



*National Institute for  
Health and Clinical Excellence*

## **Quick reference guide**

Issue date: March 2010

## **Neuropathic pain**

The pharmacological management of neuropathic pain in adults in non-specialist settings

This is a quick reference guide that summarises the recommendations NICE has made to the NHS in 'Neuropathic pain: the pharmacological management of neuropathic pain in adults in non-specialist settings' (NICE clinical guideline 96). This guidance updates and replaces recommendations on the drug treatment of painful diabetic neuropathy in 'Type 1 diabetes' (NICE clinical guideline 15) and 'Type 2 diabetes' (NICE clinical guideline 87).

## Introduction

Neuropathic pain develops as a result of damage to, or dysfunction of, the system that normally signals pain. It may arise from a heterogeneous group of disorders that affect the peripheral and central nervous systems. Common examples include painful diabetic neuropathy, post-herpetic neuralgia and trigeminal neuralgia.

Neuropathic pain can have a significant impact on a person's quality of life. It is often difficult to treat, because it is resistant to many medications and because of the adverse effects associated with effective medications. Drugs used in the management of neuropathic pain include antidepressants, anti-epileptic (anticonvulsant) drugs and opioids.

This guideline is for the pharmacological management of neuropathic pain in non-specialist settings only. There are other pharmacological and non-pharmacological treatments for neuropathic pain, within different care pathways in different settings, but these are not covered here.

## Patient-centred care

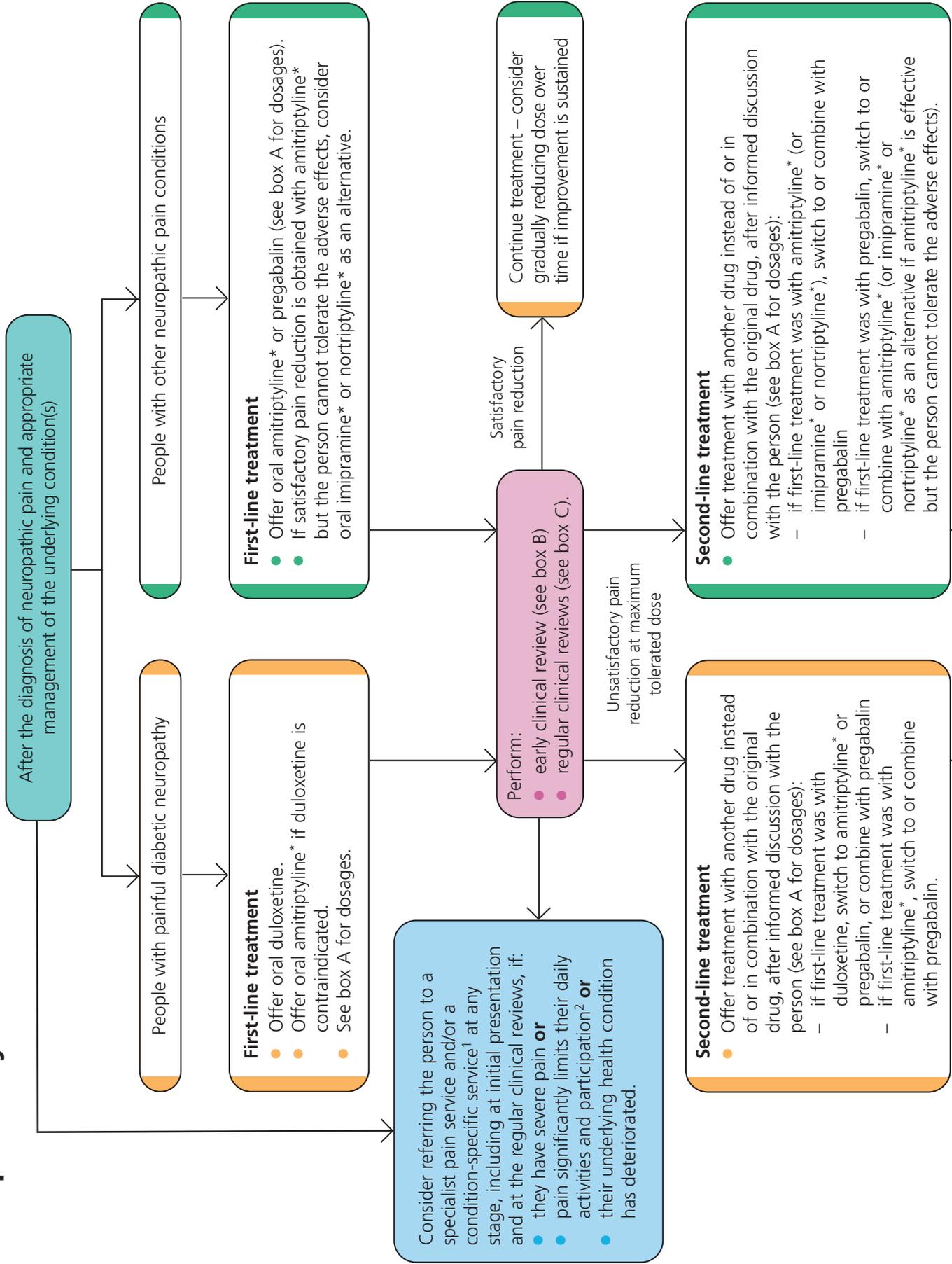
Treatment and care should take into account patients' individual needs and preferences. Good communication is essential, supported by evidence-based information, to allow patients to reach informed decisions about their care. Follow advice on seeking consent from the Department of Health or Welsh Assembly Government if needed. If the patient agrees, families and carers should have the opportunity to be involved in decisions about treatment and care.

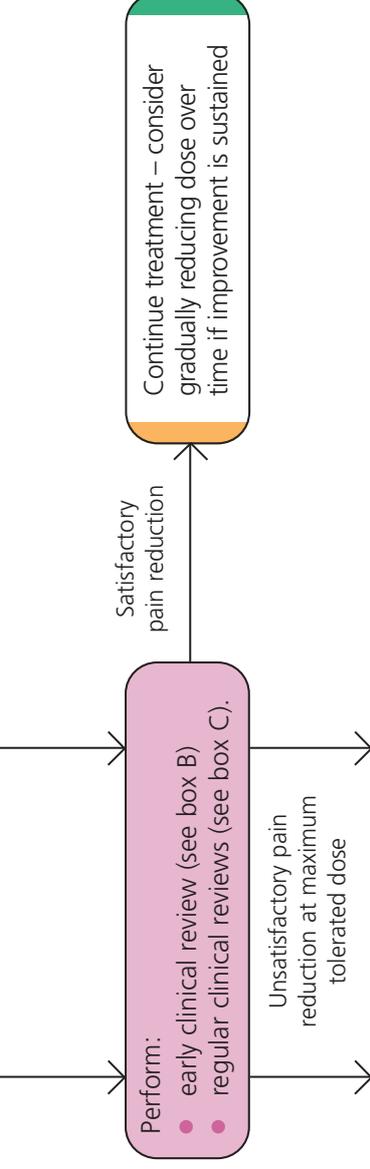
NICE clinical guidelines are recommendations about the treatment and care of people with specific diseases and conditions in the NHS in England and Wales.

This guidance represents the view of NICE, which was arrived at after careful consideration of the evidence available. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. However, the guidance does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer, and informed by the summary of product characteristics of any drugs they are considering.

Implementation of this guidance is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to avoid unlawful discrimination and to have regard to promoting equality of opportunity. Nothing in this guidance should be interpreted in a way that would be inconsistent with compliance with those duties.

# Care pathway





### Third-line treatment

- Refer the person to a specialist pain service and/or a condition-specific service<sup>1</sup>.
- While waiting for referral:
  - consider oral tramadol instead of or in combination<sup>3</sup> with second-line treatment (see box A for dosages)
  - consider topical lidocaine<sup>4</sup> for treatment of localised pain for people who are unable to take oral medication because of medical conditions and/or disability.

### Other treatments

- Do not start treatment with opioids (such as morphine or oxycodone) other than tramadol without an assessment by a specialist pain service or a condition-specific service<sup>1</sup>.
- Other pharmacological treatments that are started by a specialist pain service or a condition-specific service<sup>1</sup> may continue to be prescribed in non-specialist settings, with a multidisciplinary care plan, local shared care agreements and careful management of adverse effects.

### Box A Drug dosages

- Start at a low dose, as indicated in the table.
- Titrate upwards to an effective dose or the person's maximum tolerated dose (no higher than the maximum dose listed in the table).

Drug	Starting dose	Maximum dose
Amitriptyline*	10 mg/day	75 mg/day <sup>a</sup>
Pregabalin	150 mg/day <sup>b</sup> (divided into 2 doses)	600 mg/day (divided into 2 doses)
Duloxetine	60 mg/day <sup>b</sup>	120 mg/day
Tramadol <sup>c</sup>	50–100 mg not more often than every 4 hours	400 mg/day

<sup>a</sup> Higher doses could be considered in consultation with a specialist pain service.

<sup>b</sup> A lower starting dose may be appropriate for some people.

<sup>c</sup> As monotherapy. More conservative titration may be required if used as combination therapy.

### Box B Early clinical review

After starting or changing a treatment, perform an early clinical review of dosage titration, tolerability and adverse effects to assess suitability of chosen treatment.

### Box C Regular clinical reviews

Perform regular clinical reviews to assess and monitor effectiveness of chosen treatment. Include assessment of:

- pain reduction
- adverse effects
- daily activities and participation<sup>2</sup> (such as ability to work and drive)
- mood (in particular, possible depression and/or anxiety<sup>5</sup>)
- quality of sleep
- overall improvement as reported by the person.

- Address the person's concerns and expectations when agreeing which treatments to use by discussing:
  - benefits and possible adverse effects of each pharmacological treatment
  - why a particular pharmacological treatment is being offered
  - coping strategies for pain and for possible adverse effects of treatment
  - that non-pharmacological treatments are also available in non-specialist settings and/or through referral to specialist services (for example, surgical treatments and psychological therapies).
- When selecting pharmacological treatments, take into account:
  - the person's vulnerability to specific adverse effects because of comorbidities
  - safety considerations and contraindications as detailed in the summary of product characteristics (SPC)
  - patient preference
  - lifestyle factors (such as occupation)
  - any mental health problems (such as depression and/or anxiety<sup>5</sup>)
  - any other medication the person is taking.
- Explain both the importance of dosage titration and the titration process – provide written information if possible.
- When withdrawing or switching treatment, taper the withdrawal regimen to take account of dosage and any discontinuation symptoms.
- When introducing a new treatment, consider overlap with old treatments to avoid deterioration in pain control.
- Continue existing treatments for people whose neuropathic pain is already effectively managed<sup>6</sup>.

## Key to terms

**Non-specialist settings** Primary and secondary care services that do not provide specialist pain services. These include general practice, general community care and hospital care.

**Specialist pain services** Services that provide comprehensive assessment and multi-modal management of all types of pain, including neuropathic pain.

\* Not licensed for this indication at time of publication (March 2010). Informed consent should be obtained and documented.

<sup>1</sup> A condition-specific service is a specialist service that provides treatment for the underlying health condition that is causing neuropathic pain. Examples include neurology, diabetology and oncology services.

<sup>2</sup> The World Health Organization ICF (International Classification of Functioning, Disability and Health) defines participation as 'A person's involvement in a life situation'. It includes the following domains: learning and applying knowledge, general tasks and demands, mobility, self-care, domestic life, interpersonal interactions and relationships, major life areas, community, and social and civil life.

<sup>3</sup> The combination of tramadol with amitriptyline, nortriptyline, imipramine or duloxetine is associated with only a low risk of serotonin syndrome (the features of which include confusion, delirium, shivering, sweating, changes in blood pressure and myoclonus).

<sup>4</sup> Topical lidocaine is licensed for post-herpetic neuralgia, but not for other neuropathic pain conditions (March 2010).

<sup>5</sup> Refer if necessary to the relevant NICE clinical guidelines (see 'Related NICE guidance' on back page).

<sup>6</sup> Note that there is currently no good-quality evidence on which to base specific recommendations for treating trigeminal neuralgia. The Guideline Development Group (GDG) expected that current routine practice will continue until new evidence is available.

## Further information

### Ordering information

You can download the following documents from [www.nice.org.uk/guidance/CG96](http://www.nice.org.uk/guidance/CG96)

- A quick reference guide (this document) – a summary of the recommendations for healthcare professionals.
- 'Understanding NICE guidance' – a summary for patients and carers.
- The full guideline – all the recommendations, details of how they were developed, and reviews of the evidence they were based on.

For printed copies of the quick reference guide or 'Understanding NICE guidance', phone NICE publications on 0845 003 7783 or email [publications@nice.org.uk](mailto:publications@nice.org.uk) and quote:

- N2115 (quick reference guide)
- N2116 ('Understanding NICE guidance').

### Implementation tools

NICE has developed tools to help organisations implement this guidance (see [www.nice.org.uk/guidance/CG96](http://www.nice.org.uk/guidance/CG96)).

### Related NICE guidance

For information about NICE guidance that has been issued or is in development, see [www.nice.org.uk](http://www.nice.org.uk)

- Depression in adults with a chronic physical health problem. NICE clinical guideline 91 (2009).
- Depression. NICE clinical guideline 90 (2009).
- Type 2 diabetes. NICE clinical guideline 87 (2009).
- Medicines adherence. NICE clinical guideline 76 (2009).
- Spinal cord stimulation for chronic pain of neuropathic or ischaemic origin. NICE technology appraisal guidance 159 (2008).
- Anxiety (amended). NICE clinical guideline 22 (2004; amended 2007).
- Type 1 diabetes. NICE clinical guideline 15 (2004; amended 2009).

### Updating the guideline

This guideline will be updated as needed, and information about the progress of any update will be available at [www.nice.org.uk/guidance/CG96](http://www.nice.org.uk/guidance/CG96)

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