

Drug Management of Neuropathic Pain

(Please note: management of pain with a neuropathic element in palliative care may differ from the guidance below).

Neuropathic pain not responding to simple analgesia and with symptoms such as sleep disturbances, depression and interference with normal daily activities can be managed using the suggested algorithm below. All patients should have regular clinical reviews, and have early reviews following medication changes. Once satisfactory pain control is achieved with any medication, treatment should then be continued. If improvement is sustained consideration may be given to reducing the dose gradually over time following consultation with the patient.

NICE Clinical Guideline (CG173)¹ for the pharmacological management of neuropathic pain and the NICE pathway for managing the long term complications of type 2 diabetes² advises initial treatment with one of the four options listed below. If initial treatment with oral medication is not effective or not tolerated, offer one of the remaining three oral drugs. Consider switching again if the second or third drugs tried are also not effective or not tolerated. Due to lack of evidence of safety and cost effectiveness NICE advises against prescribing more than one neuropathic pain drug at the same time e.g. amitriptyline concurrently with duloxetine, gabapentin or pregabalin. However, the NICE Guideline Development Group noted that combination treatment may be more practical and more effective than switching to a new treatment and may reduce adverse effects of the individual drugs owing to the combination of lower doses.

(Please consult relevant SPC for further information when prescribing these drugs³)

Local guidelines for the prescribing of pregabalin are available at:

<http://best.barnsleyccg.nhs.uk/clinical-support/medicines/prescribing-guidelines/Pregabalin%20for%20neuropathic%20pain%20prescribing%20guidelines.pdf>

All types of Neuropathic pain (other than trigeminal neuralgia)

STEP 1

Amitriptyline (where no cautions or contraindications). Licensed for neuropathic pain in adults.

- Start 10mg 6-8pm to reduce 'hangover' effect
- Increase gradually by 10mg/week to an effective or maximum tolerated dose
- Aim for at least 25mg nocte (not above 75mg)
Doses higher than 75mg should only be considered in consultation with a specialist pain service and should be used with caution in the elderly and patients with cardiovascular disease.

Inadequate response after 8 week trial or not tolerated → discontinue gradually over a minimum of 4 weeks to avoid discontinuation symptoms⁴

STEP 2

Gabapentin (capsules are more cost effective⁵) Licensed for treatment of peripheral neuropathic pain in adults e.g. diabetic neuropathy, post herpetic neuralgia. Use in other conditions is off-label.

Caution: Gabapentin has been associated with a rare risk of severe respiratory depression, even in patients not receiving concomitant opioid medicines. Dose adjustments may be necessary in patients at higher risk.⁶

- Start: Day 1=300mg, Day 2=300mg BD, Day 3=300mg TDS
- Slower dose titration in 100mg increments may help improve tolerability e.g. elderly, frail, or if experienced adverse effects with higher doses
- Increase gradually in 300mg/day increments every 2-3 days to an effective or maximum tolerated dose
- Aim for at least 600mg TDS (maximum 1.2g TDS)
- Allow 1 week to reach 1.2g/day, 2 weeks for 2.4g/day and 3 weeks for 3.6g/day
- See drug SPC for dose adjustment in renal impairment

Inadequate response after 8 week trial or not tolerated → discontinue gradually over a minimum of 1 week

Consider whether, pain clinic referral or psychological support is appropriate. Consider referral to pain clinic (or other appropriate service e.g. diabetic clinic) at any time if the patient has severe pain, the pain significantly limits the patient's daily activities and participation, or if the patient's underlying health condition has deteriorated.

Duloxetine Licensed for the treatment of diabetic peripheral neuropathic pain. Use for other conditions is off-label.

- Start 60mg OD (maintenance dose), up to maximum 60mg BD (no evidence at higher dose)
- A lower starting dose of 30mg may be appropriate e.g. if tolerability is a problem
- Contraindicated in severe renal impairment (creatinine clearance <30 ml/min)
- Inadequate response after 8 week trial or not tolerated discontinue gradually over a minimum of 1 to 2 weeks

OR

Pregabalin Licensed for the treatment of peripheral and central neuropathic pain in adults. Use for other conditions is off-label.

Caution: Pregabalin has been associated with a rare risk of severe respiratory depression, even in patients not receiving concomitant opioid medicines. Dose adjustments may be necessary in patients at higher risk⁷.

- Start 75mg BD (25mg BD may be required when used in elderly patients). Increase if necessary after 3-7 days to 150mg BD, then further 7 days to maximum 300mg BD. Prescribe as BD dose (no benefit in TDS) and AVOID double dosing e.g. 2 BD
- See drug SPC for dose adjustment in renal impairment

If pregabalin is not effective or not tolerated, discontinue treatment gradually over a minimum of 1 week.

STEP 3

NICE advises against the use of gabapentinoids for managing sciatica as there is no overall evidence of benefit and there is evidence of harm.⁸

Post-Herpetic Neuralgia (Associated with previous herpes zoster infection)

Treat initially with standard oral therapies as per steps 1-3, and/or topical capsaicin cream 0.075%.

If standard therapies fail, or lead to intolerable side effects, consider **lidocaine 5% medicated plasters**.

There is limited, low quality evidence to support their use; however, they may be of value when other treatments have failed.⁹

Prescribe as **Ralvo**® as currently the most cost effective brand of lidocaine plasters (£61 for 30 plasters)¹⁰

The painful area should be covered with a plaster once daily for up to 12 hours within a 24 hour period.

No more than three plasters should be used at the same time. Each plaster must be worn for no longer than 12 hours. The subsequent plaster-free interval must be at least 12 hours.³

Prescribe a trial of **2-4 weeks** initially and then review for effectiveness before the medication is continued as a repeat prescription. If there has been little or no response to treatment → discontinue³

Treatment should be reassessed at regular intervals (e.g. every 6 months) to decide whether the amount of plasters needed to cover the painful area can be reduced, or if the plaster-free period can be extended.³ A 'trial without' can also be considered to assess ongoing need for treatment.^{11,12}

Lidocaine plasters are included within the NHS England guidance 'Items which should not routinely be prescribed in primary care: Guidance for CCGs'.¹³ They should only be prescribed in primary care when used to treat post-herpetic neuralgia and alternative treatments are contraindicated, not tolerated or ineffective.

References

1. NICE Clinical Guidelines. Neuropathic pain – pharmacological management. CG173. November 2013. Available at: <https://www.nice.org.uk/guidance/cg173> <Accessed 24.06.2021>
2. NICE Pathways. Type 2 diabetes. Identifying and managing long term complications. May 2014. Available at: <https://pathways.nice.org.uk/pathways/type-2-diabetes-in-adults> <Accessed 24.06.2021>
3. Electronic medicines compendium. Available at: <http://www.medicines.org.uk/emc> <Accessed 24.06.2021>
4. BNF Amitriptyline Available at: <https://bnf.nice.org.uk/drug/amitriptyline-hydrochloride.html#prescribingAndDispensingInformations> <Accessed 24.06.2021>
5. Drug Tariff June 2021 November 2018. Available at: <https://www.nhsbsa.nhs.uk/sites/default/files/2021-05/Drug%20Tariff%20June%202021.pdf> <Accessed 24.06.2021>
6. Gabapentin (Neurontin): risk of severe respiratory depression MHRA October 2017. Available at: <https://www.gov.uk/drug-safety-update/gabapentin-neurontin-risk-of-severe-respiratory-depression> <Accessed 24.06.2021>
7. Pregabalin (Lyrica): reports of severe respiratory depression MHRA February 2021. Available at: <https://www.gov.uk/drug-safety-update/pregabalin-lyrica-reports-of-severe-respiratory-depression?UNLID=53883079202162812930> <Accessed 28/06/2021>
8. NICE Clinical Guideline [NG59] Low back pain and sciatica in over 16s: assessment and management November 2016 Last updated: 11 December 2020. Available at: <https://www.nice.org.uk/guidance/ng59> <Accessed 24.06.2021>
9. Specialist Pharmacy Service : A review of lidocaine 5% plasters for post-herpetic neuralgia. Available at: <https://www.england.nhs.uk/wp-content/uploads/2017/11/sps-lidocaine-plasters.pdf> <Accessed 24.06.2021>
10. MIMS. Available at: <https://www.mims.co.uk> <Accessed 24.06.2021>
11. PrescQIPP CIC. Items that should not routinely be prescribed in primary care-Lidocaine plasters. Available at: <https://www.prescqipp.info/media/1415/b200-lidocaine-plasters-drop-list-30.pdf> <Accessed 24.06.2021>
12. Lidocaine 5% Medicated Plasters Barnsley Area Prescribing Committee Position Statement March 2020. Available at: <https://best.barnsleyccg.nhs.uk/clinical-support/medicines/prescribing-guidelines/Lidocaine%205%20Percent%20Medicated%20Plasters%20-%20Position%20Statement.pdf> <Accessed 24.06.2021>
13. Items which should not routinely be prescribed in primary care: Guidance for CCGs June 2019. Available at: <https://www.england.nhs.uk/wp-content/uploads/2019/08/items-which-should-not-routinely-be-prescribed-in-primary-care-v2.1.pdf> <Accessed 24.06.2021>

This guideline was ratified at the Area Prescribing Committee on 10th November 2021 (due for review November 2024).