

Pulse Radiofrequency

What is pulsed radiofrequency?

Pulsed radiofrequency locates the nerve to be treated and passes short bursts of radiofrequency current through it. This aims to modify overactive nerves to reduce pain without causing significant damage to the nerve. The difference between continuous radiofrequency (CRF) and pulsed radiofrequency (PRF) is that CRF is destructive to the nerves and PRF is non-destructive.

It can be applied to various nerves:

Peripheral nerves: Suprascapular nerve for shoulder pain, femoral nerve for thigh pain, nerves nearer the spine in the neck, thorax, lumbar area for radicular (pain due to nerve root irritation) pain.

How is it actually performed?

The patient is positioned on the x-ray table. Painful areas are marked and observed under x-ray if necessary. The skin is cleaned with antiseptic and then local anaesthetic is injected to numb the skin. A feeling of pressure or tingling means that the correct nerve is identified.

An electrode (a fine needle) is then inserted through the numbed skin near the target nerve under X ray guidance. Then the pulsed radio frequency electrical field is then applied intermittently.

What are the benefits of pulse radiofrequency?

This treatment is used to prolong and improve the pain relief which patients gain after a steroid and local anaesthetic injection.

Are there any risks?

As with any other procedure, there is a small chance of infection. There is a small chance of unintended damage to other nerves. You may get increased pain immediately after the procedure which could last for a few weeks. There is a very small chance of worsening pain in the long term.

How long will I be in hospital?

You will be asked to attend the hospital on day of your procedure. A letter providing all the information will be sent to you before the date of your procedure. Please ensure you arrive 2 hours before the procedure. You may be in hospital for a period of up to 6 hours. Very rarely, in case of complications an overnight stay may be required.

What happens before the procedure?

You may eat a light meal and drink normally prior to your treatment. Please arrive in good time for your appointment. Prior to the treatment, Dr Desai will explain and you will be able to ask any questions you like about your treatment. When you are completely satisfied, you will be asked to sign a consent form.

It is important that you tell the doctor if:

- You are taking Aspirin, Warfarin or other similar drugs
- You have a bleeding problem
- You are allergic to local anaesthetic

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- You have any serious medical problems
- Or if you are unwell on the day.

What should I expect after the procedure?

There will be a period of rest after the procedure. During this time you will be able to eat and drink normally. The nurse will assess whether you are ready to go home. You should not drive yourself. You should be able to resume driving 24hrs after the procedure if you feel sufficiently recovered.

An appointment letter for follow up to see Dr Desai after 4 to 6 weeks, will already have been sent.

For a few days after the treatment, you may find that the pain is worse than before. This is due to the procedure itself.

There will be some muscle soreness that may persist for up to a week. Application of ice packs will help. Take your normal painkillers if soreness persists.

Although most patients experience significant relief within a week, it can sometimes take up to 3-4 weeks.

You should be able to return to your work a day or two. Sometimes the soreness and discomfort after the procedure may prolong your return to work.