

South East London treatment pathway: Anti-epileptic drug therapy for focal epilepsy in adults

Investigate and start treatment as a rule if 2 or more consecutive seizures ; single seizures are often not treated

Initiation by Specialist – General Information

- Drug of first choice: carbamazepine, lamotrigine, levetiracetam (as per NICE guidance)
- Choice is dependent on individual patient; treatment is discussed with the patient to ensure a clear understanding including side effect profile and individualised dose escalation. All plans will be detailed in the clinic letter to the GP, which will be received within **10** days for all patients.
- All patients will have follow up in secondary care in the first few months (within six months). They are encouraged to make an appointment with the GP within one month of diagnosis, where the GP can review general monitoring parameters* (see overleaf for details) and refer any queries to secondary care
- Where available referral to a specialist epilepsy nurse at the point of diagnosis is recommended

If seizure free at follow up

If seizures continue at follow up

Primary care management

Follow up in primary care, unless specific reason present for additional secondary care follow up.

Annual monitoring in primary care of electrolytes, liver and bone profile, FBC, Vitamin D, cholesterol (if on enzyme inducing Antiepileptic Drugs (AED)), folate and AED levels where indicated. Also general monitoring parameters* (see overleaf details).

Refer back to specialist if:

- Recurrence of seizures
- Adverse events
- For preconception assessment and advice
- In the event of unplanned pregnancy
- If drug withdrawal considered (e.g. if patient has been seizure free for >2 years): **NB:** risk of recurrence is up to 40% expert counselling is crucial.
- **Any** girl and woman of child bearing age taking valproate:** **NB:** whilst review is pending, highly effective contraception is essential.
- Any other concerns

If seizure free at follow up

If seizure free at follow up

Secondary and tertiary care management

Diagnosis and aetiology reviewed in secondary care by specialist, and investigated appropriately. Other factors including lifestyle and adherence reviewed.

Individualised decision regarding what the next steps are:

- Consider aiming for monotherapy with another first line drug (carbamazepine, lamotrigine, levetiracetam) **OR**
- If significant improvement and good tolerance with the first drug adding in another first line agent (carbamazepine, lamotrigine, levetiracetam) or a second line drug from clobazam, eslicarbazepine, gabapentin, lacosamide, oxcarbazepine, phenytoin, pregabalin, sodium valproate **, tiagabine, topiramate, zonisamide
- Clinic letter will describe individualised titration plans
- When aiming for monotherapy usually the new drug will be introduced and its tolerability and effect established before a gradual dose reduction of initial agent is started. All individualised plans will be detailed in the clinic letter. **All changes to be made in a gradual and planned manner.**
- Patients will be followed up in secondary care and reviewed
- Consider rescue medication with benzodiazepines . (First line - Buccal Midazolam).

If seizures continue at follow up

Secondary care specialist will maintain AED which has provided the best response without significant side effects and consider initiation of any of the other AED listed above as adjuncts

If seizures continue at follow up

Refer to a tertiary specialist

Review other factors including lifestyle and adherence

- Consider brivaracetam, perampanel, phenobarbital, vigabatrin. **Note:** Brivaracetam can be initiated and prescribed in accordance with the SEL Area Prescribing Committee [recommendation](#) issued in July 2016.
- Re-assessment of aetiology and diagnosis and look for rarer genetic or metabolic causes
- Video telemetry to classify seizures
- High resolution MRI (epilepsy protocol)
- Assess dissociative seizures/psychiatric disorders and refer as needed to neuropsychiatry
- Review of AED history and current regime
- Consider other treatment options:
- Epilepsy Surgery, Vagal nerve, Stimulation, external Trigeminal Nerve Stimulation, Ketogenic diet, Clinical trials

**Valproate should not be prescribed to girls, women of child bearing age or pregnant women unless other treatments are ineffective or not tolerated, if prescribed patients will need to be on the Valproate Pregnancy Prevention Programme (Prevent). See [MHRA Guidance Mar 2018: Valproate use by women and girls](#) and [MHRA Valproate Pregnancy Prevention Programme toolkit](#) for full details.

Anti-Epileptic Drug Treatment of Focal Epilepsy in adults - Supporting Information

General Counselling points for all health care professionals to be discussed with all patients:

- Implications of seizures on driving license, work and independence – Travel concessions are available
- Safety in every day tasks e.g. bathing
- Lifestyle and potential seizure triggers
- Risk associated with epilepsy including to life (accidental or Sudden Unexpected Death in Epilepsy (SUDEP))
- As appropriate, suicidal ideation and behaviour changes with AEDs
- Allergic drug reactions secondary to AEDs
- As appropriate, highly effective contraception and family planning advice including potential teratogenic effects of AEDs e.g. Valproate Pregnancy Prevention Programme (Prevent)** – [MHRA Guidance Mar 2018: Valproate use by women and girls](#)
- **Please Note : Specialists MUST complete an Annual Risk Acknowledgement form and provide a Prevent patient guide to girls and women of child bearing age prescribed valproate. Primary care clinicians should ensure they have a copy of the signed Annual Risk Acknowledgment form, the patient has a copy and a Prevent patient guide.**
- Provision of information around bone health as appropriate
- All patients on AED for epilepsy are entitled to prescription exemptions

*General Monitoring Parameters to consider when reviewing patients with Epilepsy:

- Blood tests as per **annual monitoring**
- Adherence to treatment plans
- Seizure frequency
- Side effects of medications
- Bone health
- Contraception/Pregnancy planning
- Changes to lifestyle e.g. alcohol consumption
- Compliance with driving regulations

Enzyme Inducing AEDs

Strong Inducers

- Carbamazepine
- Eslicarbazepine
- Oxcarbazepine
- Phenobarbital
- Phenytoin
- Primidone

Less potent inducers

- Topiramate

AEDs may be associated with adverse drug reactions. These are individual to each drug and the SPC for each drug should be consulted for further information.

Potential side effects include (but are not limited to):

- Allergic Reactions
- Seizure Exacerbation
- Suicidal Ideation
- Mood disturbances
- Teratogenic effects
- Effects on weight
- Dizziness
- Double vision
- Unsteadiness
- Sedation

The Information above is not exhaustive. Please consult the current Summary of Product Characteristics (SPC) for the individual drug prior to prescribing, for up to date information on adverse effects, drug interactions, cautions and contraindications (available via www.medicines.org.uk)

MHRA Advice on switching between different manufacturers' products for a particular AED drug

- Different AEDs vary considerably in their characteristics, which influences the risk of whether switching between different manufacturers' products of a particular drug may cause adverse effects or loss of seizure control
- No switching between manufacturers should occur without the patient being informed and consented
- AEDs have been divided into three categories to help healthcare professionals decide whether it is necessary to maintain continuity of supply of a specific manufacturer's product
- If it is felt desirable for a patient to be maintained on a specific manufacturer's product, this should be prescribed either by specifying a brand name, or by using the generic drug name and name of the manufacturer (otherwise known as the Marketing Authorisation Holder)
- Please report on a Yellow Card any suspected adverse reactions to AEDs (www.mhra.gov.uk/yellowcard)
- This advice relates only to AED use for treatment of epilepsy; it does not apply to their use in other indications (e.g. mood stabilisation, neuropathic pain). See: <http://www.mhra.gov.uk/Safetyinformation/DrugSafetyUpdate/CON336716>

Useful Resources:

- DVLA driving information - <https://www.gov.uk/epilepsy-and-driving>
- Antiepileptic Drugs and Contraception - Faculty of Sexual and Reproductive Healthcare - http://www.fsrh.org/pages/clinical_guidance.asp
- Epilepsy and Pregnancy Register - www.epilepsyandpregnancy.co.uk
- NICE Guidance: The Epilepsies; the diagnosis and management of the epilepsies in adults and children in primary and secondary care; January 2012 - <http://www.nice.org.uk/guidance/cg137>
- MHRA Drug Safety Update 2013 - <http://www.mhra.gov.uk/Safetyinformation/DrugSafetyUpdate/CON336716>
- MHRA Update 2018 - [MHRA Guidance Mar 2018: Valproate use by women and girls](#)

Epilepsy Charities can provide useful information for healthcare professionals and patients and include (but not limited to):

- Epilepsy Society www.epilepsysociety.org.uk
- Epilepsy Action www.epilepsy.org.uk
- Epilepsy Research UK www.epilepsyresearch.org.uk
- SUDEP Action www.sudep.org
- Young Epilepsy www.youngepilepsy.org.uk

Written by: Neurology consultants and Neurology Lead Pharmacist, King's College Hospital with support from Southwark CCG Medicines Optimisation Team.
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South East London Area Prescribing Committee. A partnership between NHS organisations in South East London: Bexley, Bromley, Greenwich, Lambeth, Lewisham and Southwark Clinical Commissioning Groups (CCGs) and GSTFT/KCH/SLAM/SLHT/LHT/Oxleas hospital trusts