery every year. Total knee replacement surgery involves the removal of diseased or arthritic parts of the knee. A few cuts are made to shape the bones to fit the artificial components. After these cuts are made, the artificial components are secured. The knee is then moved through its range of movement to see if the knee joint is stable. Once it is confirmed that everything is secure, the soft tissues are sutured back together.

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When is knee replacement performed?

Knee replacement is usually performed in the advanced stages of OA of the knee when:

- Other forms of treatment (non-surgical/conservative options fail) are not likely to give permanent relief.
- A patient experiences persistent and severe pain, significant stiffness and impaired mobility.
- Activities of daily life are grossly affected.
- Need of medications increases.
- Knee x-rays show signs of advanced arthritis.

How does knee replacement surgery help?

First and foremost, knee replacement surgery helps a patient get rid of the disabling pain. The artificial joint helps restore joint function, alleviates pain and stiffness, and allows an affected individual to perform his day-to-day activities without any discomfort.

This surgery is helping millions of patients across the globe improve their quality of life.



What are the different types of knee replacements?

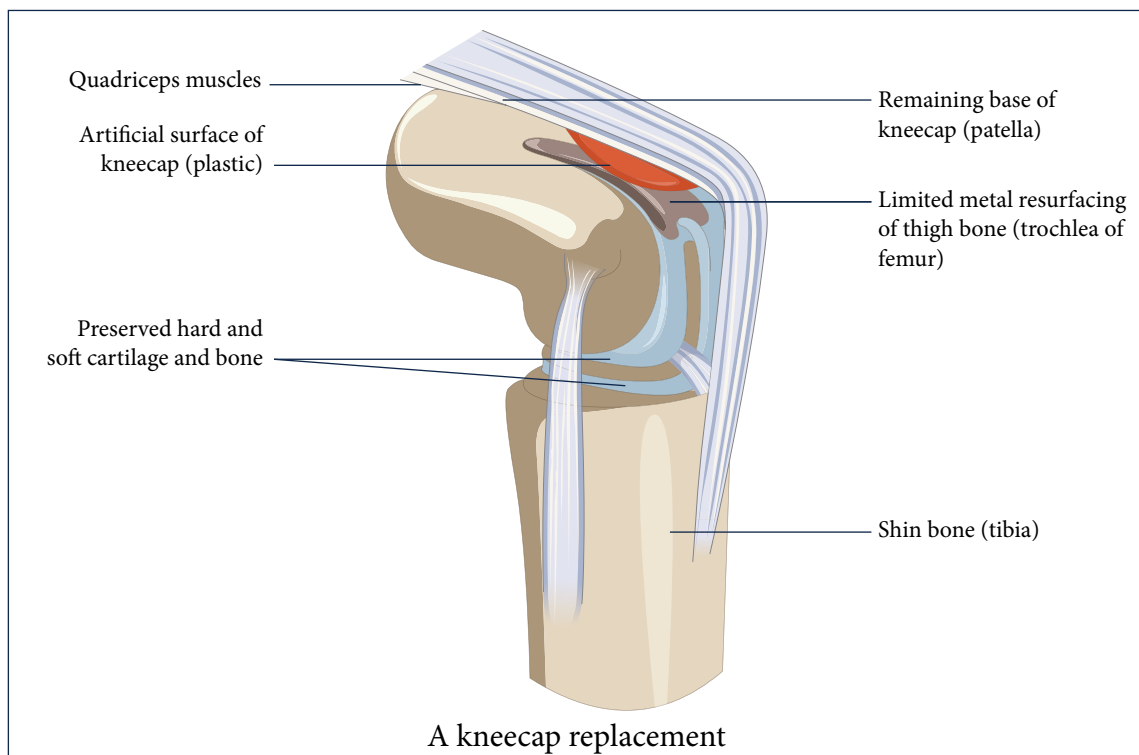
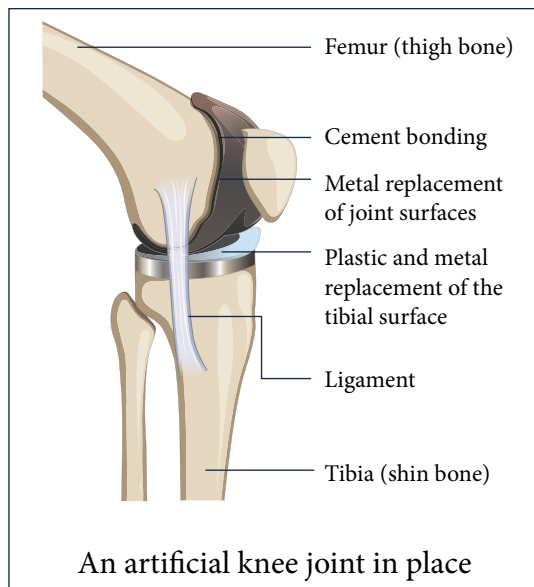
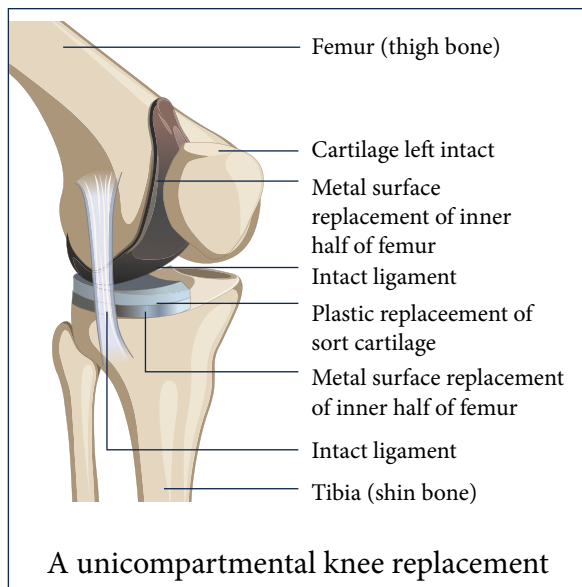


Figure: Different types of knee surgeries

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Based on the severity of Arthritis, the location and number of times surgery is conducted on the joint, knee replacement procedures can fall into any one of the following categories.

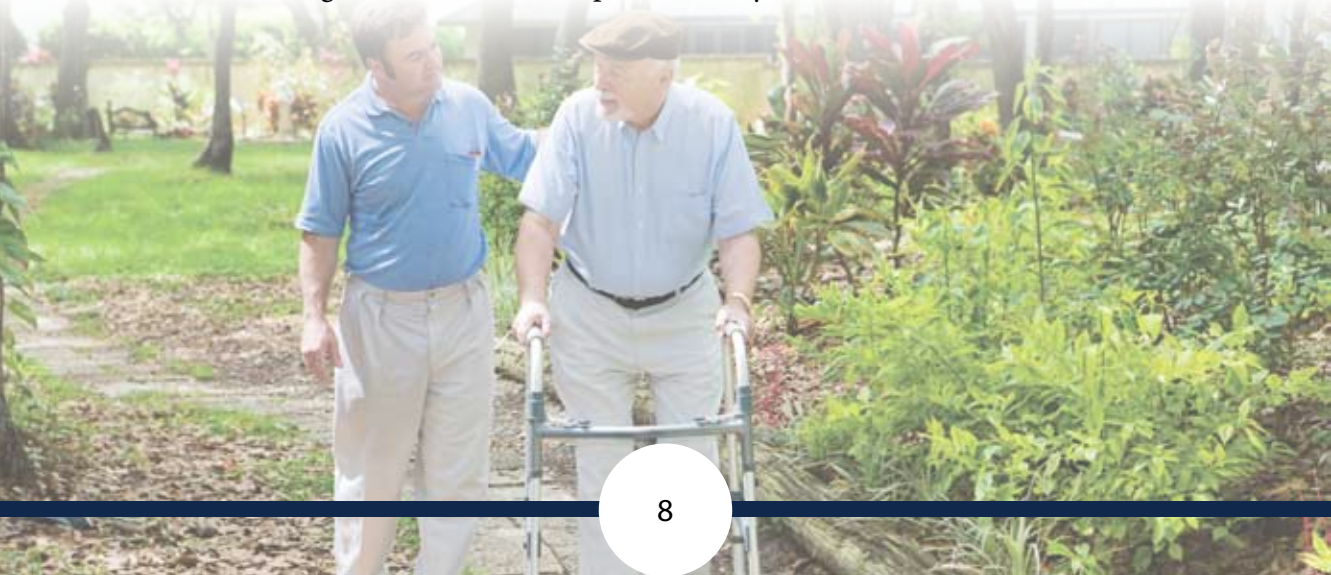
- Partial knee replacement—performed when only one side (usually the inner side) of the knee joint is affected.
- Primary total knee replacement—performed to replace the joint surfaces at the ends of the thigh and shinbone.
- Revision knee replacement—repeat surgery on the same knee. This may be for a variety of reasons such as a potential infection, replacement of a prosthesis, etc.

How can I help as a caregiver?

The initial 2 weeks after surgery is a crucial time. Hence, as a caregiver, it is important that you devote time and attention to your loved one who has recently undergone this surgery.

You can do a lot in helping your loved one get back to normal life by looking after his/her needs. Your duties include:

- Helping the patient to stand, sit, move around and use the toilet.
- Managing and keeping track of doctor's appointments and follow-up with physiotherapist.
- Administering medications at appropriate time.
- Maintaining positivity and providing motivation during their exercises.
- Communicating the concerns of the patient, if any, to the healthcare team.



Things I need to be aware of

As a caregiver, you should be aware of certain things, which can play a big role in getting your loved one back to normalcy and in making the knee replacement a success.

- **Recovery period**

Depending on the extent of surgery and a patient's health status, the recovery period may vary.

- Total knee replacement surgery—a week to 10 days of hospital stay required
- Partial knee replacement—less duration of hospital stay required
- Pain and swelling to completely go off—additional 2 to 3 months required

- **Care for the surgical wound**

It is important that you take utmost care and follow the doctor's instructions regarding the care of the surgical wound. In the initial days post-surgery, it is important to:

- Keep the incision area clean and dry
- Prevent any infections from developing
- Immediately contact your patient's healthcare team in case you notice foul odour and pus discharge from the surgical site, accompanied with pain, fever and chills

- **Being aware of complications**

Although serious complications are rare, there are certain complications that can occur after the knee replacement surgery if proper care is not taken. These include:

- Infections at the surgical wound site
- Unstable new joint—excess bone/scar tissue may form around it
- Restricted joint movement after surgery
- Allergic reaction to prosthetic material
- Dislocation of kneecap



- Development of blood clots or deep vein thrombosis due to the patient's reduced mobility following surgery
- Lung congestion—similar to any other major surgery, pneumonia is always a possible complication

As a caregiver, it is important that you are aware of these complications. If you observe any warning signs such as hard, reddened areas in the legs; chest pain; and breathlessness in the patient, do not hesitate to immediately consult the patient's healthcare team.

How can you help your loved one get back to normal life?

As a caregiver, you can help your loved one in the following ways.

- **Helping him/her in getting used to the new joint**

The way the new joint will function will depend on a number of factors such as age, weight and activity level. It is important to note that as the new joint takes time to heal and get adjusted, the patient may feel initial discomfort, pain and swelling for a few days to weeks. It is important that during this time, you:

- Provide physical support to help him/her in day-to-day activities
- Provide the much-needed emotional support to help him/her during these difficult days
- Take him/her for regular follow-up appointments in order to monitor the progress and healing of the new knee joint

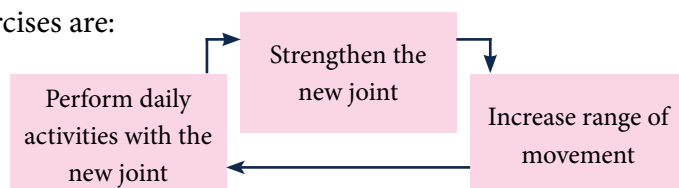
On the basis of doctor's advice and special instructions, he/she can slowly start performing activities such as driving, minor sports, etc. Another point to note here is that knee replacement surgery may limit the activities that an individual performed before joint problems developed. It is thus important for a patient to have realistic expectations about the level and type of activities that he/she can perform after surgery.

- **Helping him/her exercise regularly for faster recovery**

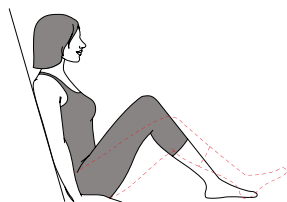
A physiotherapist will play a vital role in the rehabilitation of a patient undergoing knee replacement surgery. The aim of rehabilitation is to strengthen the new joint, increase its range of movement and help perform daily activities with it.

The physiotherapist will teach the patient few knee strengthening exercises, which have to be regularly performed. He/she will also guide the patient in performing day-to-day activities with the new joint in the right way to minimize its wear and tear. Different types of knee strengthening exercises are:

- Knee bending exercises
- Straight knee exercises
- Strong knee exercises

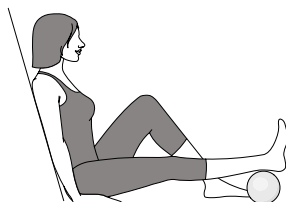


Knee bending exercises

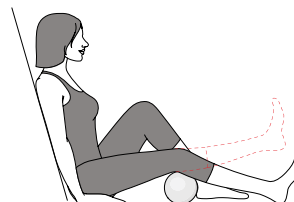


Knee bends on bed: Using a sliding board, keep your heel down on the board and slide your foot towards you, bending the knee. Hold it at the full bend for 3 seconds and then release.

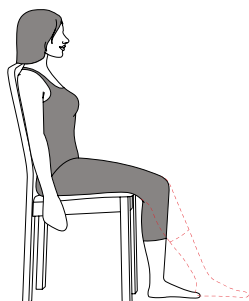
Straight knee exercise



Passive knee stretches: Sit or lie with your leg out in front of you. Put your heel up on a block or pillow so that the knee hangs in mid air. Let the knee stretch for a short time under its own weight, building up to about 5 minutes (or less if it's painful).

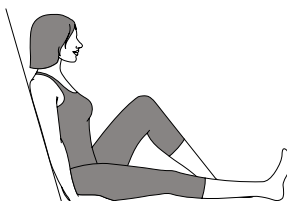


Inner range quads exercise: Sit with your knee bent over a rolled up towel and tighten up the knee muscles to lift your heel off the ground. Keep your knee firmly down on the roll. Hold for a few seconds, trying to get the heel as high as you can, then relax and repeat. If you have kneecap problems you may need to avoid this exercise if it causes pain.

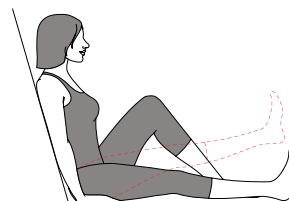


Knee bends on chair: Sit in a chair with your foot on the ground. Slide your foot firmly towards you and then release. Hold for 3 seconds each time in the fully bent position. Don't allow your hips to move, just the foot.

Strong knee exercise



Static quad exercise: With your knee straight, tense up the front muscles of your thigh as if you're trying to straighten the knee and lift the heel. Hold for a few seconds then relax. Try not to tense your buttock muscles.



Straight leg raise: Sit or lie with your leg out straight. Tighten the thigh muscles, straighten the knee and lift the whole leg six inches up off the bed or floor. Hold for 3 seconds and then lower slowly. Don't do this exercise if you've had a total hip replacement on the same side.

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These exercises (performed for 10 minutes, 6-8 times a day) help in straightening, strengthening and bending the knees. It is also important to take adequate rest in between exercises such that the knees do not get overworked. As a caregiver, it is important that you help the patient in performing these exercises in the right manner and as per the instructions of the physiotherapist to avoid complications such as joint dislocation.

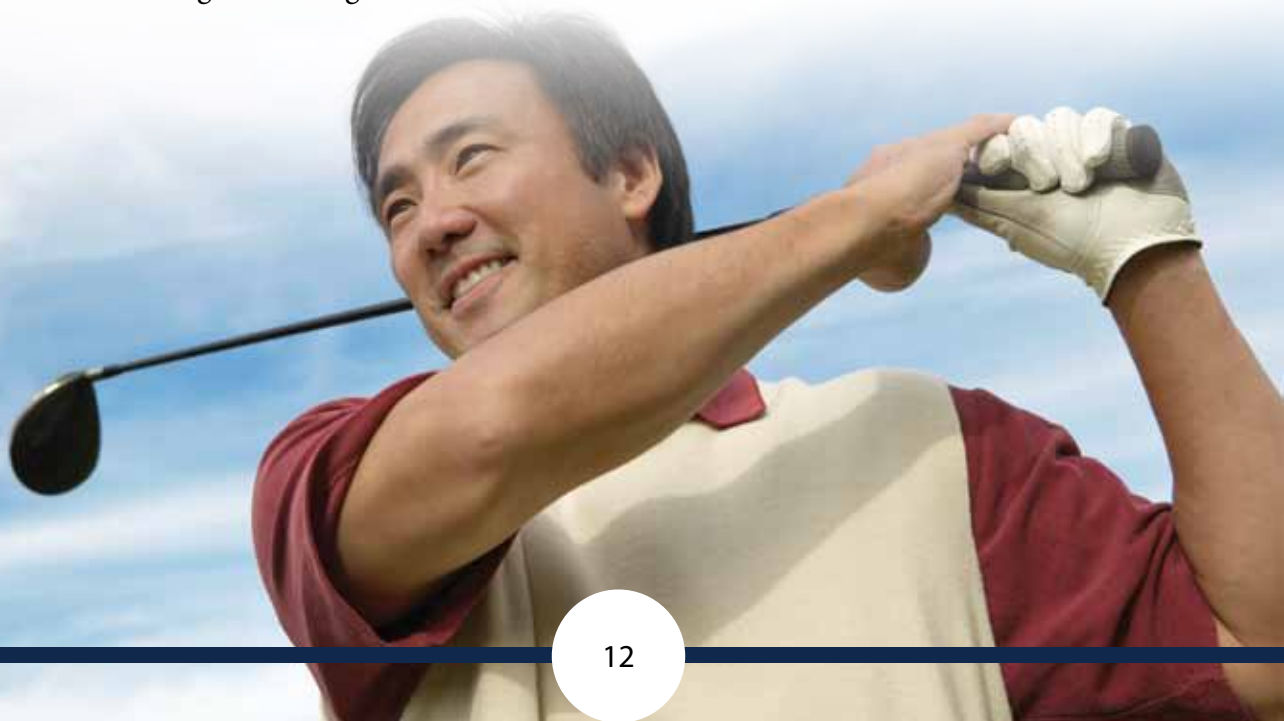
- **Activities that can be done post surgery**

- Low-impact sports such as golf, swimming, walking, cycling
- Light household chores such as dusting, washing
- Driving (4-6 weeks after surgery and with the doctor's consent)

- **Activities to avoid post surgery**

It is important for patients undergoing knee replacement surgery to refrain from certain high-impact activities and sports that can cause injury to the new joint. These include:

- Racquet sports such as tennis, badminton, squash
- Jogging, running
- High-intensity aerobics
- Lifting heavy objects
- Activities that excessively stretch, bend or twist the knee joints
- Prolonged standing



Post-surgery safety precautions

It is essential that your loved ones who have undergone knee surgery follow safety precautions, which include:

- Do not soak the knee in water until the physician approves and the incision is completely healed.
- Continue to use crutches or walker until the doctor tells you to stop.
- Continue to wear white surgical stockings until the doctor tells you to stop.
- Follow weight-bearing guidelines given by the doctor.
- Do not drive until the doctor approves.
- Do not jump or twist.
- Do not jerk or pull anything until the doctor approves.
- Notify doctors or dentists that you have an artificial joint, which is important for any procedure or routine dental cleaning.
- Do not carry anything heavier than 2 to 4 kg.
- Remove throw rugs and any other object that is below the knee level and hence has a potential to be an obstacle while walking.



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Caregiving can be stressful! Do not ignore your own health and well-being

Caregiving, though rewarding and fulfilling, can become extremely stressful and an overwhelming experience. As a caregiver, you may have to face a host of new responsibilities, which can be physically demanding and emotionally draining. You may tend to begin ignoring your own health needs and overall well-being. With time, the increased demands of caregiving may push you to perform beyond your mental and physical capabilities, and this can cause you to become stressed out and take a toll on your health.

‘Caregiver burnout’ may result in:

- Feeling depressed, tired and sleep-deprived.
- Ignoring your regular health check-ups.
- Poor eating habits and exercise schedules.
- Increased risk of alcohol abuse and drug addiction.



It is thus important that you do not ignore your physical and emotional needs such that your ability to provide the best care for your loved one is not hampered. You can do this by taking a break from caregiving, identifying and reducing stressors, setting realistic goals about how much meaningful care you can provide and not hesitating from seeking additional support.

- Maintain a life outside caregiving—pursue your hobbies, read books, meet up with friends. It is important to maintain a balance between caregiving and your own personal life.
- Do not feel guilty for taking breaks in between.
- Spend time in activities you enjoy—visit relatives, pamper yourself, watch a movie, go for a spa, etc.
- Follow simple de-stressing techniques such as relaxation, meditation, yoga, deep breathing and light physical exercises.
- Visit a doctor for your physical check-ups and stay away from health problems.
- Seek the help and support of other relatives, family members and trusted friends in providing care for your loved one.
- Learn to appreciate yourself for the good work you are doing.

It is important that you do not ignore yourself, as this can have a negative effect on your ailing ward. Only when you are happy and healthy, you can provide the best care for your loved one in their journey to recovery.

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