

What Is Knee Osteoarthritis?

After 40 years of age, the gradual wear and tear of the knee joints results in the progressive loss of articular cartilage (tissue that provides cushioning between the bones in the knee joint), known as knee osteoarthritis. The friction due to rubbing of the knee bones causes pain, swelling, and stiffness. It affects the person's daily activities and greatly impacts their quality of life.

HEALTHY KNEE



OSTEOARTHRITIC KNEE



Non-Surgical Methods for Knee Osteoarthritis

Lubricants (Viscosupplementation)

Lubricant (hyaluronic acid) injections can offer prolonged pain relief and may help in cartilage protection and regeneration, particularly in Grade 1 to Grade 3 osteoarthritis. In Grade 4, where the joint is severely damaged, their effectiveness is significantly reduced.

✓ Stem Cells & PRP (Platelet-Rich Plasma) Therapy

These are regenerative therapies that can help in pain reduction and functional improvement. While still undergoing extensive clinical studies, they have shown promise in early to moderate osteoarthritis with minimal to no side effects.

✓ Steroid Injections

Although commonly used, steroid injections should be avoided due to their adverse effects, including:

- Cartilage damage with repeated use
- Increased risk of infection
- Temporary relief with potential for worsening joint health over time

✓ Medications

Routine pain medications may offer short-term relief but do not provide long-term benefits in osteoarthritis:

Say NO to painkillers - Prolonged use can result in serious kidney and liver damage.

COOLIEF Cooled RF

A minimally invasive, out-patient procedure that can treat chronic pain. This procedure uses cooled radiofrequency energy to target the sensory nerves causing pain. COOLIEF circulates water through the device while heating nervous tissue to create a treatment area that is longer than conventional RF treatments. This combination targets the pain-causing nerves without excessive heating, leading to pain relief.

Physiotherapy

A personalized physiotherapy regimen helps improve muscle strength, joint mobility, and posture, especially effective when started early.

Laser Therapy

Low-level laser therapy can be a non-invasive adjunct that reduces inflammation and promotes healing in selected patients.



LUBRICANTS



KNEE INJECTIONS



MEDICATION



STEM CELLS

GERMANTEN OFFERS A REVOLUTIONARY SOLUTION FOR KNEE PAIN THROUGH GENICULAR ARTERY EMBOLIZATION

What is Embolization?

Embolization is a procedure performed by interventional radiologists. They use a pinhole technique to release tiny particles into the targeted blood vessels and block the blood supply to a specific region, thereby reducing inflammation and relieving pain. It is a safe and effective procedure used to treat several diseases in every part of the body including the brain, uterus, liver, and lungs.

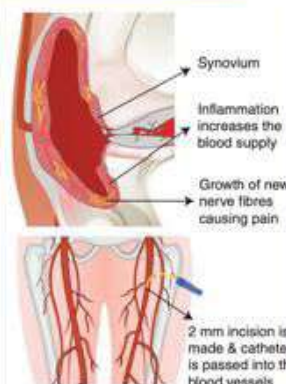


What is Genicular Artery Embolization?

Germanten's experts offer a revolutionary solution for knee pain through Genicular Artery Embolization. It is a minimally invasive, non-surgical pinhole procedure that does not require general anaesthesia and leaves no scars. It provides pain relief to patients with knee pain. The patient is discharged on the same day of the procedure.

How Is Genicular Artery Embolization Performed?

The synovium is a membrane that lines the inside of the knee joint cavity. Due to the rubbing of the knee bones, the synovium gets inflamed. The inflammation increases the blood supply which leads to the growth of new nerve fibres and causes pain. During Genicular Artery Embolization, a local anaesthetic is injected to numb the groin region. Then, a 2 mm pinhole incision is made and a fine tube called a catheter is inserted into an artery in the thigh. Guided by an X-ray, the catheter is passed into the blood vessels around the knee joint. A special X-ray contrast liquid is injected to identify the blood vessels which supply blood to the newly formed nerve fibres. Then, tiny particles are injected through the catheter into the blood vessels. These particles block the blood supply to the inflamed synovium. This reduces inflammation and provides significant pain relief to the patient. After the procedure, the catheter is removed.



What Happens After Undergoing Genicular Artery Embolization?



Patients who undergo Genicular Artery Embolization experience significant pain relief within a few days of the procedure. They can soon walk without pain and have a normal, painless life.

Who is a Candidate for Genicular Artery Embolization?

Genicular Artery Embolization is recommended for patients who are experiencing severe pain due to knee osteoarthritis but are not considering total knee replacement surgery for the following reasons:

- Too young to have surgery
- Medically unfit for surgery due to other comorbid medical conditions
- Reluctance or fear of undergoing surgery