

Genicular Neurotomy (aka Genicular Nerve Ablation)

If you suffer from osteoarthritis of the knees and want to do everything possible to avoid surgery, or you have already had knee surgery that has failed to relieve the pain, this cutting-edge treatment option may be for you.

What is Genicular Neurotomy?

Genicular Neurotomy (aka ablation) is a brand new, innovative option for treating knee pain without surgery. This highly advanced procedure is on the absolute cutting edge of medicine. By selectively applying a sophisticated type of radio wave to the nerves surrounding the knee (the genicular nerves), one can effectively relieve pain in the knee from any number of causes.

Indications

Perhaps the greatest advantage of genicular neurotomy is the fact that the entire procedure is performed OUTSIDE the knee capsule. This is what allows it to succeed where other procedures like cortisone injections, hyaluronic acid injections, and even

surgery fail. In fact, this procedure can be done up to one month before knee surgery and even after surgery.

Genicular neurotomy is indicated for a variety of conditions:

Osteoarthritis (OA)

Chronic Knee Pain

Degenerative Joint Disease

Total Knee Replacement (before or after)

Partial Knee Replacement (before or after)

Patients unfit for knee replacement

Patients who want to avoid a knee replacement

While surgery is considered to be the accepted treatment option for patients with advanced joint disease, many individuals have comorbidities that may prevent them from being an appropriate surgical candidate. Others may simply want to avoid surgery, as they may be unable to take off the necessary time from work for the procedure and post-operative recovery period. In these cases,

radiofrequency neurotomy of the genicular nerves is a safe, potential alternative to joint replacement for pain.

Despite the general efficacy of knee replacements, many patients complain the pain persists after surgery. In these unfortunate cases, patients have traditionally had few options, if any, that did not involve additional surgery. With the advent of genicular nerve neurotomy, patients can look forward to pain relief without any potential further surgeries.

What Are The Benefits?

It is a minimally invasive, nonsurgical treatment option with the potential to relieve pain where other more conventional therapies have failed. When compared to a total knee replacement:

Genicular Nerve Neurotomy	Traditional Joint Replacement
<i>Inexpensive and covered by most insurance</i>	<i>Can be extremely expensive even with good insurance</i>
<i>Performed in your doctor's office</i>	<i>Performed in hospital</i>

<i>Outpatient procedure</i>	<i>Inpatient admission</i>
<i>Can be done with only local anesthetic</i>	<i>Required general anesthesia and regional anesthesia</i>
<i>Minimal risk of infection</i>	<i>Risk of post-surgical or nosocomial infection</i>
<i>No need for blood thinners</i>	<i>Requires 4 weeks of blood thinners (anticoagulation)</i>
<i>Virtually non-existent recovery period</i>	<i>Long postoperative recovery period requiring inpatient rehab</i>
<i>In many cases, can go back to work the same day</i>	<i>Can be weeks to months before returning to work</i>
<i>Little to no postoperative pain, typically controlled with NSAIDs</i>	<i>Significant postoperative pain</i>
<i>Can return to normal activities in a matter of days</i>	<i>Can be months before returning to normal activities</i>

For those patients where a knee replacement is the only option, genicular nerve neurotomy can offer a number of benefits in the postoperative phase. By performing this procedure preoperatively, there is a decrease in postoperative pain, allowing the patient to begin physical therapy earlier. Thus improving knee strength and leading to shorter hospital stay. Decrease postoperative pain has also been linked to decreased morbidity in the postoperative phase.

For many patients who have to wait several months for surgery, genicular nerve neurotomy can significantly reduce their pain making the waiting period more tolerable.

After the procedure, the degree of pain relief can vary, depending on the cause and location of the pain. In most cases, pain relief from the procedure can last from 6 to 12 months; in other cases, relief can last for years. During the pain relief period, patients are typically able to participate in physical therapy and improve their overall activity level.

How Does It Work?

The procedure uses a breakthrough technology called Radiofrequency Ablation (RFA) to stun the painful nerves and prevent the signals from reaching the brain. This amazing

technology has been used for decades with excellent success, traditionally to treat pain in the neck and back. The nerves grow back over time which makes the procedure reversible if necessary.

RFA harnesses the energy of radio waves to treat pain at the source, without the need for incisions of any kind. The most appealing aspect of RFA is that there is no need for steroid or cortisone injections, making it ideal for patients with high blood pressure and Diabetes.

Learn More About Radiofrequency Ablation (RFA)

This procedure is performed in 2 phases:

- *Diagnostic Genicular Nerve Block – This procedure consists of placing a small amount of a local anesthetic, like Lidocaine or Bupivacaine, on the genicular nerves to test the patient’s response and see if there is sufficient enough relief in the knee to justify performing a therapeutic neurotomy.*
- *Genicular Nerve Ablation – This is the therapeutic portion of the treatment whereby the physician will perform a radiofrequency ablation (RFA) of the genicular nerves, thus alleviating pain to the knee and restoring function.*

Both portions of the procedure are performed as an outpatient under direct fluoroscopic guidance.

How Many Treatments Will I Need?

Before performing a genicular neurotomy, your doctor will first schedule you for a diagnostic genicular nerve block to see if you are a candidate for the ablation procedure. The pain relieving effects of the genicular neurotomy can last up to a year or longer.

When Will I Feel Better?

The effects of the diagnostic block can be felt almost immediately, but will typically wear off in just a few hours – THIS IS NORMAL. This is just to let your doctor know if the actual ablation procedure will work for you. Relief from the genicular neurotomy proper typically takes effect in a few days.

Is Genicular Neurotomy Right for Me?

If traditional treatments like physical therapy and injections with cortisone or hyaluronic acid have not provided you with relief, genicular neurotomy may be an option for you. The procedure involves minimal to no scarring, and can be performed as an alternative to surgery to relieve pain, and even for patients still experiencing pain after surgery.

