

# Mid-Tennessee Bone and Joint Clinic

## Genicular Nerve Block

The knee joint is richly innervated by pain sensitive peripheral nerve fibers called genicular nerves. Genicular nerves are part of the nerve pathway to and from the knee joint to the brain. The pain message starting from the knee joint may travel along the genicular nerves to your brain and cause you to feel pain in or around the knee.

**What is a Genicular Nerve Block?** A Genicular Nerve Block is an injection of local anesthetic near the genicular nerves of the knee, and it is performed to relieve knee pain. Many patients get significant relief from one or two injections. In some cases, it may be necessary to repeat the procedure. Your doctor typically uses genicular nerve blocks to see if you might respond to a therapeutic procedure known as radiofrequency neuroablation (lesioning). If the genicular nerve block procedure reduces your pain for the duration of the local anesthetic (as early as the first hour to 15-24 hours), then the nerves can be treated with a radiofrequency heat current to keep certain pain messages from reaching the brain, reducing or relieving knee pain for the long term.

**Who is a candidate for this injection?** This injection is designed to provide relief to patients with knee pain that remains despite other therapies. The knee pain can be related to a number of conditions, such as degenerative osteoarthritis or chronic knee pain following knee replacement.

### The Procedure

- You will lie on your back and fluoroscopy (video X-ray) or ultrasound guidance is used to help locate the knee joint, and local anesthetic is used to numb your skin.
- Using video X-ray or ultrasound guidance, a thin needle is inserted into and around the knee in the region of the genicular nerves.
- A local anesthetic solution (sometimes a steroid-local anesthetic mixture) is injected near the genicular nerves bathing the area with soothing medication.
- The needle is removed and a bandage will be placed on the tiny area where the needle was injected for each level injected.

### Instructions (Day of Procedure)

- Continue taking your medications as prescribed with the exception of blood thinners.
- If you are taking blood thinning medication, you will be instructed when to stop taking the medication.
- It is recommended you bathe with anti-bacterial soap before the procedure.
- Your procedure will take place at the Surgery Center of Middle Tennessee. You will be contacted and told when to arrive.
- If you have any known allergic reactions to having medication injected, have an active infection, rash, or are pregnant, inform the doctor and/or nursing staff.
- Please bring your insurance card and driver's license.

**NOTE: Patients are NOT permitted to drive themselves home after this procedure. Please make arrangements for someone to drive you home.**

### After the procedure

- After the procedure is completed you will be monitored in the recovery area. When your blood pressure, pulse, and breathing are stable, you should be discharged and able to leave with a responsible adult.
- You may experience discomfort at the needle placement site(s). This discomfort will subside over the next few days. Your legs may feel slightly heavy and may be numb due to the local anesthetic. This sensation wears off in a few hours.

**Risks:** Generally speaking, this procedure is safe. However, as with any procedure, there are risks including, but not limited to: infection, bleeding with nerve damage or worsening of present symptoms, allergic reaction, or no improvement in symptoms.

**Possible Side Effects:** The most common side effect is pain which is temporary. Other side effects include bruising, swelling, or soreness at the injection site, or transient weakness and numbness. If steroids are included in the injection, other side effects are related to the use of cortisone which can include weight gain, increased blood sugar, water retention, and suppression of the body's own natural production of cortisone.