NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

SCOPE

1 Guideline title

Low back pain and sciatica: management of non-specific low back pain and sciatica

1.1 *Short title*

Low back pain and sciatica

2 The remit

This is an update of Low back pain: early management of persistent non-specific low back pain (NICE clinical guideline 88).

2.1 The time cut-off point of 12 months and the restriction to pain that has persisted for 6 weeks specified in NICE clinical guideline 88 has been removed for the update of the guideline. There will be no restriction on duration of low back pain.

2.2 The population has been expanded to include people with sciatica.

2.3 The age of people covered by the guideline update has been expanded to include people aged 16 and older. This is an additional population not included in NICE clinical guideline 88.

3 Need for the guideline

3.1 *Epidemiology*

a) Low back pain can present with different levels of severity – for example, some people may be able to continue to work and lead active lives, while others may be severely disabled or unable to

work. Low back pain is common in working-age adults (particularly between the ages of 40 and 60 years). A UK survey reported that in 1998, 40% of adults had had low back pain lasting longer than 1 day in the previous 12 months. According to the Health survey for England 2011, back pain was responsible for 37% of all chronic pain in men and 44% in women. Treating all types of back pain costs the NHS more than £1000 million per year. In 1998 the direct healthcare costs of all back pain in the UK were estimated at £1623 million – approximately 35% of costs were related to services provided by the private sector. The costs of care for low back pain exceed £500 million per year. The total cost of low back pain to the economy is estimated at £12.3 billion per year.

b) Low back pain can cause many problems, including:

- impaired quality of life
- poor mobility
- higher risk of social exclusion through inability to work (and reduced income)
- depression and anxiety
- social isolation because of disability.

c) Interventions and therapies are used to help people to manage and improve their back condition and to lessen the intensity, recurrence and/or duration of back pain. They aim to help people to remain more physically and socially active in their daily lives and to reduce absence from work. There are many therapeutic and rehabilitation strategies that can be used for low back pain. These include:

- manual therapies (for example, massage and joint manipulation)
- pharmacological treatments (for example, analgesics)
- psychological treatments (for example, cognitive behavioural pain management)
- complementary or alternative therapies

- orthotics and appliances (for example, supports and traction)
- exercise (general and specific)
- patient education and ’back schools’
- invasive procedures (for example, facet joint or epidural injections)
- electrotherapy (for example, TENS)
- self-management strategies (including relaxation techniques)
- occupational health and ergonomics
- surgery.

d) Sciatica is a relatively common condition with a lifetime incidence ranging from 13 to 40%. The corresponding annual incidence of an episode of sciatica ranges from 1 to 5%.

e) The incidence of sciatica is related to age. Rarely seen before the age of 20, incidence peaks in the fifth decade and then declines.

3.2 *Current practice*

a) People with low back pain may go to their GP or other primary healthcare practitioners for initial treatment so, in most cases, their care will be managed in primary care.

b) Managing persistent low back pain follows a stepped approach:

- initial assessment – identify specific aetiologies and any sinister pathology for example, cauda equina syndrome and other red flag symptoms
- management – (once specific pathologies have been excluded) a combination of lifestyle advice and conventional treatment such as pharmacological treatment, physical therapies or exercise programmes
- if pain persists – psychological therapies and invasive procedures such as acupuncture and surgical intervention may be offered.

c) Access to the care and uptake of the interventions recommended in NICE clinical guideline 88 has been poor. According to a Pulse survey of 127 primary care organisations in 2010, only half provided funding for acupuncture and 15% offered acupuncture in their practices. A recent study of people with low back pain attending a spinal outpatient clinic before and after the publication of the NICE guideline suggests that the guidance has not yet influenced management in primary care.

d) People who have sciatica often present with similar symptoms to simple non-specific low back pain with referred leg pain. It is most commonly caused by herniated intervertebral disc, but there are other causes of impingement of nerve roots in the lower back.

e) Treatment of sciatica depends on the cause of the nerve impingement as well as the severity of symptoms. In the majority of cases, symptoms caused by a herniated disc resolve with conventional management. If symptoms persist, injection treatments (for example, epidural or nerve root injections) or surgical treatment (for example, microdiscectomy) can be offered. In cases where progressive neurological deficit is diagnosed, urgent surgical treatment is needed. The potential for faster recovery with invasive interventions for sciatic pain is a consideration as well as the cost-effectiveness and increased complication rates of these procedures.

f) This guideline update aims to improve targeting of treatment and as a result, improve the quality of life of people with low back and sciatica.

4 The guideline

The guideline development process is described in detail on the NICE website (see section 6, ‘Further information’).

This scope defines what the guideline will (and will not) examine, and what the guideline developers will consider. The scope is based on the referral from the Department of Health.

The areas that will be addressed by the guideline are described in the following sections.

4.1 *Population*

4.1.1 Groups that will be covered

a) People aged 16 or older presenting with symptoms of 'non-specific' low back pain. The pain may (or may not) radiate to the limbs and is not associated with progressive neurological deficit.

b) People aged 16 or older with suspected sciatica.

c) No subgroups have been identified as needing specific consideration.

4.1.2 Groups that will not be covered

a) People who have low back pain or sciatica related to specific spinal pathologies, including:

- conditions of a non-mechanical nature, including;
  - inflammatory causes of back pain (for example, ankylosing spondylitis or diseases of the viscera)
  - serious spinal pathology (for example, neoplasms, infections or osteoporotic collapse)
- neurological disorders (including cauda equina syndrome or mononeuritis)
- adolescent scoliosis.

b) People aged under 16 years.

4.2 *Setting*

a) All settings in which NHS-funded care is received.

4.3 *Management*

4.3.1 Key issues that will be covered

a) Assessment to identify ‘non-specific’ low back pain and sciatica and any prognostic factors that could guide management. This would include relevant clinical examination and assessment (for example, imaging, physiological testing and psychosocial assessment methods).

b) Lifestyle interventions. For example:

- self-management strategies, including education and advice
- workplace interventions and return-to-work interventions (for example, occupational and ergonomic interventions).

c) Use of pharmacological treatments for low back pain:

- analgesics
- muscle relaxants
- antidepressants
- anticonvulsants
- long-term antibiotics.

Note that guideline recommendations will normally fall within licensed indications; exceptionally, and only if clearly supported by evidence, use outside a licensed indication (‘off-label use’) may be recommended. The guideline will assume that prescribers will use a drug’s summary of product characteristics to inform decisions made with individual patients.

d) Non-pharmacological interventions. These will include but are not limited to:

- exercise and postural therapies (for example, general exercise to manage low back pain; specific exercises for the lower back; yoga, group-based and individualised exercise programmes and Alexander technique)
- manual therapies including massage
- electrotherapy
- orthotics and appliances
- acupuncture.

e) Combined therapies.

f) The use of invasive procedures. For example:

- injection therapies
- radiofrequency ablation procedures.

g) Psychological interventions (for example, cognitive behavioural pain management).

h) Surgery:

- indications for referral for surgery.
- surgical interventions (for example, fusion and disc replacement for low back pain and discectomy or laminectomy and decompression surgery for sciatica).

4.3.2 Key issues that will not be covered

a) Management of :

- conditions with a select and uniform pathology of a mechanical nature (for example, spondylolisthesis, scoliosis, vertebral fracture or congenital diseases)
- conditions of a non-mechanical nature (for example, ankylosing spondylitis or diseases of the viscera)

- neurological disorders (including cauda equina syndrome), serious spinal pathology (for example, neoplasms, infections or osteoporotic collapse).

b) Post-surgery care.

c) Spinal cord stimulation.

d) Pharmacological treatments for sciatica.

4.4 *Main outcomes*

a) Pain severity (for example, visual analogue scale [VAS] or numeric rating scale [NRS]).

b) Function measured by disability scores (for example, the Roland-Morris disability questionnaire or the Oswestry disability index).

c) Health-related quality of life (for example, SF-12 or EQ-5D).

d) Return to work.

e) Adverse events.

f) Healthcare utilisation.

4.5 *Economic aspects*

Developers will take into account both clinical and cost effectiveness when making recommendations involving a choice between alternative interventions. A review of the economic evidence will be conducted and analyses will be carried out as appropriate. The preferred unit of effectiveness is the quality-adjusted life year (QALY), and the costs considered will usually be only from an NHS and personal social services (PSS) perspective. Further detail on the methods can be found in The guidelines manual.

4.6 *Status*

4.6.1 Scope

This is the final scope.

4.6.2 Timing

The development of the guideline recommendations will begin in January 2014.

5 Related NICE guidance

5.1 *Published guidance*

5.1.1 NICE guidance to be updated

This guideline will update and replace the following NICE guidance:

- Low back pain. NICE clinical guideline 88 (2009).

5.1.2 Other related NICE guidance

- Neuropathic pain – pharmacological management. NICE clinical guideline 173 (2013).
- Percutaneous vertebroplasty and percutaneous balloon kyphoplasty for treating osteoporotic vertebral compression fractures. NICE technology appraisal guidance 279 (2013).
- Peripheral nerve-field stimulation for chronic low back pain. NICE interventional procedures guidance 451 (2013).
- Patient experience in adult NHS services. NICE clinical guideline 138 (2012).
- EOS 2D/3D imaging system. NICE diagnostics guidance 1 (2011).
- Transaxial interbody lumbosacral fusion. NICE interventional procedures guidance 387 (2011).
- Non rigid stabilisation techniques for the treatment of low back pain. NICE interventional procedures guidance 366 (2010).

- Interspinous distraction procedures for lumbar spinal stenosis causing neurogenic claudication. NICE interventional procedures guidance 365 (2010).
- Percutaneous intradiscal laser ablation in the lumbar spine.NICE interventional procedures guidance 357 (2010).
- Therapeutic endoscopic division of epidural adhesions. NICE interventional procedures guidance 333 (2010).
- Depression with a chronic physical health problem. NICE clinical guideline 91 (2009).
- Depression in adults. NICE clinical guideline 90 (2009).
- Lateral (including extreme, extra and direct lateral) interbody fusion in the lumbar spine. NICE interventional procedures guidance 321 (2009).
- Percutaneous intradiscal electrothermal therapy for low back pain. NICE interventional procedures guidance 319 (2009).
- Prosthetic intervertebral disc replacement in the lumbar spine. NICE interventional procedures guidance 306 (2009).
- Percutaneous endoscopic laser lumbar discectomy. NICE interventional procedures guidance 300 (2009).
- Long-term sickness and incapacity for work. NICE public health guidance 19 (2009).
- Metastatic spinal cord compression. NICE clinical guidance 75 (2008).
- Spinal cord stimulation for chronic pain of neuropathic or ischaemic origin. NICE technology appraisal guidance 159 (2008).
- Osteoarthritis. NICE clinical guideline 59 (2008).
- Percutaneous disc decompression using coblation for lower back pain. NICE interventional procedures guidance 173 (2006).
- Referral for suspected cancer. NICE clinical guidance 27 (2005).
- Automated percutaneous mechanical lumbar discectomy. NICE interventional procedures guidance 141 (2005).
- Percutaneous intradiscal radiofrequency thermocoagulation for lower back pain. NICE interventional procedures guidance 83 (2004).

- Endoscopic laser foraminoplasty. NICE interventional procedures guidance 31 (2003).

5.2 *Guidance under development*

NICE is currently developing the following related guidance (details available from the NICE website):

- Osteoarthritis. NICE clinical guideline. Publication expected February 2014.
- Ankylosing spondylitis and axial spondyloarthritis (non-radiographic) - adalimumab, etanercept infliximab and. NICE technology appraisal guidance. Publication expected January 2015.
- Insertion of an annular disc implant lumbar discectomy. NICE interventional procedure guidance. Publication date to be confirmed.
- Referral for suspected cancer. NICE clinical guideline. Publication date to be confirmed.
- Seronegative arthropathies. NICE clinical guideline. Publication date to be confirmed.

6 Further information

Information on the guideline development process is provided in the following documents, available from the NICE website:

- How NICE clinical guidelines are developed: an overview for stakeholders the public and the NHS: 5th edition
- The guidelines manual.

Information on the progress of the guideline will also be available from the NICE website.