TWIN CITIES ORTHOPEDICS

Genicular Nerve Radiofrequency Ablation Patient Education

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WHAT IS GENICULAR NERVE RADIOFREQUENCY ABLATION?

The genicular nerves are sensory nerves that carry pain signals from the knee joint and joint capsule. Genicular radiofrequency ablation is a procedure that uses a specialized machine and needles that generate radiofrequency current and heat in order to disrupt pain signaling. The current is passed through a conductive probe that is strategically placed adjacent to a target nerve. The nerve is thus ablated and unable to carry pain signals. Prior to this procedure, the patient undergoes diagnostic blocks of the nerves or joint of interest.

HOW IS THE PROCEDURE PERFORMED?

The patient lies on his/her back. The skin of the knee is cleansed with antiseptic solution and a sterile field is created. Local anesthetic is used to numb the skin and underlying soft tissues. Under X-ray (fluoroscopy) guidance, an introducer needle is advanced into the targeted nerve. The radiofrequency probe is then placed through the introducer needle and the target nerves are anesthetized. Radiofrequency ablation is then performed, which typically lasts from 90-150 seconds. The procedure takes about 30 minutes to complete.

HOW LONG DOES THE EFFECT LAST?

The effect will hopefully last for an extended period of time. While the duration of effect is different for everyone, majority of patients get 1-2 years of relief.

WHAT IS THE NEXT STEP AFTER THE INJECTION?

You should minimize strenuous activity on the day of the procedure, but after that you may return to your normal activity level as tolerated. You may have increased pain for the first few days after the procedure and occasionally patients experience a “sunburn” sensation for a few weeks after the procedure. The full extent of the pain relief is typically realized by 6 weeks.

WHAT ARE THE RISKS AND SIDE EFFECTS?

Serious side effects and complications are rare. The most common problem after the injection is having pain in the area of the injection for a few days to weeks. Sometimes, steroid is used to minimize post-procedure pain and some individuals may temporarily develop headaches, facial flushing, higher than normal blood pressure, and high blood sugar due to the steroid. The other potential complications are infection, bleeding and nerve injury. These complications are minimized by using sterile technique and fluoroscopic (x-ray) needle guidance.