Hertfordshire and West Essex Integrated Care System

NHS Hertfordshire and West Essex Integrated Care Board

Evidence Based Intervention

Injections for isolated low back pain without sciatica

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Policy:

This is a national Evidence Based Intervention policy formally adopted by Hertfordshire and West Essex Integrated Care Board. Please see https://ebi.aomrc.org.uk/

Many types of spinal injections do not have a strong evidence base. This guidance is focused on the use of diagnostic spinal injections (local anaesthetic only), radiofrequency denervation and NOT therapeutic injections for people with isolated lower back pain without sciatica.

Recommendation

This guidance recommends:

1. **Medial branch blocks** (a spinal injection)

   CAN be used **diagnostically** for patients with isolated lower back pain who have not responded to rehabilitation, e.g. CPPP (combined physical and psychological programmes).

   Should **NOT** be used **therapeutically** for patients with isolated lower back pain.

2. Radiofrequency denervation should be offered for patients with isolated lower back pain who meet all of the following criteria:

   - 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 or more on a visual analogue scale, or equivalent); and
   - after a positive response (defined as an improvement of 50% in the first 6 hours, ideally should be through diary exercises) to a diagnostic medial branch block with 1 ml or less of local anaesthetic at each level (No steroids).

3. **Diagnostic sacroiliac joint injections** (local anaesthetic only) should be used in patients whose pain is believed to arise from this joint.

4. For people with isolated low back pain the following injections **should not be** offered:

   - Intra-articular facet joint injections
   - Intradiscal therapy
   - Platelet rich plasma
   - Stem cell therapy
   - Prolotherapy
   - Trigger point injections with any agent, including botulinum toxin
   - Epidural steroid injections for isolated back pain or for neurogenic claudication in patients with central spinal canal stenosis
   - Any other spinal injections not specifically covered above

5. Alternative and less invasive options have been shown to work e.g. exercise programmes, behavioural therapy, and attending a specialised pain clinic. Alternative options are suggested in line with the National Back Pain Pathway.

For further information please see NICE Guidance [NG 59] Low back pain and sciatica in over 16s: assessment and management.

The scope of the guidance does **NOT** cover the following:

- Epidurals/nerve root blocks (local anaesthetic and steroid) which should be considered in patients who have acute and severe lumbar radiculopathy.

Rationale for Recommendation

Isolated back pain is common, often multifactorial and amenable to multimodal non-operative treatment (e.g. lifestyle modifications, weight loss, analgesia, exercise). Imaging (e.g. plain film radiographs, MRI) in the absence of focal neurology (e.g. sciatica) or 'red flags' may identify incidental, if not trivial, findings of age-related changes which can unnecessarily create a health anxiety for some patients, where simple reassurance would otherwise usually suffice.

Combined psychological and physical programmes (CPPP) involve multidisciplinary teams with intensive physical and psychological elements, using cognitive behavioural principles throughout the programmes. The effectiveness of these programmes is supported by NICE CG59. It is recommended that patients with isolated lower back pain are offered CPPP as part of their rehabilitation package.

NICE guidelines recommend that spinal injections should not be offered for the treatment of isolated lower back pain. Diagnostic spinal injections, specifically medial branch blocks do have a role as part of the diagnostic pathway for patients who may be suitable for facet joint denervation therapy.

Radiofrequency denervation is a minimally invasive and percutaneous procedure performed under local anaesthesia or light intravenous sedation. Radiofrequency energy is delivered along an insulated needle in contact with the target nerves. This focused electrical energy heats and denatures the nerve. NICE supports denervation therapy for patients who meet the treatment criteria stated above.

Patient Information

Information for Patients
A recent review of which treatments work for isolated back pain has shown that injections are not very effective. One example is the injection of a pain-killer into the facet joints. Although many of these have been used in the past, and sometimes with good, short-term relief, they do not work often enough or long enough to make them a good treatment. The risks of the procedure, such as infection, although rare, make them a poor choice.

The NHS finds that the evidence points to other treatment methods as a better option for many people.

What you can do about the condition
Episodes of isolated back pain are very common and normally improve within a few weeks or months. Although the pain can be very limiting and distressing, in most cases the pain isn't caused by anything serious and will usually get better over time. If the problem persists, your GP may refer you to a specific care pathway which may include physiotherapy, group exercise classes along with self-management strategies.

It's important you and your doctor make a shared decision about what's best for you if the pain is becoming a problem. When deciding what's best you should both consider the benefits, risks, alternatives and what will happen if you do nothing.

What are the BENEFITS of the intervention?
Any pain relief from spinal injections will be short term. The routine use of spinal injections for isolated lower back pain is not recommended by the National Institute for Health and Care Excellence (NICE) which assesses the effectiveness of all tests, treatment and procedures.

What are the RISKS?
The procedure itself has risks including infection of the spine and nerve damage.

What are the ALTERNATIVES?
There are many alternatives to spinal injections. You and your doctor can discuss what might be best for you.

Options include exercise, weight loss, physiotherapy, pain relief medication and psychological support such as cognitive behavioural therapy (CBT). These can help you live a better life with the pain. If your clinician feels that you need further assessment they may refer you to a specialist who will consider other treatments, such as an MRI.

What if you do NOTHING?
Doing nothing is not likely to be harmful and isolated back pain usually improves after a few weeks. If the problem persists and is difficult to cope with, you should talk to your doctor about pain management options.

Further information can be found at https://ebi.aomrc.org.uk/interventions/injections-for-nonspecific-low-back-pain-without-sciatica-2/.This weblink was correct as of 06/01/2025.

Coding

```
WHEN (Primary_Spell_Procedure IN (
'A521','A522','A528','A529','A577','A735','V544','X322','X323','X324','X325','X334','X335','X336'
,'A573')
OR (Primary_Spell_Procedure = 'W903' AND Any_Spell_Procedure like '%Z841%') )
AND Primary_Spell_Diagnosis IN ('M545')
-- Only Elective Activity
AND APCS.Admission_Method not like ('2%')
THEN 'D_low_back_pain_inj'
```

Exclusions

```
 WHERE 1=1
-- Cancer Diagnosis Exclusion
AND (Any_Spell_Diagnosis not like '%C[0-9][0-9]%'
AND Any_Spell_Diagnosis not like '%D0%'
AND Any_Spell_Diagnosis not like '%D3[789]%'
AND Any_Spell_Diagnosis not like '%D4[012345678]%'
OR Any_Spell_Diagnosis IS NULL)

–Private Appointment Exclusion
AND apcs.Administrative_Category<>’02’
```

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4. Choi HJ, Hahn S, Kim CH, Jang BH, Park S, Lee SM, et al. Epidural steroid injection therapy for low back pain: a meta-analysis. Int J Technol Assess Health 2013 Jul;29(3):244-53.
5. Cohen SP, Bicket MC, Jamison D, Wilkinson I, Rathmell JP. Epidural steroids: a comprehensive, evidence-based review. Reg Anesth Pain Med. 2013 May- Jun;38(3):175-200.
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8. Establishing an Optimal ‘Cutoff’ Threshold for Diagnostic Lumbar Facet Blocks. Cohen, S.P., Strassels, S.A., Kurihara, C., Griffith, S.R., Goff, B., Guthmiller, K., Hoang, H.T., Morlando, B. and Nguyen, C. (2013). The Clinical Journal of Pain, 29(5), pp.382–391

Change History:

Version	Date	Reviewer(s)	Revision Description

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