

Radio Frequency Denervation

Radio Frequency Denervation (RFD) or rhizolysis is a minimally invasive procedure that involves the emission of pulsations of heat through a fine needle to disable and prevent nerves from transmitting pain signals.

Why RFD?

This procedure has been used traditionally to treat facet, sacroiliac joint and back pain. More recently, RFD has been used to treat soft tissue conditions such as, plantar fasciitis, achilles tendonitis, groin pain and foot neuromas.

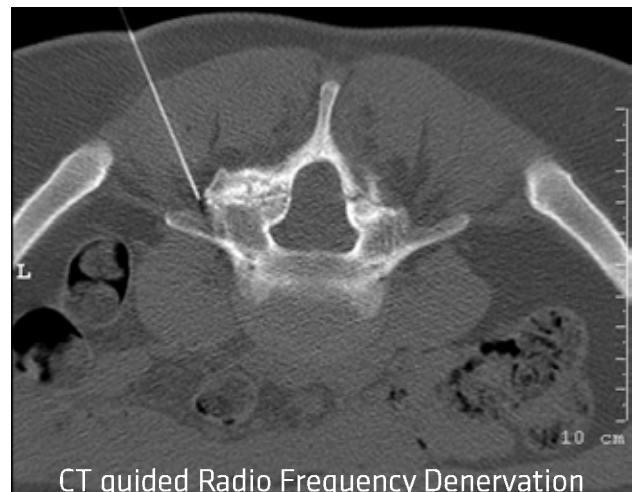
Procedure

A radiologist specialising in RFD will perform the procedure under CT, x-ray or ultrasound guidance. The patient is positioned according to the area to be treated. A diathermy pad is placed on the opposite thigh to where the procedure is being performed. The area is covered with sterile drapes and washed with an antiseptic solution. Either a regional nerve block or a small amount of local anaesthetic is injected to numb the area. A fine needle is positioned upon the nerve to be treated under imaging guidance. A thin wire (probe) is then passed through the needle sheath. The position of the probe is very important in spinal RFD it is checked by sensation and motor tests:

- Sensation – you may feel tightness, pressure or tingling in your back
- Motor – you may feel some throbbing in your back. Depending on the extent of the throbbing, the probe may be re-positioned.

The probe has an electrode on its tip that is connected to a radiofrequency generator. When the probe is in the correct place, the tip is then heated to 40- 80 degrees centigrade and the radiofrequency generator produces a high frequency alternating current that will cause tissue to heat up in the vicinity of the electrode. The current is such that it will cause a 'burn' to the nerve, hence causing interruption of nerve signals.

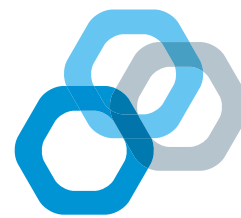
Local anaesthetic and steroid is injected after the probe has been heated to relieve discomfort following the procedure. The procedure takes approximately 30 minutes plus recovery time.



Post Procedure Care

If you already have had a good response to diagnostic injections so RFD offers you a realistic chance of good long term pain relief. You may not feel any benefit for 2-3 weeks. Symptoms can be relieved for up to a year or longer in about 50% of all patients. Unfortunately, the nerve can regenerate so your pain may return but a repeated procedure is likely to be beneficial if you respond to the first treatment.

- It is preferable to have someone take you home.
- There may be a slight soreness or bruising at the needle site. Paracetamol and or ice may provide some comfort if required.
- You should not participate in strenuous activity or exercise for 48 hours to one week depending on your



treating doctor's instructions. They will also advise you on how best to resume pre-treatment activity levels.

- If you experience any fever, localised heat, swelling or increasing pain more than 48 hours after the injection you should call our clinic or consult your referring doctor without delay.

Are there any risks or side effects?

There are risks and side effects associated with any treatment. In general the risk is low, but includes:

- More discomfort for the first few days after your injection
- Bruising to the injection area
- Infection
- Leg numbness and weakness are very rare side effects.
- Reactions associated with the injected steroid such as: facial flushing for a few days; difficulty sleeping and temporary increase in your sugar levels (diabetics).

Please bring to your appointment

Please bring your referral from your doctor along with the following:

- Medicare Card
- Pension/Concession Card
- Previous films

Things we need to know from you

Please inform the Radiology staff of any of the following:

1. If you are allergic to any medications, anaesthetic agent or X-Ray contrast

2. If you are not feeling well or wish to cancel please ring immediately (someone else can be offered your appointment time).

Female Patients: Please let us know if you are pregnant or suspect you may be or if you are breastfeeding

Concerns

It is important you understand why and how we will be assisting you. Please feel free to contact our friendly staff at any time if you have any questions or concerns on [03 9420 1700](tel:0394201700).

Find Us

We are situated in the new AAMI Park. Free on-site parking available for our patients- enter via Entrance F and continue to Car Park F.

