NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Guideline

Epilepsies in children, young people and adults: treatment for self-limited epilepsy with centrotemporal spikes

Draft for consultation, May 2026

This is an update to NICE guideline NG217 (published April 2022 and previously updated January 2025). We have:

- reviewed the licensed status for treatments recommended for self-limited epilepsy with centrotemporal spikes including the UK licencing approval of sultiame in January 2025
- searched for any new evidence on treatments for self-limited epilepsy with centrotemporal spikes and found none
- appointed an expert working group to advise on any changes to recommendations
- amended the recommendations.

Who is it for?

- Healthcare professionals in primary, secondary and tertiary care
- Commissioners, providers and voluntary organisations
- People with epilepsy, their families and carers.

What does it include?

- the updated recommendations
- some recommendations that have not been updated (shaded in grey and marked **[2022]**), provided for context
- rationale and impact section that explains why the expert working group made the 2026 recommendations and how they might affect practice.

Information about how the guideline was developed is on the guideline's webpage. This includes the updated evidence review, details of the expert working group and any declarations of interest.

New and updated recommendations

You are invited to comment on the updated recommendations. These are marked as **[2026]**.

You are also invited to comment on the recommendation that we propose to delete from the 2022 guideline.

We have not reviewed the evidence for the recommendations marked **[2022]** (shaded in grey), and cannot accept comments on them.

Sections of the guideline that have had no changes at all have been temporarily removed for this consultation and will be re-instated when the final guideline is published. See the current version of the guideline.

See update information for a full explanation of what is being updated.

Full details of the evidence and the working group's discussion on the 2026 recommendation are in the evidence reviews.

Contents

Treating childhood-onset epilepsies

6.4 Self-limited epilepsy with centrotemporal spikes

People have the right to be involved in discussions and make informed decisions about their care, as described in NICE's information about shared decision making.

Making decisions using NICE guidelines explains how we use words to show the strength (or certainty) of our recommendations, and has information about prescribing medicines (including off-label use), professional guidelines, standards and laws (including on consent and mental capacity), and safeguarding.

Healthcare professionals should follow our general guidelines for people delivering care:

- Babies, children and young people's experience of healthcare
- Decision making and mental capacity
- Medicines adherence
- Medicines optimisation
- Multimorbidity
- Patient experience in adult NHS services
- Shared decision making
- Transition from children's to adults' services

Discussing starting treatment

6.4.1 Discuss with children and young people with self-limited epilepsy with centrotemporal spikes, and their families or carers as appropriate, whether they wish to start treatment. In particular, discuss:

- frequency and severity of seizures
- possible hazards of ongoing seizures (including the small risk of death)
- possible side effects of treatment. **[2022]**

First-line treatment

6.4.2 Consider lamotrigine or levetiracetam as first-line monotherapy treatment for self-limited epilepsy with centrotemporal spikes. If either lamotrigine or levetiracetam is unsuccessful, try the other of these options. **[2022, amended 2026]**

In May 2026, these were off-label uses of lamotrigine in under 13s, and levetiracetam in under 16s. See NICE's information on prescribing medicines.

Second-line treatment

6.4.3 If first-line treatments for self-limited epilepsy with centrotemporal spikes are unsuccessful, consider any of the following as second-line monotherapy treatment options:

- carbamazepine **[2022]**
- oxcarbazepine **[2022]**
- sultiame **[2026]**
- zonisamide. **[2022]**

If the first choice is unsuccessful, consider any of the other second-line monotherapy options.

Sultiame should only be prescribed by, or on the advice of, a paediatric epilepsy specialist.

In May 2026, these were off-label uses for oxcarbazepine in children under 6 years, and zonisamide in children. See NICE's information on prescribing medicines.

Other treatment considerations

6.4.4 Be aware that carbamazepine, oxcarbazepine and lamotrigine may rarely exacerbate seizures or the development of another epilepsy syndrome, or affect cognitive performance, in a small number of children and young people with self-limited epilepsy with centrotemporal spikes. **[2022]**

6.4.5 If there is concern about the school performance of a child or young person having antiseizure medication, seek guidance from an epilepsy specialist and consider:

- sleep electroencephalogram (EEG) to exclude exacerbation of epileptic activity (electrical status epilepticus during sleep) **and**
- neuropsychology assessment to review academic performance. **[2022]**

6.4.6 If a child or young person having antiseizure medication treatment develops other seizure types, consider a sleep EEG to exclude exacerbation of epileptic activity (developmental epileptic encephalopathy with spike-wave activation in sleep). **[2022]**

6.4.7 Offer follow up at a frequency and with a healthcare professional appropriate to the child or young person's individual needs. Discuss discontinuing treatment if a child or young person with self-limited epilepsy with centrotemporal spikes is seizure-free for at least 2 years or at age 14 years. **[2022]**

For a short explanation of why the committee made these recommendations and how they might affect practice, see the rationale and impact section on self-limited epilepsy with centrotemporal spikes.

Full details of the evidence and the committee's discussion are in evidence review Q: effectiveness of antiseizure medications for self-limited epilepsy with centrotemporal spikes.

Rationale and impact

This section briefly explains why the committee made the recommendations and how they might affect practice.

Self-limited epilepsy with centrotemporal spikes

Recommendations 6.4.1 to 6.4.7

Why the committee made the recommendations

Children will grow out of self-limited epilepsy with centrotemporal spikes by their early teens. Some only have infrequent seizures, which have little impact on wellbeing. Therefore, not all children and young people and their families will choose antiseizure medicine. The committee acknowledged the importance of discussing the balance of risks and benefits of treatment compared with no treatment, with the child or young person and their family or carers, and agreed on some important factors that should form part of a full discussion about treatment. They also agreed that the risk of sudden unexpected death in epilepsy (SUDEP) should be discussed, and reassurance given that this is very rare.

The committee members were confident, based on their experience and knowledge, that current practice using antiseizure medications is effective at controlling seizures in children and young people with self-limited epilepsy with centrotemporal spikes.

There was a lack of evidence on antiseizure medications for self-limited epilepsy with centrotemporal spikes, but because these children and young people usually have focal seizures, the committee agreed to use the evidence on monotherapy for treating focal seizures to inform the recommendations for first- and second-line treatments. This evidence showed that lamotrigine and levetiracetam were continued for longer than other drugs for treating focal epilepsy, suggesting that they may be more effective and better tolerated. However, the evidence also suggested they were not more effective than other drugs in terms of remission at 6 and 12 months, and the evidence for time to first seizure suggested they were less effective than carbamazepine.

The evidence on focal seizures suggested that lamotrigine, levetiracetam and gabapentin may have more tolerable adverse events than other drugs. However, adverse events were reported inconsistently across the studies making comparisons between drugs difficult. The committee also agreed that, for most drugs, adverse events could be managed by careful titration and dosage changes.

Based on the evidence for focal seizures, the committee agreed that lamotrigine and levetiracetam should be considered as first-line treatment options, and

carbamazepine, oxcarbazepine or zonisamide as second-line monotherapy treatments.

In 2026, we reviewed the licensed status for treatments recommended for self-limited epilepsy with centrotemporal spikes following the UK licencing of sultiame in January 2025. We searched for any new evidence on treatments but found none. The existing evidence on self-limited epilepsy with centrotemporal spikes showed that sultiame is effective for reducing seizures, and so the expert working group agreed that it should also be available as an option for second-line monotherapy. Sultiame was not recommended as a first-line option because the evidence was limited to 2 small studies with a high number of dropouts. The second-line treatments were listed alphabetically because there was no evidence that 1 treatment was better than the others.

The committee noted that, in line with guidance from the MHRA, clinicians should be aware of the risks of serious complications associated with carbamazepine and potentially medicines with a similar chemical structure (such as oxcarbazepine and eslicarbazepine acetate) for people of Han Chinese, Thai, European or Japanese family background.

In addition, in line with the MHRA, the committee emphasised that long-term treatment with carbamazepine can cause decreased bone mineral density and increased risk of osteomalacia. The committee noted that appropriate supplementation should be considered for those at risk.

The committee noted that in their experience, carbamazepine, oxcarbazepine and lamotrigine are sometimes associated with increased seizures or the development of another epilepsy syndrome. The committee recognised that only a small number of children are likely to be affected by these problems, but agreed that any change should prompt a sleep electroencephalogram (EEG) to exclude developmental epileptic encephalopathy with spike-wave activation in sleep, which may indicate an atypical form of self-limited epilepsy with centrotemporal spikes. The committee agreed that poor school performance should also prompt a neuropsychology assessment.

Based on their experience, the committee agreed that these children and young people will have varied needs for review, for example, depending on frequency of seizures and choice of treatment. Regular reviews are important to prevent children and young people continuing on unnecessary treatment and allow discussion of stopping treatment. The committee agreed that this should usually happen when the child has been seizure-free for 2 years or at age 14 years.

How the recommendations might affect practice

The recommendations are not likely to change current practice, but should reinforce best practice.

Return to recommendations

Finding more information and committee details

To find NICE guidance on related topics, including guidance in development, see the NICE topic page on epilepsy.

For details of the guideline committee see the committee member list.

Update information

May 2026

We have searched for any new evidence on treatments for self-limited epilepsy with centrotemporal spikes and reviewed the licensed status for treatments following the UK licencing of sultiame in January 2025. No new evidence was found and an expert working group was formed to agree any changes to recommendations.

Recommendations are marked **[2026]** if the evidence has been reviewed.

Recommendations that have been deleted

We propose to delete a recommendation from the 2022 guideline. Table 1 sets out this recommendation and an explanation for the proposed deletion.

See also the previous NICE guideline and supporting documents.

Table 1 Recommendations that have been deleted

Recommendation in 2022 guideline	Comment
If second-line treatments tried are unsuccessful for self-limited epilepsy with centrotemporal spikes, consider sulthiame as monotherapy or add-on treatment, but only after discussion with a tertiary paediatric neurologist. (6.4.4).	This recommendation has been deleted because sultiame is now included as a second-line monotherapy treatment option in recommendation 6.4.3. We have aligned with British National Formulary (BNF), international non-proprietary name, British approved name and the NHS dictionary of medicines and devices regarding the spelling of sultiame.