

Radiofrequency Ablation for Knee Pain

At UWMC - Northwest Outpatient Surgery Center

This handout for UW Medicine patients explains how radiofrequency ablation (RFA) is used to treat chronic knee pain. It includes what to expect when having a trial nerve block and the RFA procedure.

What is radiofrequency ablation?

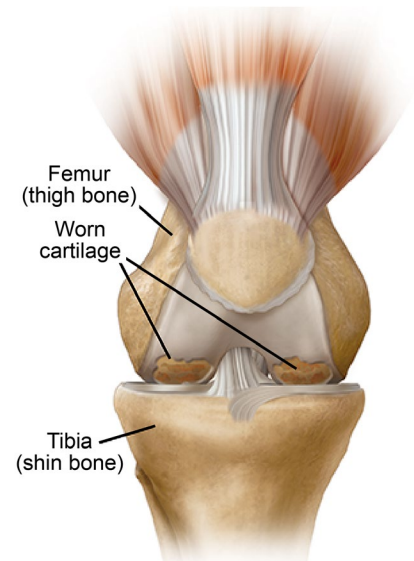
Radiofrequency ablation (RFA) is a way to treat pain without surgery. It uses an electric current to block or “turn off” painful nerves. The doctor uses both *ultrasound* (sound waves) and *fluoroscopy* (X-rays) to guide the process.

How is it used for knee pain?

RFA can be directed to the main nerves that send pain signals from the knee to the brain. These are called the *genicular* nerves.

RFA is used to treat *chronic* (long-term) knee pain caused by many conditions. These include:

- Osteoarthritis
- Cartilage defects or loss
- Other nerve problems that cannot be identified on a *magnetic resonance imaging* (MRI) scan



RFA can help treat chronic knee pain caused by cartilage loss.

Who can have RFA for knee pain?

RFA may be used for patients who:

- Still have chronic pain after receiving standard treatments. Other treatments include pain medicine, physical therapy, massage, acupuncture, chiropractic, complimentary therapies, and injections. These injections may be steroids, platelet-rich plasma, or viscosupplementation.

- Want pain control and wish to delay having partial or total knee replacement.
- Still have chronic pain 12 months or longer after partial or total knee replacement.
- Cannot have knee replacement surgery due to their weight, age, or other health problems such as heart disease, lung disease, and diabetes.

What are the benefits and risks of RFA?

Benefits of RFA for knee pain include:

- Most people get about 50 to 80% pain relief. This greatly improves how well they can function.
- Pain relief can start as early as 1 week. Most benefits are seen starting around 4 to 6 weeks.
- RFA results in 6 to 24 months of pain relief. Most patients have pain relief for 18 to 24 months.
- RFA costs less than many other treatments. It is also covered by most insurance plans.

Risks of RFA include:

- Bleeding
Note: If you take warfarin (Coumadin), you must have an INR of less than 3 to qualify for RFA.
- Infection
- Short-term increase in pain
- Skin burn from grounding pad
- No response to the procedure
- Injury to a nerve, blood vessel, tendon, or *patella* (kneecap)

When is RFA done?

Before we do RFA to treat knee pain, we do a **test (trial) nerve block**. This trial is done at the UW Medicine Sports Medicine Center at Husky Stadium.

This trial will show us if a nerve block will help your pain. If your knee pain improves by at least 50 to 80% after the trial, your doctor will know that RFA may help your chronic pain.

What happens for the trial nerve block?

- At the time of your trial nerve block appointment, please come to:
UW Medicine Sports Medicine Clinic
3800 Montlake Blvd. N.E., Seattle WA 98195
(To call the clinic, call 206.598.DAWG (3294) and press 2.)
- Your doctor will inject each of the 3 main genicular nerve sites of your knee with a local numbing medicine. This will block the nerves from sending pain signals to your brain.
- After your procedure, you will track your pain for 24 hours. You will then report to your doctor, either by using eCare or by calling your doctor's office.
- When you report back, please answer these 2 questions:
 - Did you get 50 to 80% pain relief?
 - How many hours did the relief last?

Most times, RFA can be done for patients who have at least 50 to 80% improvement in their knee pain after their trial nerve block. If your results meet these criteria, we will contact you about scheduling an RFA procedure.

What happens for the RFA procedure?

- At the time of your RFA appointment, please come to:
UWMC - Northwest Outpatient Surgery Center
10330 Meridian Ave. N, Seattle, WA 98133
(To contact the Surgery Center, call 206.668.6600.)
- Plan to be at the Surgery Center for about 1 hour. This includes time for check-in and getting ready for the procedure. The RFA itself will last about 30 minutes.
- The doctor will use both ultrasound and X-ray to find the exact location of the 3 genicular nerves.
- We will numb the area with local anesthetic. The ablation probes have a small needle on the end. Your doctor will place them into your skin. There is no need to make incisions.
- We will check to make sure you are pain-free before we start the procedure.

- The ablation machine will run for 90 seconds over each site. It will disrupt the nerve signals to the brain.
- If you usually wear a knee brace, please bring it to your visit. If you do not wear a knee brace, you will not need one after RFA.
- After the procedure, you can drive and continue with your other activities of daily living.
- A small sterile bandage will be placed over the sites. You can remove this in 24 hours.

What can I expect after the RFA?

- You can drive yourself home after your RFA.
- Rest your knee for 2 to 3 days. Do only your activities of daily living during this time. You can go to work and do short errands, but nothing more.
- After 3 days, you can slowly start to do more activities. Listen to your body. If you feel pain when doing something, stop.
- You should not need any extra pain medicines after the procedure. You may have some mild soreness for up to 1 week. This should not interfere with your daily activities. If soreness bothers you, it is OK to take any pain medicine that you had been taking before your surgery. Take your medicine until the soreness goes away.
- Schedule a follow-up visit with your doctor in 4 to 6 weeks. If physical therapy (PT) will improve your results, your doctor may write your prescription for PT at this visit.

What are my next steps?

If you want to find out if this treatment is a good option for you, please call UW Medicine Sports Medicine Center at 206.598.DAWG (3294) and press 2. Ask to schedule a doctor consult to talk about RFA for knee pain.

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

Scheduling

To schedule a doctor consult to talk about RFA, call 206.598.DAWG (3294) and press 2.