

OSTEOARTHRITIS

Osteoarthritis is the most common form of arthritis, affecting millions of people worldwide. It occurs when the protective cartilage that cushions the ends of your bones wears down over time.

STAGES OF OSTEOARTHRITIS:

The progressive degeneration of OA has been classified into **four stages**. The first **stage**, with no joint damage, is called **Stage 0**. **Stage 4** is the most advanced and severe **stage** of OA.



What Causes Knee Osteoarthritis?

- Age. The ability of cartilage to heal decreases as a person gets older.
- Weight. Weight increases pressure on all the joints, especially the **knees**. ...
- Heredity.
- Gender.(women>males)
- Repetitive stress injuries.
- Athletics.(continuous wear and tear)
- Other illnesses.

Symptoms of osteoarthritis of the knee may include:

- **pain** that increases when you are active, but gets a little better with rest.
- swelling.
- feeling of warmth in the joint.
- stiffness in the **knee**, especially in the morning or when you have been sitting for a while.

WHEN TO CONSIDER SURGERY:

Surgery can help bring relief, but doctors almost always advise trying other treatment options first. These include:

Oral Medications.: options include [acetaminophen](#), as well as nonsteroidal anti-inflammatory drugs ([NSAIDs](#)) such as [ibuprofen](#) or [naproxen](#) . NSAIDs fight [inflammation](#).

Creams or ointments you rub onto the skin. Different forms are sold over the counter.

Medications injected into the joint. Corticosteroid injections, also called cortisone shots, fight inflammation and can offer fast pain relief that may last up to several months. Injections of [hyaluronic acid](#) boost the natural joint fluid that keeps knees moving smoothly. They may take up to a couple of months to have their full effect but can last up to 6 months or more.

Exercise And physical therapy. Exercise strengthens the muscles that support your knee. Physical therapy also helps. A physical therapist can design the program for you and see if you need supportive braces, splints, or canes. If you need to lose weight, [diet and exercise](#) can help you shed some pounds and take some of the pressure off your knees.

Weight loss. Every pound you gain puts an extra 3 pounds of pressure on your knees. If you eventually need [knee replacement surgery](#), your chances of success are much greater if you first lose extra weight.

Nutritional supplements. Some people take glucosamine and chondroitin for OA. Studies on how well they work have had mixed results. It takes longer to work, though.

These treatment options may provide enough relief to keep you moving comfortably. If they don't, they become less effective over time, or you can't tolerate them, your doctor may suggest considering surgery.

TOTAL KNEE REPLACEMENT SURGERY

Detailed preparation of the patient:

1. Radiographs: X-ray of both the knees in AP(standing) and lateral, skyline view, scanogram. Chest X-ray, X-ray lumbo-sacral spine.
2. Blood investigation: CBC, ESR, SE.ELECTROLYTES, FBS,PPBS, URINE ROUTINE, HIV, HBsAG, HCV, BT,CT, PT-INR, BLOOD GROUP.
3. 2D-ECHO, COLOUR DOPPLER, ECG.
4. EXAMINATION OF THE SKIN CONDITION OF THE OPERATIVE SITE TO LOOK FOR ANY SCARS, SINUSES OR ANY SIGNS OF SKIN INFECTION.
5. TO START BASIC PRE-OP PHYSIOTHERAPY
 - Straight Leg Raises
 - Hamstring Curls.
 - Calf Raises.
 - Step-Ups.
 - Side Leg Raises.
 - Leg Presses.
6. PREOPERATIVE MEDICAL FITNESS BY PHYSICIAN.
7. FITNESS BY ANAESTHETIST.

Patient has to be admitted one day prior to surgery and kept nil by mouth 6 hours prior to surgery, during this time the knee joint is prepared by the nursing staff using chlorohexidine wash. The back and private parts are shaved and prepared.

The usual surgical time for a single total knee replacement surgery is about 2 hours.

Following the surgery the anaesthetists give an adductor canal block with an indwelling catheter on the operative limb just over the thigh for post op pain control and early mobilization.

The patient is observed in the recovery ward until the action of the spinal drug wears off.

Post operative recovery:

Post operative rehabilitation is started on the very same day of surgery in about 6-7 hours.

Post-op day 0: patient is made to do in-bed exercises, sit over the edge of bed for all meals, walk/stand with the help of walker.

Post-op day 1: with all the exercises pt is encouraged to do exercises with the help of physiotherapist minimum 3 times a day , walking with the help of walker, toilet training.

Post-op day 2: with all the above said exercises and walking pt is now taught to do staircase climbing.

Post-op day 3: adductor canal block catheter is removed and pt is discharged on oral medication.

Patient is advised to return on the 14th day of surgery for removal of the sutures.