



LEARNING ABOUT GENICULAR NERVE BLOCKS

What is the Genicular Nerve Block?

Patients with knee pain that have failed to respond to conservative care, may be candidates for a genicular nerve block. This procedure is based on a theory that blocking the nerve supply to a painful area may alleviate pain and restore function. The knee joint is innervated by the articular branches of various nerves, including the femoral, common peroneal, saphenous, tibial, and obturator nerves. These branches around the knee joint are known as genicular nerves. Several genicular nerves can be easily approached with a needle under fluoroscopic guidance. Patients can get a diagnostic genicular nerve block to determine if this will provide adequate relief.

A genicular nerve block is a procedure where these nerves are anesthetized, or “blocked”, with local anesthetic injected through small needles. The procedure is performed with live X-ray guidance, fluoroscopy, to ensure proper needle placement. It generally takes 5 to 10 minutes for the procedure.

How is the Genicular Nerve Blockade performed?

These injections are performed under fluoroscopic guidance. A small amount of local anesthetic (1-2ml) of Lidocaine or Bupivacaine is injected around the superior lateral (SL), superior medial (SM) and the inferior medial (IM) branches. A response is considered positive if there is at least 50% reduction in pain in the 24hrs following injection.

Are there any risks associated with this procedure?

Complications are rare, particularly if injections are performed using a precise needle-positioning technique. Septic arthritis can be avoided with appropriate aseptic precautions. Severe allergic reactions to local anesthetics are uncommon. Post-procedural pain flare-up is not uncommon and may be treated with painkillers. Neurological complications including paresthesia and numbness have been described but are extremely rare. Radiofrequency treatment can cause patchy numbness of the overlying skin. Incidents of infection is low as the procedure is performed under strict aseptic conditions and the injections are extra articular.