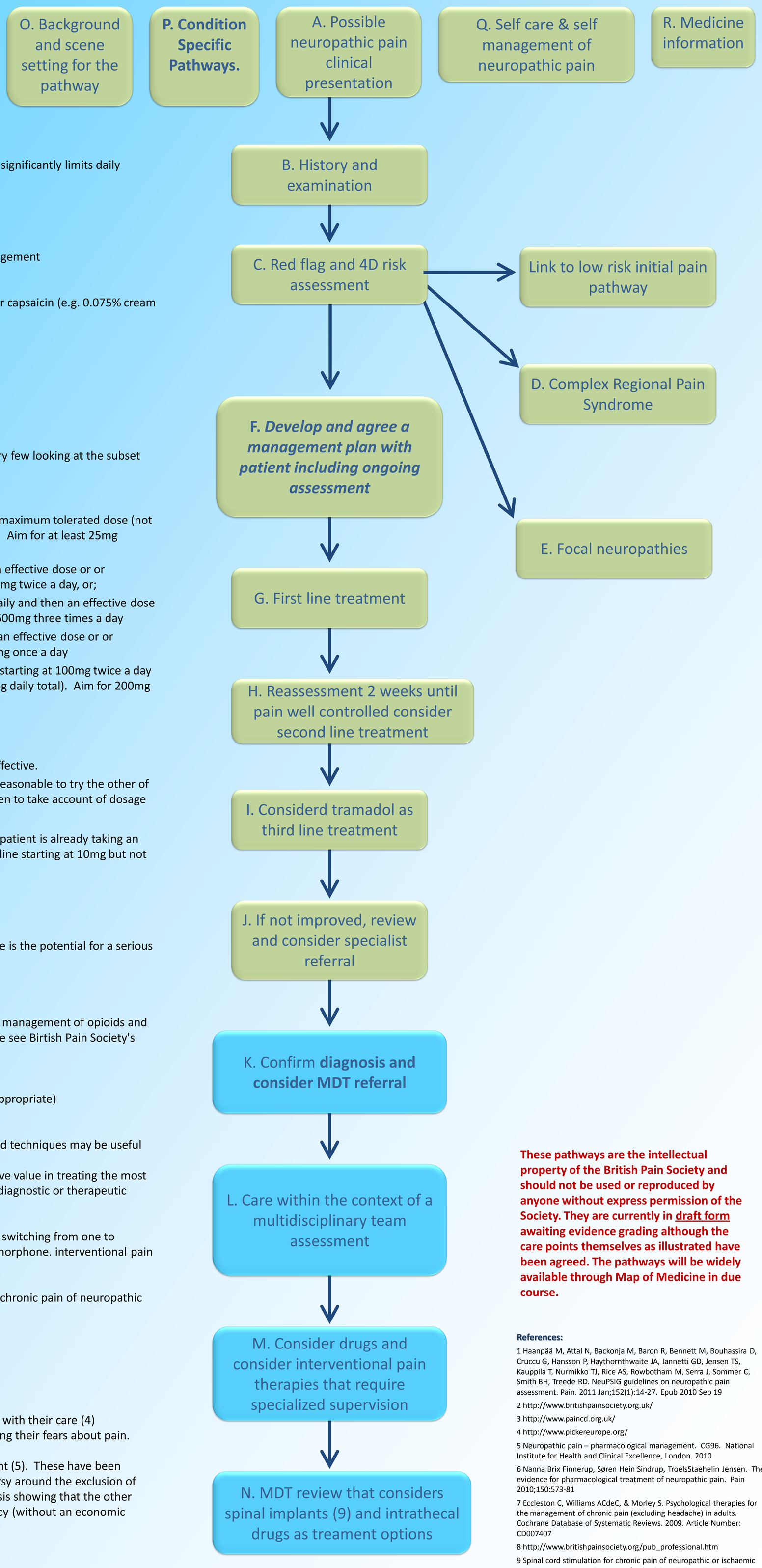
# Neuropathic pain




**A. Possible neuropathic pain**
If pain distribution is neuroanatomically plausible and history suggests relevant lesion or disease (1)

**B. History and examination**
Negative or positive sensory signs, confined to innervation territory of the lesioned nervous structure (1)

**C. Red flag and 4D risk assessment**
Refer to specialist if there is diagnostic uncertainty, they have severe pain, if pain significantly limits daily activities, or the underlying health condition has deteriorated.
Continue to work through neuropathic flow chart whilst waiting

**D. Complex Regional Pain Syndrome**
Rapid therapy for CRPS is likely to reduce long term disability.
- refer for immediate specialist assessment for intensive physiotherapy and management
- actively manage with drugs from neuropathic pain pathway

**E.** Localized areas of neuropathic pain may respond to topical lidocaine patches or capsaicin (e.g. 0.075% cream 3-4 times a day) without the need for systemic therapy. Examples of this are
- dermatomal post herpetic neuralgia
- a tender area from nerve trauma

**F. Develop and agree a management plan with patient**
Describe the options for treatment available to allow for patient choice.
- self-help
- medication
- cognitive behavioral multidisciplinary pain management
There are considerable numbers of studies supporting CBT in chronic pain but very few looking at the subset with neuropathic pain (7)

**G. First line drug**

•Start amitriptyline 10mg at night, increasing gradually to an effective dose or or maximum tolerated dose (not above 75mg). Consider alternative tricyclic antidepressants such as nortriptyline. Aim for at least 25mg amitriptyline at night, or;

•Start pregabalin 75mg at night, increasing to twice daily and then gradually to an effective dose or or maximum tolerated dose (no higher than 600mg daily total). Aim for at least 150mg twice a day, or;

•Start gabapentin 300mg at night, increasing gradually first to three times daily daily and then an effective dose or or maximum tolerated dose (no higher than 3.6g daily total). Aim for at least 600mg three times a day

•In the case of painful diabetic neuropathy, start duloxetine 30mg, increasing to an effective dose or or maximum tolerated dose (no higher than 120mg daily total). Aim for at least 60mg once a day

•In the case of classical trigeminal neuralgia, consider carbamazepine as first line starting at 100mg twice a day increasing to an effective dose or or maximum tolerated dose (no higher than 1.6g daily total). Aim for 200mg four times a day. Oxcarbazepine is an alternative.

**H. Reassessment two weekly until pain is well controlled.**
Add in or change to another first line drug.
Amitriptyline and either gabapentin or pregabalin may be combined if partially effective.

If gabapetin or pregabalin have not been effective or limited by side effects, it is reasonable to try the other of the two. When withdrawing or switching treatment, taper the withdrawal regimen to take account of dosage and any discontinuation symptoms.

Combinations of antidepressants are not generally recommended. However, if a patient is already taking an SSRI or SNRI for their mood, some specialists would consider adding in amitrtiptyline starting at 10mg but not going above 25mg daily.

**I. Consider third line treatment**
Reassessment should be within two weeks until pain is better controlled.
NICE supports the use of tramadol in neuropathic pain (5)
Tramadol should be used with caution for people on SSRI antidepressants as there is the potential for a serious serotonergic crisis

**J. Review and consider specialist referral**
Refer if there is no significant improvement and to clarify the diagnosis
Stronger opioids can be considered if the practitioner is confident with long term management of opioids and problems arising. This must include an understanding of equivalent doses. Please see Birtish Pain Society's guidelines on long term opioids in non cancer pain (8)

**K. Confirm diagnosis and consider MDT referral**
Specialised tests will be required (e.g. imaging and nerve conduction studies as appropriate)

**L. Care should be provided in the context of a multidisciplinary team.**
Combinations of drugs should be considered. Cognitive behavourial therapy based techniques may be useful

**M.** Drugs less widely available can be delivered by a variety of routes and may have value in treating the most resistant cases e.g. lidocaine, ketamine, high dose capsaicin (e.g. Qutenza), focal diagnostic or therapeutic injections (e.g. with steroids or Botox)
Consider drugs and interventional pain therapies.
Stronger opioids may have value and need careful management, especially when switching from one to another e.g. morphine, oxycodone, methadone, fantanyl, buprenorphine, hydromorphone. interventional pain therapies for radicular pain e.g. nerve root blocks should be considered

**N.** Spinal cord stimulation is recommended as a treatment option for adults with chronic pain of neuropathic origin (9) Spinal drug delivery may be appropriate for the most intractable cases.

**Q. Self care/management with patient**
Use patient information leaflets and self guided websites e.g.
- British pain society (2)
- Neil Berry's online audio descriptions of pain (3)
- other material as available
Patient information is known to improve the patient experience and involvement with their care (4)
Address people's concerns about understanding their pain with the aim of reducing their fears about pain.

**R.** NICE guidelines were produced for non-specialist pharmacological management (5). These have been supplemented by further systematic reviews (6). There has been much controversy around the exclusion of gabapentin from the NICE guidelines; this was done following an economic analysis showing that the other recommended drugs were more efficient use of resource; the evidence for efficacy (without an economic analysis) supports the use of gabapentin as a first line agent.



**References:**

1 Haanpää M, Attal N, Backonja M, Baron R, Bennett M, Bouhassira D, Cruccu G, Hansson P, Haythornthwaite JA, Iannetti GD, Jensen TS, Kauppila T, Nurmikko TJ, Rice AS, Rowbotham M, Serra J, Sommer C, Smith BH, Treede RD. NeuPSIG guidelines on neuropathic pain assessment. Pain. 2011 Jan;152(1):14-27. Epub 2010 Sep 19

2 http://www.britishpainsociety.org.uk/

3 http://www.paincd.org.uk/

4 http://www.pickereurope.org/

5 Neuropathic pain – pharmacological management. CG96. National Institute for Health and Clinical Excellence, London. 2010

6 Nanna Brix Finnerup, Søren Hein Sindrup, TroelsStaehelin Jensen. The evidence for pharmacological treatment of neuropathic pain. Pain 2010;150:573-81

7 Eccleston C, Williams ACdeC, & Morley S. Psychological therapies for the management of chronic pain (excluding headache) in adults. Cochrane Database of Systematic Reviews. 2009. Article Number: CD007407

8 http://www.britishpainsociety.org/pub_professional.htm

9 Spinal cord stimulation for chronic pain of neuropathic or ischaemic origin. TA159. National Institute for Health and Clinical Excellence, London. 2008