Non-specific low back pain and sciatica: management

NICE guideline: short version

Draft for consultation, March 2016

[straight after consultation editors delete the consultation box and transfer the 'This guideline covers' and 'Who is it for' sections into the overview template to help write text for the guideline overview page]This guideline covers the assessment and management of non-specific low back pain and sciatica in adults over the age of 16 years.

Who is it for?

- People with non-specific low back pain and sciatica, their families and carers.

This version of the guideline contains the draft recommendations, context and recommendations for research. Information about how the guideline was developed is on the guideline's page on the NICE website. This includes the guideline committee's discussion and the evidence reviews (in the full guideline), the scope, and details of the committee and any declarations of interest.

https://www.nice.org.uk/guidance/indevelopment/gid-cgwave0681/consultation/html-content

Other information about how the guideline was developed is on the project page. This includes the scope, and details of the committee and any declarations of interest.

This guideline will update and replace NICE guideline CG88 (published May

2009).

Contents

Recommendations

People have the right to be involved in discussions and make informed decisions about their care, as described in your care.

Making decisions using NICE guidelines explains how we use words to show the strength (or certainty) of our recommendations, and has information about prescribing medicines (including off-label use), professional guidelines, standards and laws (including on consent and mental capacity), and safeguarding.

1.1 Assessment of non-specific low back pain and sciatica

Risk assessment and risk stratification tools

1.1.1 Consider using risk stratification (for example, the STarT Back risk assessment tool) at first point of contact with a healthcare professional for each new episode of non-specific low back pain with or without sciatica to inform shared decision-making about stratified management.

Imaging

1.1.2 Do not routinely offer imaging in a non-specialist setting for low back pain with or without sciatica.

1.1.3 Explain to people with low back pain with or without sciatica that if they are being referred for specialist opinion, they may not need imaging.

1.1.4 Consider imaging in a specialist care setting for people with low back pain with or without sciatica only if the result is likely to change management.

1.1.5 Consider alternative diagnoses when examining or reviewing people with non-specific low back pain, particularly if they develop new or changed symptoms.

1.2 Non-invasive treatments for non-specific low back pain and sciatica

Non-pharmacological interventions

Self-management

1.2.1 Provide people with advice and information, tailored to their needs and capabilities, to help them self-manage their non-specific low back pain with or without sciatica, including:

- information on the nature of non-specific low back pain and sciatica
- encouragement to continue with normal activities as far as possible.

Exercise

1.2.2 Consider a group exercise programme (biomechanical, aerobic, mind–body or a combination of approaches) within the NHS for people with a specific episode or flare-up of non-specific low back pain with or without sciatica. Take people's specific needs, preferences and capabilities into account when choosing the type of exercise.

Orthotics

1.2.3 Do not offer belts or corsets for managing non-specific low back pain with or without sciatica.

1.2.4 Do not offer foot orthotics for managing non-specific low back pain with or without sciatica.

1.2.5 Do not offer rocker sole shoes for managing non-specific low back pain with or without sciatica.

Manual therapies

1.2.6 Do not offer traction for managing non-specific low back pain with or without sciatica.

1.2.7 Consider manipulation, mobilisation or soft tissue techniques (for example, massage) for managing non-specific low back pain with or without sciatica, but only as part of multi-modal treatment packages.

Acupuncture

1.2.8 Do not offer acupuncture for managing non-specific low back pain with or without sciatica.

Electrotherapies

1.2.9 Do not offer ultrasound for managing non-specific low back pain with or without sciatica.

1.2.10 Do not offer percutaneous electrical nerve simulation (PENS) for managing non-specific low back pain with or without sciatica.

1.2.11 Do not offer transcutaneous electrical nerve simulation (TENS) for managing non-specific low back pain with or without sciatica.

1.2.12 Do not offer interferential therapy for managing non-specific low back pain with or without sciatica.

Psychological therapy

1.2.13 Consider psychological therapies for managing non-specific low back pain with or without sciatica but only as part of multi-modal treatment packages.

Combined physical and psychological programmes

1.2.14 Consider a combined physical and psychological programme (preferably in a group context, that takes into account a person's specific needs and capabilities) for people with persistent non-specific low back pain or sciatica:

- when they have significant psychosocial obstacles to recovery

or

- when previous treatments have not been effective.

Return-to-work programmes

1.2.15 Promote and facilitate return to work or normal activities of daily living for people with non-specific low back pain with or without sciatica.

Pharmacological interventions for non-specific low back pain

1.2.16 Offer oral non-steroidal anti-inflammatory drugs (NSAIDs) for managing non-specific low back pain, taking into account potential differences in gastrointestinal, liver and cardio-renal toxicity, and the person's risk factors, including age.

1.2.17 When prescribing oral NSAIDs for non-specific low back pain, think about appropriate clinical assessment, ongoing monitoring of risk factors, and the use of gastroprotective treatment.

1.2.18 Use oral NSAIDs at the lowest effective dose for the shortest possible period of time.

1.2.19 Do not offer paracetamol alone for managing non-specific low back pain.

1.2.20 Do not routinely offer opioids for managing acute non-specific low back pain.

1.2.21 Consider weak opioids (with or without paracetamol) for managing acute non-specific low back pain only where an NSAID is contraindicated, not tolerated or has been ineffective.

1.2.22 Do not offer opioids for managing chronic non-specific low back pain.

1.2.23 Do not offer selective serotonin reuptake inhibitors, serotonin–norepinephrine reuptake inhibitors or tricyclic antidepressants for managing non-specific low back pain.

1.2.24 Do not offer anticonvulsants for managing non-specific low back pain.

1.3 Invasive treatments for non-specific low back pain and sciatica

Non-surgical interventions

Spinal injections

1.3.1 Do not offer spinal injections for managing non-specific low back pain.

Radiofrequency denervation

1.3.2 Consider referral for assessment for radiofrequency denervation for people with chronic non-specific low back pain with suspected facet joint pain when:

- non-surgical treatment has not worked for them **and**
- they have moderate or severe levels of back pain (rated as greater than 5 on a visual analogue scale, or equivalent).

1.3.3 Only do radiofrequency denervation after a positive response to a diagnostic medial branch block for people with chronic non-specific low back pain with suspected facet joint pain.

Epidurals

1.3.4 Consider epidural injections of local anaesthetic and steroid in people with acute sciatica.

1.3.5 Do not use epidural injections for neurogenic claudication in people who have central spinal canal stenosis.

Surgical interventions

Surgery and prognostic factors

1.3.6 Do not allow a person's BMI, smoking status or psychological distress to influence the decision to refer them for a surgical opinion for sciatica.

Spinal decompression

1.3.7 Consider spinal decompression for people with sciatica when non-surgical treatment has not improved pain or function. (For recommendations on pharmacological management of sciatica, see NICE's guideline on neuropathic pain in adults.)

Spinal fusion

1.3.8 Do not offer spinal fusion for people with non-specific low back pain unless as part of a randomised controlled trial.

Disc replacement

1.3.9 Do not offer disc replacement in people with non-specific low back pain.

Terms used in this guideline

Multimodal treatment package

Exercise alongside at least one of:

- Self-management
- Manual therapy
- Psychological therapy (for example, cognitive behavioural therapy).

Putting this guideline into practice

[This section is for completion later. We invite stakeholders to raise any issues they think may affect implementation of this guidance]

NICE has produced tools and resources [link to tools and resources tab] to help you put this guideline into practice.

[Optional paragraph if issues raised] Some issues were highlighted that might need specific thought when implementing the recommendations. These were raised during the development of this guideline. They are:

- [add any issues specific to guideline here]
- [Use 'Bullet left 1 last' style for the final item in this list.]

Putting recommendations into practice can take time. How long may vary from guideline to guideline, and depends on how much change in practice or services is needed. Implementing change is most effective when aligned with local priorities.

[Clinical topics only] Changes recommended for clinical practice that can be done quickly – like changes in prescribing practice – should be shared quickly. This is because healthcare professionals should use guidelines to guide their work – as is required by professional regulating bodies such as the General Medical and Nursing and Midwifery Councils.

Changes should be implemented as soon as possible, unless there is a good reason for not doing so (for example, if it would be better value for money if a package of recommendations were all implemented at once).

Different organisations may need different approaches to implementation, depending on their size and function. Sometimes individual practitioners may be able to respond to recommendations to improve their practice more quickly than large organisations.

Here are some pointers to help organisations put NICE guidelines into practice:

1. **Raise awareness** through routine communication channels, such as email or newsletters, regular meetings, internal staff briefings and other communications with all relevant partner organisations. Identify things staff can include in their own practice straight away.

2. **Identify a lead** with an interest in the topic to champion the guideline and motivate others to support its use and make service changes, and to find out any significant issues locally.

3. **Carry out a baseline assessment** against the recommendations to find out whether there are gaps in current service provision.

4. **Think about what data you need to measure improvement** and plan how you will collect it. You may want to work with other health and social care organisations and specialist groups to compare current practice with the recommendations. This may also help identify local issues that will slow or prevent implementation.

5. **Develop an action plan**, with the steps needed to put the guideline into practice, and make sure it is ready as soon as possible. Big, complex changes may take longer to implement, but some may be quick and easy to do. An action plan will help in both cases.

6. **For very big changes** include milestones and a business case, which will set out additional costs, savings and possible areas for disinvestment. A small project group could develop the action plan. The group might include the guideline champion, a senior organisational sponsor, staff involved in the associated services, finance and information professionals.

7. **Implement the action plan** with oversight from the lead and the project group. Big projects may also need project management support.

8. **Review and monitor** how well the guideline is being implemented through the project group. Share progress with those involved in making improvements, as well as relevant boards and local partners.

NICE provides a comprehensive programme of support and resources to maximise uptake and use of evidence and guidance. See our into practice pages for more information.

Also see Leng G, Moore V, Abraham S, editors (2014) Achieving high quality care – practical experience from NICE. Chichester: Wiley.

Context

Non-specific low back pain (sometimes abbreviated to NSLBP) is pain in the back between the bottom of the rib cage and the buttock creases. A diagnosis of non-specific low back pain simply means that the back pain is very unlikely to be because of a serious problem such as cancer, infection, fracture, or as part of more widespread inflammation.

Worldwide, low back pain causes more disability than any other condition. 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 spontaneously, 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.

One of the greatest challenges with low back pain is identifying risk factors that may predict when a single back pain episode will become a long-term, persistent pain condition. When this happens, quality of life is often very low and healthcare resource use high.

Unlike the previous NICE guidance on the management of persistent low back pain between 6 weeks and 12 months, this guideline gives guidance on the assessment and management of both non-specific low back pain and sciatica from first presentation onwards in people aged 16 years and over.

We use ‘sciatica’ to describe leg pain secondary to lumbosacral nerve root pathology rather than the terms ‘radicular pain’ or ‘radiculopathy’, although they are more accurate. This is because ‘sciatica’ is a term that patients and clinicians understand, and it is widely used in the literature to describe neuropathic leg pain secondary to compressive spinal pathology.

This guideline does not cover the evaluation or care of people with sciatica with progressive neurological deficit or cauda equina syndrome. All clinicians involved in the management of sciatica should be aware of these potential neurological emergencies and know when to refer to an appropriate specialist.

We hope to address the inconsistent provision and implementation of the previous guidance and provide patients, carers and healthcare professionals with sensible, practical and evidence-based advice for managing this important and common problem.

More information

[The following sentence is for post-consultation versions only] You can also see this guideline in the NICE pathway on [pathway title].

To find out what NICE has said on topics related to this guideline, see our web page on [add and link topic page title or titles].

Recommendations for research

The guideline committee has made the following recommendations for research. The committee's full set of research recommendations is detailed in the full guideline.

1 Pharmacological therapies

What is the clinical and cost effectiveness of benzodiazepines for the acute management of non-specific low back pain?

Why this is important

Guidelines from many countries have said that muscle relaxants should be considered for short-term use in people with non-specific low back pain when the paraspinal muscles are in spasm. The evidence for this mainly comes from studies on medications that are not licensed for this use in the UK. The 2009 NICE guideline on low back pain recommends to consider prescribing diazepam as a muscle relaxant in this situation, but the evidence base to support this particular medicine is extremely small. Benzodiazepines are not without risk of harm, even for short-term use. Because of this, there is a need to find out if diazepam is clinically and cost effective in the management of acute non-specific low back pain.

2 Pharmacological therapies

What is the clinical and cost effectiveness of codeine with and without paracetamol for the acute management of non-specific low back pain?

Why this is important

Codeine, often together with paracetamol, is commonly prescribed in primary care to people presenting with acute non-specific low back pain. This often happens with people who are intolerant of non-steroidal anti-inflammatory drugs (NSAIDs) or when a person has contraindications to these medications. Although there is evidence that opioids are not effective in chronic non-specific low back pain, there are relatively few studies that look at their use for acute non-specific low back pain (a problem commonly seen in primary care). Also, it is not known if using paracetamol and codeine together has a synergistic effect in the treatment of back pain.

3 Radiofrequency denervation

What is the clinical and cost effectiveness of radiofrequency denervation for chronic non-specific low back pain in the long term?

Why this is important

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. This may allow axons to regenerate with time, requiring the repetition of the radiofrequency procedure.

The length of pain relief after radiofrequency denervation is uncertain. Data from randomised controlled trials suggest relief is at least 6–12 months but no study has reported longer-term outcomes. Pain relief for more than 2 years would not be an unreasonable clinical expectation. The economic model presented in this guideline suggested that radiofrequency denervation is likely to be cost effective if pain relief is above 16 months.

If radiofrequency denervation is repeated, we do not know whether the outcomes and duration of these outcomes are similar to the initial treatment. If repeated radiofrequency denervation is to be offered, we need to be more certain that this intervention is both effective and cost effective.

4 Epidurals

What is the clinical and cost effectiveness of image-guided compared with non-image-guided epidural injections for people with acute sciatica?

Why this is important

Epidural injection of treatments, including corticosteroids, is commonly offered to people with sciatica. Epidural injection might improve symptoms, reduce disability and speed up return to normal activities. Several different procedures have been developed for epidural delivery of corticosteroids. Some practitioners inject through the caudal opening to the spinal canal in the sacrum (caudal epidural), but others inject through the foraminal space at the presumed level of nerve root irritation (transforaminal epidural).

Some people believe transforaminal epidurals might be most effective because they deliver corticosteroids directly to the region where the nerve root might be compromised. But because transforaminal epidural injection needs imaging, usually within a specialist setting, this potentially limits treatment access and increases costs. Caudal epidural injection can be done without imaging, or with ultrasound guidance in a non-specialist setting. But it has been argued the treatment might not reach the affected nerve root, meaning this method might not be as effective as transforaminal injection.

Evidence that one method is clearly better than the other is currently lacking. Use of the 2 methods varies between healthcare providers, and people whose sciatica does not respond to caudal corticosteroid injection might go on to have image-guided epidural injection. This means people with sciatica might currently experience unnecessary symptoms at unnecessary cost to the NHS than they would if the most clinically and cost-effective way of delivering epidural corticosteroid injections was always used.

5 Spinal fusion

Should people with non-specific low back pain be offered spinal fusion as a surgical option?

Why this is important

An increasing number of procedures have been proposed for surgically managing non-specific low back pain. One of these procedures is surgical fixation with internal metalwork applied from the back, front, side, or any combination of the 3 routes. The cost of these operations has risen, and now that minimally invasive approaches are used, more of these operations are done with uncertain benefit.

As well as the cost, surgery can lead to complications – some studies report around a 20% complication rate in the short to medium term. There have been several studies (both randomised and cohort) looking at the clinical effectiveness of spinal fusion versus usual care, no surgery, different surgeries, and other treatments. Overall, the studies do not show a clear advantage of fusion but do show some modest benefit for some elements of pain, function and quality of life. The studies also show healthcare use was lower. It is not known what treatments should be tried before surgery is considered. The evidence from the studies was weak because of low numbers of patients, large crossover and in-case selection bias. This means there is a need for a large, multicentre randomised trial with sufficient power to answer these important questions.

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