City and Hackney Clinical Commissioning Group
Homerton University Hospital Foundation Trust

**SHARED CARE GUIDELINE**

# VIGABATRIN
## Treatment of epilepsy

***DOCUMENT TO BE SCANNED INTO ELECTRONIC RECORDS AND FILED IN NOTES***

## INTRODUCTION – Indication and Licensing

Vigabatrin exerts its anticonvulsant effect by selectively inhibiting GABA (gamma aminobutyric acid) transaminase, which leads to an increase in the concentration of GABA, the major inhibitory neurotransmitter in the brain.

**Licensed indications**

- **Adjunctive** treatment for patients with resistant partial epilepsy with or without secondary generalisation where all other appropriate medicinal product combinations have proved inadequate or have not been tolerated.
- **Monotherapy** in the treatment of infantile spasms (West's syndrome).

NICE CG137 recommends vigabatrin as the treatment of choice for infantile spasm (with or without tuberous sclerosis).

## PATIENT PATHWAY

| **Clinical Speciality / Indication** | **Prescribing Initiated by** | **Prescribing Continued by** ***(detail when suitable for transfer to occur)*** | **Monitored by** ***(detail when suitable for transfer to occur IF APPROPRIATE)*** | **Duration of treatment** |
|---|---|---|---|---|
| Neurology/ Epilepsy | Consultant Epileptologist | GP to take over after 2 months or after the patient has been titrated to a stable therapeutic dose. | Effect on seizure control monitored by hospital and GP. | Indefinite if treatment tolerated and effective. |

**Reviews & dosing adjustments**

- The patient will be followed up by the epilepsy specialist team at the hospital for review of treatment efficacy and tolerability. The patient will be given contact details for the team.
- Dosing adjustments are to be undertaken by the hospital and this information communicated to the GP in writing within 14 days.
- Correspondences from GP should be addressed to the 'Consultant Epileptologist' and NOT to neurology.

## ORAL DOSE AND ADMINISTRATION

| | **Initial** | **Titration** | **Maximum dose** |
|---|---|---|---|
| Adjunctive dosing in adults | 1g daily in single or 2 divided doses | Increase according to response in steps of 500 mg at weekly intervals according to response and tolerability.<br>*Usual maintenance dose:* 2–3g daily. | 3g/day |
| Adjunctive dosing in neonates and children up to 12 years | 15–20 mg/kg (max. 250 mg) twice daily | Increase over 2–3 weeks according to response and tolerability.<br>*Usual maintenance dose:* 30–40 mg/kg twice daily | **Neonate–2 years**<br>75 mg/kg twice daily<br>**2–12 years**<br>1.5 g twice daily |
| Adjunctive dosing in 12–18 years | 250 mg twice daily | Increase over 2–3 weeks according to response and tolerability.<br>*Usual maintenance dose:* 1–1.5 g twice daily | 3g/day |
| Infantile spasms (West's syndrome), monotherapy | 15–25 mg/kg twice daily | Adjust according to response over 7 days<br>*Usual maintenance dose:* 40–50 mg/kg twice daily | 75 mg/kg twice daily |

**Note neonate and child vigabatrin doses are based on the BNF and may differ from those in the product literature.**

**Other considerations:**

- **Potential childbearing age** – discuss with the epilepsy specialist team regarding the benefits of treatment, risks in pregnancy and contraceptive advice. All women with epilepsy should be advised to take 5 mg daily of folic acid prior to conception and to continue taking this until at least the end of the first trimester to reduce the incidence of major congenital malformation.
- **Driving** – advise the patients to inform the Driver and Vehicle Licensing Agency (DVLA) about their epilepsy. See the Epilepsy Action website for more information.

## CAUTIONS

- **Older people and patients with renal impairment (CrCl <60ml/min)** - consider reduced dose or increased dose interval.
- **Suicidal ideation and behaviour** have been reported in patients treated with anti-epileptic medicinal products in several indications. The available data do not exclude the possibility of an increased risk for vigabatrin.
- **History of psychosis, depression or behavioural problems.**
- **Absence seizures** – may be exacerbated.

## CONTRAINDICATIONS

- Visual field defects.

## INTERACTIONS

- Interactions with other medicinal products are unlikely as vigabatrin is neither metabolised, nor protein bound and is not an inducer of hepatic cytochrome P450 drug metabolising-enzymes.
- **Fosphenytoin and phenytoin** – plasma concentration reduced by vigabatin (mechanism unknown).
- **Anticonvulsant effect of antiepileptics reduced by**: selective serotonin reuptake inhibitors, tricyclic (and related) antidepressants, monoamine oxidase inhibitors, antipsychotics, mefloquine and orlistat.

## MONITORING STANDARDS FOR MEDICATION AT THE ACUTE NHS TRUST

**Visual field test by perimetry** – to be done at baseline (prior to drug initiation), then at 6 month intervals thereafter (for the whole duration of treatment). The Consultant Epileptologist is responsible for referring the patient and ensuring that the patient receives ongoing visual assessments.

**Seizure diary**

- The patient will be given a seizure recording diary, which they will be encouraged to use for the first 6 months of therapy. The patient will be able to record in the diary the nature of the seizure and frequency, and any side effects or problems that they experienced with the treatment.
- A pdf copy of the seizure diary and the Epilepsy Toolkit smartphone app can be downloaded from the Epilepsy Society website (see page 4).

## KEY ADVERSE EFFECTS & ACTIONS

| **Adverse effects** | **Symptoms/signs** *(specify what would prompt action)* | **Actions (***what action should the GP take if identified in primary care)* |
|---|---|---|
| Visual field defects (prevalence in 1/3 of patients). Irreversible after drug discontinuation | May begin with bilateral nasal field loss, this is typically asymptomatic therefore necessitating formal visual field perimetry screening. Note blurred vision, diplopia and nystagmus are also common. | Refer to an Ophthalmologist if visual symptoms develop. **Stop medication** after discussion with the specialist team. |
| Neurological and psychiatric conditions | Speech disorder, drowsiness, fatigue and impaired concentration, marked sedation, stupor and confusion. Excitation or agitation in children. | **Reduce dose** after discussion with the specialist team. |
| Eye disorders | Double vision (very common ≥10%), blurred vision and visual disturbances. | **Reduce dose if severe** after discussion with the specialist team. |
| Gastrointestinal problems | Nausea, vomiting and abdominal pain | **Reduce dose if severe** after discussion with the specialist team. |

**Patients should be monitored for signs of suicidal ideation and behaviours and appropriate treatment should be considered. Patients and their carer should be advised to seek medical advice should signs of suicidal ideation or behaviour emerge.**

**The SCG lists only the key information. Please refer to the current British National Formulary and Summary of Product Characteristics for comprehensive information on cautions, contraindications, interactions and adverse effects.**

## PREGNANCY AND BREAST FEEDING

- **Pregnancy** – abnormal outcomes (congenital anomalies or spontaneous abortion) were reported in the offspring of mothers taking vigabatrin. No definite conclusion can be drawn as to whether vigabatrin produces an increased risk of malformation when taken during pregnancy because of limited data and the presence of concomitant antiepileptics. **The specialist team will discuss options with the patient.** All pregnant women with epilepsy, whether taking medication or not, should be encouraged to **notify the UK Epilepsy and Pregnancy Register** (Tel: 0800 389 1248).
- **Breastfeeding** – vigabatrin is excreted into human milk. The specialist team will discuss with the patient.
- **Fertility** – there are no human data on fertility. In rats, vigabatrin had no effects on fertility.

**For comprehensive information please refer to the current British National Formulary and Summary of Product Characteristics.**

## SHARED CARE

**Shared care guideline*:*** is a document which provides information allowing patients to be managed safely by primary care, secondary care and across the interface. It assumes a partnership and an agreement between a hospital specialist, GP and the patient and also sets out responsibilities for each party. The intention to shared care should be explained to the patient and accepted by them. Patients are under regular follow-up and this provides an opportunity to discuss drug therapy. Intrinsic in the shared care agreement is that the prescribing doctor should be appropriately supported by a system of communication and cooperation in the management of patients. The doctor who prescribes the medicine has the clinical responsibility for the drug and the consequence of its use**.**

### Consultant

1. Ensure that the patient/carer is an informed recipient in therapy.
2. Ensure that patient/carer understands their treatment regimen and any monitoring or follow up that is required (using advocacy if appropriate). Issue any local patient information leaflets where appropriate.
3. Ensure baseline investigations are normal before commencing treatment.
4. Initiate treatment and prescribe until the GP formally agrees to share care (as a minimum, supply the first month of treatment or until patient is stabilised).
5. Send a letter to the GP requesting shared care for this patient.
6. Clinical supervision of the patient by routine clinic follow-up on a regular basis.
7. Send a letter/results notification to the GP after each clinic attendance ensuring current dose, and if applicable, most recent blood results and frequency of monitoring are stated.
8. Evaluation of any reported adverse effects by GP or patient.
9. Advise GP on review, duration or discontinuation of treatment where necessary. Where urgent action is required following tests the hospital team will telephone the patient and inform GP.
10. Inform GP of patients who do not attend clinic appointments.
11. Discuss benefits of treatment, risks in pregnancy and breastfeeding with the patient. Counsel the patient on contraception (if appropriate) and what to do if pregnancy occurs. Document in the patient's notes.
12. Ensure that backup advice is available at all times.

### General Practitioner

1. Ensure that the patient/carer understands the nature, effect and potential side effects of the drug before prescribing it as part of the shared care programme and contact the specialist for clarification where appropriate.
2. Monitor patient's overall health and well-being.

3. Report any adverse events to the consultant, where appropriate.
4. Report any adverse events to the MHRA / CHM, where appropriate.
5. Help in monitoring the progression of disease.
6. Prescribe the drug treatment as described.
7. Provide contraception advice and prescription as appropriate. Prescribe folic acid if appropriate.

**City and Hackney Medicines Management Team**

1. To provide feedback to acute trusts via Joint Prescribing and Medicines Management Group.
2. To support GPs to make the decision whether or not to accept clinical responsibility for prescribing.
3. To support acute trusts in resolving issues that may arise as a result of shared care

**Patient/ Carer**

1. Report any adverse effects to their GP and/or specialist
2. Ensure they have a clear understanding of their treatment.
3. Report any changes in disease symptoms to GP and/or specialist
4. Alert GP and/or specialist of any changes of circumstance which could affect management of disease e.g. plans for pregnancy.
5. Take/ administer the medication as prescribed.
6. Undertake any monitoring as requested by the GP and/or specialist.

**Costs**

| Drug Product | Cost in primary care |
|---|---|
| Sabril® (Vigabatrin) film coated tablets | 500 mg, 100-tab pack = £44.41 |
| Sabril® (Vigabatrin) sugar-free granules | 500 mg/sachet, 50-sachet pack = £24.60 |

Based on BNF edition 73 (March 2017).

## RESOURCES AVAILABLE

- Epilepsy Society accessible via https://www.epilepsysociety.org.uk
- Epilepsy Action accessible via https://www.epilepsy.org.uk

| Relevant contact details | |
|---|---|
| Consultant or Registrar on-call via switchboard | 020 8510 5555 |
| Clinical Nurse Specialist | 020 8510 5912 |
| Homerton University Hospital NHS Foundation Medicines Information | 020 8510 7000 |
| City and Hackney Medicines Management Team | 0203 816 3224 |

**References**


- SCG template adapted from NELMMN and Barts Health NHS Trust
- Joint Formulary Committee British National Formulary edition 73. Available at https://ebnf.homerton.nhs.uk [accessed 08/06/2017].
- Summary of product characteristics – Sabril® 500 mg film-coated tablets. Available at www.medicines.org.uk [accessed 09/06/2017].
- Royal College of Obstetricians & Gynaecologists. Epilepsy in pregnancy, green-top guideline 68. Available at https://www.rcog.org.uk/globalassets/documents/guidelines/green-top-guidelines/gtg68_epilepsy.pdf [accessed 21/06/2017].


Date SCG approved by Joint Prescribing Group (JPG): 10/2017 Review date: 10/2020