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Neuropathic pain: a pathway for care developed by the British Pain Society

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Editor's key points

- Neuropathic pain is a challenging pain syndrome to treat effectively.
- Diagnosis of neuropathic pain can be 'possible', 'probable', or 'definite', all potentially requiring treatment.
- This review outlines a new practical guideline to the comprehensive management of neuropathic pain.
- The current evidence base has clear research gaps that need to be addressed.

Summary. Neuropathic pain is a common chronic pain condition that can be challenging to treat, particularly for non-specialists. The development of the Map of Medicine care pathway for the management of neuropathic pain was led by the British Pain Society. Focusing on treatment by non-specialists, this pathway is based on new evidence, consensus, and the interests of service users. This paper presents the care pathway and accompanying evidence base, highlighting its salient features, and discussing important treatment points. After initial assessment, the pathway progresses through first-, second-, and third-line drug treatment, includes advice on topical treatment and opioids (in specific circumstances), and describes non-pharmacological approaches. Importantly, timely review of patients and referral to specialist secondary or tertiary care must be considered as vital components of the pathway. Although the emphasis was not on specialist treatment, advice is given on existing interventions, including neural stimulation and multi-disciplinary care. These, and other steps on the pathway, will be subject to further review as more evidence becomes available. In the meantime, the pathway represents a straightforward, valuable and accessible approach for healthcare professionals managing the distress and impact of neuropathic pain.

Keywords: nerve pain; neuralgia; neuropathic pain

The British Pain Society (BPS) is a national society, affiliated with the International Association for the Study of Pain (IASP). It has commissioned working groups to develop five care pathways for pain to assist the management of common pain conditions. The pathways are intended to be comprehensive and to maximize generalist care, and each has an accompanying commentary. They are: the initial assessment and early management of pain;[1] chronic widespread pain, including fibromyalgia;[2] low back, and radicular pain;[3] pelvic pain;[4] and neuropathic pain[5] (presented here). They can be viewed on the BPS website. The pathways were chosen because of the high frequency of presentation with the problem, geographical variability in access to treatment, variation in clinical case management, or a combination of some or all of these issues.

Neuropathic pain

Chronic pain has been shown to affect up to 46% of the adult population, with >5% reporting high intensity, severely disabling chronic pain.[6 7] The recent Health Survey for England found that 31% of men, and 37% of women reported chronic pain.[8]

Neuropathic pain, defined by the IASP as 'pain arising as a direct consequence of a lesion or disease affecting the somatosensory system',[9] was previously thought to affect 1% of the UK population,[10] but more recent research suggests that this figure is closer to 8%.[11] This increase is due in part to the recognition that neuropathic mechanisms contribute to many types of chronic pain, and therefore that 'classic' neuropathic pain diagnoses (Table 1) only represent a small proportion of the problem in the population. It is also likely that patients and professionals are more aware of the possibility of neuropathic pain than they were, perhaps because of greater availability of specific, effective treatments, and educational initiatives surrounding these.

Neuropathic pain is a particularly unpleasant type of pain, whose characteristics contribute to poor general health, and produce quality of life scores similar to those reported by people with serious mental illness, or with severe heart disease.[12 13] In common with other chronic conditions, it is commoner among women and in relative deprivation. The ageing population and rising prevalence of specific risk factors (notably diabetes)[14] mean that neuropathic pain will increase both in incidence and prevalence, and it is important

Table 1 Common causes of neuropathic pain

Peripheral
Painful diabetic neuralgia
Post-herpetic neuralgia
Trigeminal neuralgia
Lumbar radiculopathy
Nerve damage, including postoperative
Pain because of cancer tumour infiltration
Central
Post-stroke pain
Multiple sclerosis
Chemotherapy-induced pain
General
Idiopathic
Neuropathic contributions to other painful conditions

therefore that non-specialist health professionals have a robust, evidence-based approach to its management.

Excellent recent systematic reviews have assessed the evidence for pharmacological treatment of neuropathic pain, concluding that there are many specific effective medicines available.[15 16] Other systematic approaches have produced evidence-based consensus approaches to the assessment of neuropathic pain, in both primary care,[17] and other settings.[18] Despite this, there is consistent evidence of under-recognition, under-treatment of neuropathic pain, or both, particularly in primary care.[19 20] Hall and colleagues, in a 2005 review of common neuropathic pain conditions using the General Practice Research Database, found that the most commonly prescribed items were the same across conditions, and included opioids as first-line treatments. However, changes in therapy were less frequent when initial therapy was with antidepressants or anticonvulsants rather than conventional analgesics, confirming the relative effectiveness of these drugs in primary care.[21] Therefore, there is a need for accessible guidance for non-specialists, to help them to improve the health and quality of life of their patients with the best approaches to treating this common and disabling condition.

With all guidelines, the most important step in achieving the intended outcome is the first one having identified its relevance (i.e. setting off on the correct pathway). This is the stage at which undifferentiated illness (as usually presented in primary care) takes on shape and form, achieves definition, and moves towards diagnosis and management. This is particularly true for neuropathic pain, recognition of which (as distinct from non-neuropathic pain) leads to the use of effective treatments and the avoidance of some ineffective ones. Along the way, this is likely to lead to the maximum clinical benefit, with the minimal harm. Arguably, therefore, the most important activities associated with good quality guidelines are those that promote awareness of their existence, enhance their accessibility, or both.

The recent re-classification of neuropathic pain by the IASP, now makes this first step easier. Previously, a binary clinical entity (present/absent), the diagnosis of which relied on detailed neurological assessment, we now acknowledge the existence of 'possible', 'probable', and 'definite' neuropathic pain.[9] Although still requiring skilled clinical history and examination, the diagnosis of 'possible' neuropathic pain requires less time and specialist clinical skill, and is therefore easier in brief primary care consultations. The presence of a few typical symptoms and easily observed signs, with a neuroanatomically logical potential cause, is sufficient for the non-specialist to take the first steps towards successful management, using available guidelines.[17] In this way, gauging response to early, specific treatments, reduces suffering, and assists diagnosis, often without the need for the detailed assessment that might be required to diagnose 'definite' neuropathic pain.

Aims and objectives of the neuropathic pain pathway

The neuropathic pain pathway was developed in response to the need highlighted above, and with the intention of maximum accessibility and reading ease. It aims to take the non-specialist from the point of recognizing 'possible' neuropathic pain through an evidence-based series of management options to the point at which the pain (a) is managed satisfactorily, (b) resolves, or (c) requires specialist secondary care assessment and intervention. There is also guidance on treatments and management to be used within specialist settings, which though less specific than the guidance for non-specialist management, will inform General practitioners (GPs) and others involved in shared care, and guide specialist practice. Important features include: (i) the use of a limited set of first- and second-line drugs; (ii) the parallel use of non-pharmacological approaches, self-help, and highlighted information resources; (iii) need for early and frequent review at the outset of treatment to ensure that maximum effective/tolerated treatment is given as quickly as possible; (iv) need for early specialist secondary care referral in severe or uncertain disease without awaiting the end of the pathway (but also for the pathway to continue while the specialist assessment is awaited); and (v) information on secondary care interventions, drugs used with specialist supervision, and multidisciplinary pain management.

The pathway has been developed in collaboration between the Map of Medicine editorial team, representatives of the BPS and independent reviewers. It is based on well-reputed secondary evidence, as selected in accordance with the Map of Medicine's editorial methodology for developing care pathways. Practice-based knowledge has been added by clinicians nominated by the BPS and by independent reviewers identified by the Map of Medicine editorial team. For the detailed editorial methodology please see the Neuropathic Pain Pathway provenance certificate (see Appendix 1, Supplementary material). Map of Medicine care pathways can be customized to reflect local commissioning needs and practices to provide comprehensive, evidence-based local guidance and clinical decision