

Surgical Threshold Policy

Radiofrequency Denervation

Scope

This policy covers the treatment of low back pain with radiofrequency denervation and pulsed radiofrequency. This policy links to the [Surgery and Other Invasive Interventions for Low Back Pain Policy](#)

Policy

It is the responsibility of referring and treating clinicians to ensure compliance with this policy. Referral proforma should be attached to the patient notes to aid the clinical audit process and provide evidence of compliance with the policy. For patients not meeting the policy criteria, clinicians can apply for funding to the Exceptional Cases Panel by completing the exceptional funding section of the [referral proforma](#).

NHS C&P (ICB) will fund treatment with radiofrequency denervation for patients with low back pain (facet or sacroiliac joints) where **all** the following criteria are met:

- There is failure of one year of appropriate non-invasive therapies, which include medication and physiotherapy, and advice on self-management. **And**
- Patient experiences moderate to severe pain (VAS or equivalent >5/10) that limits activities of daily living and/or limits sleep at night. **And**
- Diagnostic nerve block gives ≥80% reduction in pain for the duration of local anaesthetic action (injections are only to be used for diagnosis, not for the treatment of back pain). **And**
- Radiofrequency denervation is provided as part of a comprehensive pain management pathway. **And**
- There is continued evidence of effectiveness with each treatment.

Notes:

Note 1 Only one radiofrequency ablation treatment episode per 6 months is funded (may involve more than one procedure if multiple levels require treatment).

Note 2 Pulsed Radiofrequency of the dorsal root ganglion or other experimental techniques or radiofrequency for neck pain or other targets, will not be funded without exceptional case panel approval.

Rationale and Evidence

NICE and NHS E/I recommend considering the use of radiofrequency denervation in patients with low back pain of facet joint origin where conservative management has failed (see references 1 & 2). Radiofrequency denervation of selected lumbosacral targets appears to have a small, short-term, positive effect for the management of patients with chronic back pain. However, the quality of evidence for the majority of outcomes is low or very low and there is still a degree of uncertainty, particularly around the duration of the effect (see reference 3) and its use has not been proven cost-effective (see reference 4).

Radiofrequency denervation of the dorsal root ganglion has not been shown to be effective (see references 6 to 8) and is not funded.

There is also no clear evidence for the effectiveness of pulsed radiofrequency of the dorsal root ganglion. One trial (see reference 9) suggests some potential benefit but there is no statistical significance and this procedure should be used sparingly, with ongoing formal assessment of its effectiveness. Pulsed radiofrequency of the facet joints (see reference 10) has not been shown to be effective and should not be used in routine practice.

Glossary

Facet joint:	Pairs of joints between the vertebra of the spine.
Pulsed radiofrequency:	A treatment that uses radio waves to control pain and applies heat intermittently in pulses. The heat is less destructive and, therefore, non-destructive to the nerve.
Medial branch block:	Injection of anaesthetic solution near to medial nerves connected to a specific facet joint, which temporarily stops the transmission of pain signals from the facet joint. The injection is done to diagnose pain coming from a chronically irritated facet joint and/or other structures supplied by the medial branches of the dorsal rami.
Radiofrequency denervation:	A treatment using a very small electrical current to heat the nerve - by destroying the nerve this will block the pain signals.

References

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