



GENICULAR NERVE BLOCK

What is a genicular nerve block?

A genicular nerve block is the injection of a local anesthetic to block the nerves that transmits pain from the knee.

What is the purpose of a genicular nerve block?

A genicular nerve block is a diagnostic procedure to determine if the pathologic change (i.e. arthritis, meniscal tears, etc) and inflammation within the knee joint is the source of your knee pain. It also confirms that the knee pain will respond well to the actual treatment procedure. If a genicular nerve block works, it will give you relief for several hours. After that, the pain is expected to return to normal. This test is always performed twice (usually a week or two apart) because two successful tests are required to move onto treatment. If both diagnostic tests are positive, then we schedule a treatment call radiofrequency (RF) ablation. In this procedure, the same nerves are cauterized, which typically leads to pain relief for 12-18 months (please see the link for Genicular Radiofrequency Ablation to learn more about this procedure). If this process works well for one knee, it can be performed on the other knee if needed.

How is the procedure performed?

You will be placed on the procedure table. The injection site is sterilized with either iodine or chlorhexidine. The site to be injected is numbed with a local anesthetic, and a needle is directed to the target area. X-ray guidance is used to ensure proper placement and positioning of the needle. When the needle is properly positioned near the genicular nerve, local anesthetic is injected to numb that nerve. This will be repeated at multiple sites around the knee to block all genicular nerves.

Will the procedure be painful?

The injection can be painful and we therefore provide the option of receiving IV sedation. IV sedation, combined with local anesthetic, can make the injection nearly pain free. It allows you to remain very still during the procedure, which can also make the injection easier, faster, and more successful. If you decide to have IV sedation, you must have a driver to get you home safely afterwards. In addition, you cannot have anything to eat or drink within 8 hours of your appointment. If you take medications for diabetes, these medications may need to be adjusted the morning of the procedure. Your primary care physician can help you with this adjustment.



What are the discharge instructions?

If you received IV sedation do not drive or operate machinery for at least 24 hours after the procedure. You may return to work the next day following your procedure. You may resume your normal diet immediately. Do not engage in any strenuous activity for 24 hours. You should, however, engage in moderate activity that typically causes your usual pain. If the block works, those activities should not be painful for several hours after the injection. Do not take a bath, swim, or use a hot tub for 24 hours (you may take a shower). Call the office if you have any of the following: severe pain afterwards (different than your usual symptoms), redness/swelling/discharge at the injection site(s), or fevers/chills.

What are the risks and side effects?

The complication rate for this procedure is very low. Whenever a needle enters the skin, bleeding or infection can occur. Some other serious but extremely rare risks include paralysis and death.

You may have an allergic reaction to any of the medications used. If you have a known allergy to any medications, especially x-ray contrast dye or local anesthetics, notify our staff before the procedure takes place.

You may experience any of the following side effects up to 4 hours after the procedure:

- Arm muscle weakness or numbness may occur due to the local anesthetic affecting the nerves that control your arm (this is a temporary affect and it is not paralysis). Your arm strength will return slowly and completely.
- Dizziness may occur due to a decrease in your blood pressure. If this occurs, remain in a seated or lying position. Gradually sit up, and then stand after at least 10 minutes of sitting.
- Mild headaches may occur. Drink fluids and take pain medications if needed. If the headaches persist or become severe, call the office.
- Mild discomfort at the injection site can occur. This typically lasts for a few hours but can persist for a couple days. If this occurs, take anti-inflammatories or pain medications, apply ice to the area the day of the procedure. If it persists, apply moist heat in the day(s) following.

The side effects listed above can be normal. They are not dangerous and will resolve on their own. If, however, you experience any of the following, a complication may have occurred and you should either contact your doctor. If he is not readily available, then you should proceed to the closest urgent care center for evaluation:

- Severe or progressive pain at the injection site(s)
- Arm or leg weakness that progressively worsens or persists for longer than 8 hours
- Severe or progressive redness, swelling, or discharge from the injections site(s)



CENTERS FOR
PAIN CONTROL

CENTERS FOR
VEIN CARE



- Fevers, chills, nausea, or vomiting
- Bowel or bladder dysfunction (i.e. inability to urinate or pass stool or difficulty controlling either)

How long does it take for the procedure to work?

You should feel relief from your usual pain within the first hour. Again, this is only expected to last for several hours, at the most. Remember, you may be sore in your knee from the needles, and you must distinguish this from your usual pain.