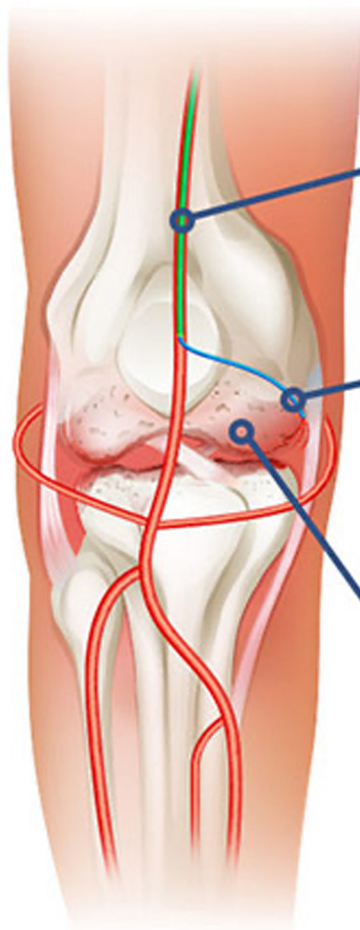


GENICULAR ARTERY EMBOLISATION (GAE)



A small catheter is inserted.

Tiny particles are injected that block the capillaries around the lining of the knee.

By blocking these arteries there is a reduction in the amount of inflammation, which reduces or even eliminates associated knee pain.

Genicular Artery Embolisation (GAE) is a modern knee pain treatment solution performed by Interventional Radiologists on individuals dealing with persistent and stubborn knee pain due to arthritis. This minimally invasive procedure is a modern option for those who have exhausted traditional remedies for their chronic knee pain.

Chronic knee pain is caused by an array of reasons, ranging from degenerative conditions like osteoarthritis to inflammatory disorders such as rheumatoid arthritis. Osteoarthritis is the most common cause and frequently leaves people dealing with pain that disrupts their daily lives and impedes their mobility.

1. WHAT IS GAE?

Genicular Artery Embolisation (GAE) is a modern knee pain treatment solution performed by Interventional Radiologists on individuals dealing with persistent and stubborn knee pain due to arthritis. This minimally invasive procedure is a modern option for those who have exhausted traditional remedies for their chronic knee pain.

During a GAE procedure, arteries are catheterised with a tiny tube and microscopic embolic agents (called microparticles) are injected to reduce blood flow to the painful regions of the knee. The overall effect is a reduction in pain, resulting in an improvement of function.

2. WHY WOULD A DOCTOR REFER ME TO HAVE THIS PROCEDURE?

The decision to consider GAE often stems from dissatisfaction with the available options. Individuals who have diligently adhered to exercise regimens, regularly taken anti-inflammatory medications, had corticosteroid injections, and undergone physical therapy without achieving the desired outcome for their knee pain, may now want to consider a GAE procedure. This is particularly true when the pain begins to limit your ability to engage in routine activities.

You may be referred for GAE if you have a history of chronic knee pain which is caused by knee arthritis and not due to an acute knee injury. Your eligibility for the procedure will be determined through a thorough medical evaluation and imaging studies, such as an Xray or an MRI, to ascertain the underlying causes of your knee pain. Not all knee pain can be solved by GAE, so it is important to have a complete diagnosis of the knee to better evaluate the potential for success. You may be referred to an orthopaedic surgeon if appropriate, during this assessment to ensure there is no current role for surgery for you.

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4. HOW DO I PREPARE FOR THE PROCEDURE?

Prior to the GAE procedure, your healthcare team will provide you with comprehensive set of instructions. This may include fasting for a specified period, adjusting any current medications, and discussing any allergies that you may have.

5. WHAT HAPPENS DURING THE PROCEDURE?

During the GAE procedure, an interventional radiologist will use advanced imaging techniques to guide a small catheter to the genicular (knee) arteries responsible for the knee's blood supply. Once positioned accurately, tiny embolic agents are delivered through the catheter, causing the targeted arteries to be obstructed. This process restricts blood flow to the painful areas of the knee.

6. WHAT IS THE RECOVERY NORMALLY LIKE?

Following GAE, you may experience mild discomfort and bruising around the catheter insertion site and possibly a short term flare of knee discomfort. Most patients can resume their daily activities within a few days, guided by their medical team's recommendations.

7. WHAT ARE THE RISKS?

Like any medical procedure, Genicular Artery Embolisation carries certain risks. Potential risks include a bruise in the groin (insertion site), as well as temporary skin rash over the knee, and rarely, temporary numbness. However, these risks will be closely monitored and managed by the medical team throughout the procedure and are uncommon.

8. WHAT ARE THE BENEFITS?

GAE has the potential to reduce chronic knee pain, and the requirement for regular pain killers, thus enabling you to engage in activities that were previously hindered.

9. WHEN CAN I EXPECT THE RESULTS OF MY PROCEDURE?

GAE has the potential to reduce chronic knee pain, and the requirement for regular pain killers, thus enabling you to engage in activities that were previously hindered.

The timeline for experiencing the full benefits of GAE can vary among individuals. Some patients report immediate pain relief, while others may require weeks for noticeable improvements.

Genicular Artery Embolisation is an emerging area for Interventional Radiologists and hope for individuals who find themselves dealing with unrelenting knee pain, offering a potential respite for those whose conventional treatments have not found relief.

If you or someone you know is experiencing chronic knee pain, engaging with an Interventional Radiologist could open the door to the possibility of using GAE as a treatment solution. If you'd like to discuss Genicular Artery Embolisation further, you can use the Doctor Finder option on this website, to connect with an Interventional Radiologist who specialises in this procedure.

NOTE: Most of the scientific evidence for GAE and procedures performed worldwide to date have been by specialised interventional radiologists, so we would advise caution in selecting a practitioner who is a suitably qualified interventional radiologist experienced in embolisation procedures.