NHS
Pan Mersey
Area Prescribing Committee

Pharmacological Management of Chronic Pain in Children

IMPORTANT: The assessment and diagnosis of chronic pain should always be carried in secondary care. GPs may normally only prescribe the medicines described below on advice from secondary care specialists once the medicine has been initiated in secondary care.

Scope: Chronic pain syndromes denoted in this guideline cover the following:

- Neuropathic pain
- Trigeminal neuralgia
- Complex regional pain syndrome
- Chronic Post-Surgical Pain (CPSP)
- Diffuse chronic pain syndromes including musculoskeletal pain syndromes, *presence of functional impairment e.g. sleep disturbance, recurrent/persistent school absences and reduced social participation.*

Oral therapy

Gabapentin (off-label) [1] 

Children from 2 – 11 years:
Day 1: 5 – 10mg/kg OD (max. single dose 300mg)
Day 2: 5 – 10mg/kg BD (max. single dose 300mg)
Day 3 onwards: 5 – 10mg/kg TDS (max. single dose 300mg)
Increase further if necessary to maximum of 20mg/kg/dose (max single dose 600mg)

From 12 years: Initially 300mg OD for day 1, then 300mg BD for day 2, then 300mg TDS for day 3, then increase in steps of 300mg every 3 – 7 days in 3 divided doses. Max daily dose 3600mg/day.

Speed of titration after the first 3 days varies between every 3 days for a fast regime to an increase every one to two weeks in debilitated children or when on other CNS depressants (to minimise adverse effects).

Pregabalin (off-label) [2] 

Children from 3 years and above:
Starting dose 1 – 2mg/kg (max 25mg) BD

Based on patient response and tolerability, dose can be increased gradually after an interval of 3 to 7 days Increase dose by 1mg/kg until

- Effective analgesia achieved or
- Side effects experienced or
- Maximum dose of 5mg/kg BD is reached

Max adult dose is 300mg BD

Dose reduction required in patients with compromised renal function.

Discontinuation should be done gradually over a minimum of ONE week.

Amitriptyline (off-label) 

Dose as per BNFc for neuropathic pain

Child 2-11 years
Initially 200-500 micrograms/kg (max 10mg per dose) nocte.
Maximum 1mg/kg BD (Max daily dose 75mg)

Child 12-17 years
Initially 10 mg nocte, increased gradually to maximum 75mg nocte.

Higher doses (> 750 micrograms/kg) or doses up to 150mg a day can be given under specialist advice

Carbamazepine (licensed) 

Typically for trigeminal neuralgia

Infants over 1 month and children

Dose as per BNFc

Prescribing policy statement Version: 2.1
APC board date: 27 Mar 2019
Review date: Mar 2021 or earlier if there is significant new evidence relating to this recommendation

Localised neuropathic pain

Lidocaine patch 5% (off-label indication)[1]

BLACK	**The Pan Mersey Area Prescribing Committee does not recommend the prescribing of lidocaine plaster 5% (Ralvo®, Versatis®), except in limited circumstances outlined below.**

The Pan Mersey Area Prescribing Committee recommends the prescribing of lidocaine plaster 5% (Ralvo®, Versatis®) for neuropathic pain ONLY following paediatric pain specialist initiation and ONLY in the limited circumstances as described below. Within these circumstances lidocaine plaster is designated amber initiated status.

AMBER INITIATED

- Patients who have been treated with oral therapy outlined in this guideline but are still experiencing neuropathic pain or where oral therapy is clinically inappropriate /not tolerated.

- **OR** for patients with neuropathic pain who are physically unable to take oral medication because of medical conditions and/or disability.

Review: A review of effectiveness after 2 -4 weeks must be carried out by the specialist who must prescribe until review occurs. This is to ensure the patient has gained worthwhile clinical benefit, and where insufficient benefit has been gained prescribing must be discontinued. Where worthwhile clinical benefit has been obtained the specialist may request the patient's GP to continue prescribing. They must provide the GP and patient with a full explanation of why lidocaine plaster is necessary (and its off-label use) and provide a further prescription sufficient to supply the patient for the time period prior to their communication reaching the GP and patient obtaining their first prescription from their GP. GP to re-assess regularly e.g. every 6 months[3].

Children from 3 – 17 years:

Apply 1 to 2 plasters to affected area(s) once daily for 12 hours followed by 12 hours plaster free period (to help reduce risk of skin reactions)

Plaster can be cut to size and shape of painful area.

Do not use on broken or damaged skin or near the eyes

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IMPORTANT POINTS:

1. Pharmacological therapy alone is unlikely to provide the best outcome for the patient and should be considered within the biopsychosocial model, alongside other non-pharmacological interventions including physiotherapy and psychology pain management strategies.
2. Most medications for neuropathic analgesia begin to take effect after 2-3 weeks of regular administration; therefore an immediate beneficial response should not be expected.
3. Although the majority of drugs recommended in this guidance are off-label, there is widespread use and considerable experience in paediatric chronic pain conditions.

4. Specialist in the context of this guidance refers to a specialist service providing treatment for the underlying health condition that is causing chronic pain e.g. neurology, rheumatology, oncology and palliative care.
5. When prescribing a medicine described in the guidance, the specialist who initiated the treatment would have considered the following:
    - Off-label use of medicine explained to patient and family. The informed patient consent will be clearly communicated in the letter to the GP.
    - Drug interaction with other concomitant medicines that the child is having
    - The balance of risk of adverse effects against the clinical benefits
6. Where a patient has failed treatment or is intolerant to a particular drug:
    - The specialist will review the treatment option and initiate an alternative drug
    - The GP will be requested to carry out on-going prescribing once patient is stabilised on the new treatment

NB: Please refer to the individual Summary of Product Characteristics for full list of cautions, contraindications, drug interactions and adverse reactions.

Primary Care prescribing

- Prescribing will be continued in primary care under amber initiated criteria.
- The specialist should provide primary care with a diagnosis and treatment plan including review dates.
- The GP should inform the specialist of any concerns or side effects associated with the drug.
- If the GP does not feel it is appropriate to take on the prescribing then the prescribing responsibilities will remain with the specialist. The GP should inform the specialist the reason for declining.

Monitoring recommendations:

- The specialist will continue to monitor and supervise treatment and review the patient.
- GPs are not expected to monitor treatment. Patient's family/carer will have been advised by the specialist to report any suspected side effects directly to them.

Potential side-effects and complications:

- Analgesia effectiveness
- Weight gain (gabapentin or pregabalin)
- Indication of abuse
  [There are concerns around the abuse potential of gabapentin and pregabalin]
- Signs of suicidal ideation and behaviours (gabapentin and pregabalin)
- Other side effects as outlined in the BNF / BNFc

How long the medicine should be prescribed for

The duration of treatment benefit may vary between individuals. Termination of treatment will be carried out by the specialist.

References:

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