RADIOFREQUENCY ABLATIONS

Radiofrequency ablation – also known as RFA — is used to treat patients suffering from arthritis and other types of joint pain. The procedure, although somewhat invasive, can significantly reduce joint pain in patients for up to six months or more following treatment.

WHAT IS RFA?

RFA works in a way similar to medial branch block injections. The patient is given a local anesthetic to eliminate discomfort, and a fine needle is placed near the nerves responsible for chronic pain using x-ray guidance. Unlike a medial branch block injection, which delivers steroids and anesthetics to the nerves, radiofrequency ablation needle tips are heated while in place using an electrical current, effectively destroying the nerve tissues altogether.

It is common for patients to feel a slight tingling sensation during treatment, although most patients should not feel any discomfort. Following the procedure, patients may experience slightly more pain than usual for approximate 7 to 14 days, at which time it will begin to dissipate. Patients are encouraged to avoid physical activity for the first few days following RFA treatment and to return for a check-up within a few weeks.

RFA is considered to be a more long-term treatment than joint injections, although patients do not always receive permanent relief. In some cases, the nerves eventually grow back, at which time patients can undergo RFA treatment again.

RADIOFREQUENCY ABLATION PROCEDURE

Radiofrequency ablation is a minimally invasive procedure that is usually performed with local anesthetic and mild sedation.
As with many spinal injections, radiofrequency neurotomy is best performed under fluoroscopy (live x-ray) for guidance in properly targeting and placing the needle (and for avoiding nerve or other injury).

RADIOREQUENCY ABLATION STEPS:

The neurotomy or ablation procedure includes the following steps:

- An intravenous (IV) line is often started so that relaxation medicine (sedation) can be given.
- The patient lies on a procedure table and the skin over the neck, mid-back, or low back is well cleaned.
- The physician numbs a small area of skin with numbing medicine (anesthetic), which may sting for a few seconds.
- The physician uses x-ray guidance (fluoroscopy) to direct a special (radiofrequency) needle alongside the medial or lateral branch nerves.
- A small amount of electrical current is often carefully passed through the needle to assure it is next to the target nerve and a safe distance from other nerves. This current should briefly recreate the usual pain and cause a muscle twitch in the neck or back.
- The targeted nerves will then be numbed to minimize pain while the lesion is being created.
- The radiofrequency waves are introduced to heat the tip of the needle and a heat lesion is created on the nerve to disrupt the nerve's ability to send pain signals.
- This process will be repeated for additional nerves.