Kent and Medway Policy Recommendation and Guidance Committee

Policy Recommendation

Policy:	**PR 2017-15: Radiofrequency denervation for low back pain in over 16s**
Issue date:	**September 2017**
Review date:	**September 2020**

The Kent and Medway Policy Recommendation and Guidance Committee (PRGC) considered national guidance, evidence of clinical- and cost-effectiveness, the baseline position, other CCG policies and the views of stakeholders. All decisions were made with reference to the Ethical Framework. Taking these into account, the PRGC recommends that:

- Radiofrequency denervation (RFD) is not routinely commissioned for people who have sciatica without low back pain
- Referral for assessment for RFD for low back pain should only be considered when all of the following criteria are met:
    - the patient has a documented history of chronic, function limiting low back pain that has lasted for >1 year despite optimal non-surgical treatment
    - the main source of pain is thought to come from structures supplied by the medial branch nerve (see Box 1)
    - the patient has moderate or severe levels of localised back pain (rated as 5 or more on a visual analogue scale, or equivalent) at the time of referral.
- RFD will only be funded for people with chronic low back pain when all the following criteria are met:
    - the patient has had a positive response to a diagnostic medial branch block
    - treatment is part of a pain management plan (i.e. injections should not be provided in isolation) and the patient is engaging with pain management principles
    - outcome data is submitted to the National Spinal Radiofrequency Registry
- Imaging for people with low back pain with specific facet joint pain should not be undertaken as a prerequisite for RFD
- Repeat RFD will only be funded if the benefit of previous RFD procedures was for >16 months

See overleaf for background information and supporting rationale.

This policy recommendation will be reviewed in light of new evidence or guidance from NICE.

Clinical Commissioning Groups in Kent and Medway will always consider appropriate individual funding requests (IFRs) through their IFR process.

Supporting documents

NEL CSU HCiAG (2017) *Spinal injections and radiofrequency denervation for low back pain – Scoping report*

Equality Analysis Screening Tool – Radiofrequency denervation for low back pain (2017)

Box 1 – Clinical features suggestive of a facet joint component

- Increased pain unilaterally or bilaterally on lumbar para-spinal palpation
- Increased back pain on 1 or more of the following:
  - extension (more than flexion)
  - rotation
  - extension/side flexion
  - extension/rotation

  AND
  - No radicular symptoms
  - No sacroiliac joint pain elicited using a provocation test.

Source: Full version of NICE NG59. Although no reliable clinical features or physical signs identify 'facet joint pain' accurately, a recent UK based consensus group have published clinical features suggestive of a facet joint pain component. The NG59 guideline development group (GDG) agreed that the features identified by the consensus group might be helpful in identifying those patients who may benefit from a radiofrequency denervation. These features have also been noted in the NHS England national low back and radicular pain pathway (2017).

Key points and rationale

What is low back pain?

Worldwide, low back pain causes more disability than any other condition. Serious causes of low back pain are rare. Episodes of back pain usually do not last long, with rapid improvements in pain and disability seen within a few weeks to a few months. Although most back pain episodes get better with initial primary care management, without the need for investigations or referral to specialist services, up to one-third of people say they have persistent back pain of at least moderate intensity a year after an acute episode needing care, and episodes of back pain often recur. When a back pain episode becomes a long-term, persistent pain condition, quality of life is often very low and healthcare resource use high.

How is low back pain managed?

Managing low back pain follows a stepped approach: (1) initial assessment – identify specific aetiologies, any sinister pathology and other red flag symptoms; (2) management – (once specific pathologies have been excluded) a combination of advice on self-management, exercise programmes, manual therapies, psychological therapy and pharmacological interventions; (3) if pain persists – combined physical and psychological programmes and invasive procedures such as spinal injections and surgery may be offered.

What is radiofrequency denervation (RFD)?

Radiofrequency denervation is a procedure which involves sealing off some of the nerves to the joints of the spine to stop the nerves transmitting pain signals. Radiofrequency energy is delivered along an insulated needle in contact with the target nerves. This focussed electrical energy heats and denatures the nerve. RFD aims to achieve longer-term pain relief in people with chronic low back pain who experience significant but short-term relief after a diagnostic medial branch block by injection of local anaesthetic.

What does national guidance say?

According to NICE guideline (NG) 59 (2016) on low back pain and sciatica, referral for assessment for RFD for people with chronic low back pain should be considered when: non-surgical treatment has not worked; and the main source of pain is thought to come from structures supplied by the medial branch nerve; and they have moderate or severe levels of localised back pain (rated as ≥5 on a visual analogue scale, or equivalent) at the time of referral. RFD should only be performed after a positive response to a diagnostic medial branch block. Imaging should not be offered as a prerequisite for RFD.

No new evidence on RFD for low back pain was identified that was considered likely to change recommendations in NG59.

Why is repeat RFD only funded if the benefit of previous RFD procedures was for >16 months?

The stipulation that repeat RFD should only be considered if the benefit of previous RFD procedures was for >16 months is consistent with the economic model presented in NG59 (2016), guidance set out in the NHS England national low back and radicular pain pathway (2017) and a research recommendation in NG59. The typical length of pain relief after RFD is uncertain; data from RCTs suggests relief is maintained for at least 6–12 months but no study has reported longer-term outcomes. If RFD is repeated, it is not known whether the outcomes, and duration of these outcomes, are similar to the initial treatment. The economic model presented in NG59 suggested that RFD is likely to be cost effective if pain relief is above 16 months. The NG59 guideline development group did not review the evidence for repeat RFD but agreed that clinicians should be cautious about recommending repeat denervation procedures until longer term effectiveness data becomes available. They consequently made the following research recommendation: *What is the clinical and cost effectiveness of radiofrequency denervation for chronic low back pain in the long term?*

What is the rationale for PR2017-15?

PR2017-15 is broadly consistent with recommendations in NICE NG59. See Section 7 of the accompanying report for more information.

Change sheet

Reason for review:
CCGs are responsible for commissioning spinal injections including radiofrequency denervation (RFD). There is currently no formal Kent and Medway wide commissioning policy on RFD for low back pain. Kent and Medway CCGs have indicated that they would like to agree a single commissioning policy for RFD to ensure equity of access across the region.

Change to baseline:
Currently no Kent and Medway CCG appears to have a formal commissioning policy on RFD for low back pain, although this procedure is performed by all local acute trusts. Overall, PR2017-15 appears to broadly reflect the baseline position. The exception is that currently it appears that repeat RFD would generally be considered locally after a 6–12 month response, rather than after a >16 month response as specified in PR2017-15.

Rationale for PR2017-15:
PR2017-15 is broadly consistent with recommendations in NICE NG59. See Section 7 of the accompanying report for more information.

Estimated impact of implementing PR2017-15:
The introduction of formal eligibility criteria may result in modest reductions in activity and expenditure[1] particularly with respect to repeat RFD. However, some specialists felt that the introduction of a threshold of 16 months for repeat RFD could lead to offset demand and costs elsewhere in the NHS. It is not possible to quantify these potential offset costs. This policy may also be cost avoiding in the future given that more patients may be considered for RFD should therapeutic spinal injections be decommissioned by CCGs (as per PR2017-14).

[1] An estimated ~460 radiofrequency denervation procedures were undertaken on Kent and Medway patients in 2016/17 at an estimated cost of £251,000 to CCGs.