

Lumbar Radiofrequency Denervation

Radiofrequency Denervation is a minimally invasive procedure. Radiofrequency energy is delivered along a needle to heat and disrupt the sensory nerve to the facet joint is an attempt to achieve longer lasting pain relief. In addition, local anaesthetic and/or steroid are injected to reduce discomfort after the injection.

Current national guidelines recommend offering Radiofrequency Denervation for people with moderate to severe lower back pain who have not responded to other recommended treatments and have had significant short term relief from a Diagnostic Medial Branch Block.

Facet joints are pairs of joints that allow movement of the spine. Less than 4 in every 10 people with back pain may have pain arising from the facet joints of the spine. The nerves that carry information from the facet joints are called the 'medial branch of the dorsal rami'.

Benefits

Pain Relief. Reducing pain by up to half is considered a good outcome. Duration of pain relief is uncertain, but current trials suggest relief is maintained for at least 6-12 months. Whilst no study has reported longer term outcomes, pain relief for more than 2 years would not be an unreasonable expectation. If Radiofrequency Denervation is repeated, we do not know whether the outcomes are similar.

Risks

Common: between 1 in 10 and 1 in 100 people are affected.

- **Tenderness and/or Bruising.** Mild local tenderness and / or bruising at the site of the injection, that usually settles over the first few days.
- **Pain.** A prickling sunburn-like sensation over the skin of the back, which usually settles with time but may last a few months.

Uncommon: Between 1 in 100 and 1 in 1,000 people are affected.

- **Numbness and/or Weakness.** The local anaesthetic may rarely spread causing some numbness and/or weakness in your legs and other areas. Should this occur, the effect is temporary and will rapidly resolve over minutes or rarely hours.

Rare: Between 1 in 1,000 and 1 in 10,000 people are affected.

- **Infection.** This is rare. You should seek medical help if there is local warmth or redness over the site of injection with tenderness and/or you feel hot and unwell. This may require antibiotic treatment.

- **Allergy.** Injection local anaesthetic and/or steroid may rarely cause an allergic reaction.

Very Rare: Fewer than 1 in 10,000 people are affected.

- **Nerve Injury.** There are important nerves in the spine, but serious nerve injury is extremely rare. Injury to nerves that supply muscles to your leg can lead to foot drop for lumbar injections causing you to be unable to lift your foot up. Great care is taken during the procedure to avoid this very rare complication by placing the needles carefully under x-ray guidance. The nerve is only treated when the doctor is confident that they are in the right position.