Top 10 Guidelines for Following up a Person with Epilepsy

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Abstract

The "Vlaams Netwerk Zeldzame Ziektes / Epilepsy (VNZZ)" has in recent years worked on a number of guidelines that can be used in the follow-up of a person with new or already known epilepsy. The VNZZ/epilepsy consists of representatives of first (Domus Medica), second (regional hospitals) and third line (university centres and epilepsy centres), with also members of the Flemish Epilepsy League and patient associations (RadiOrg, Ikaros). The guidelines should improve the cooperation between the different lines in medical care, so that every person with epilepsy can be followed correctly by the general practitioner, paediatrician and (paediatric) neurologist. It will also allow the difficult-to-treat patient to be referred adequately and quickly enough to the more specialised third line, for expert diagnosis and treatment. Although these guidelines are made both for children and adults with epilepsy, we believe also the paediatrician can benefit from the insights more specifically relevant for adults.

1. The Epilepsy Patient at the General Practitioner / Paediatrician

Annual Routine Check-up

Although the follow-up of individuals with active epilepsy is primarily carried out by a (paediatric) neurologist, they should also be seen at least once a year by their general practitioner (GP) or paediatrician.

During routine check-ups, inquiries should be made about seizure frequency, medication adherence, side effects, and other epilepsy-related problems. The GP or paediatrician should also review the individual seizure management plan, which has been drawn up in collaboration with the (paediatric) neurologist.

In individuals whose epilepsy has been well-controlled for several years, care and follow up may be managed by the GP or paediatrician. This may be less applicable to young children with epilepsy, where treatment adjustments may be needed more frequently. Even then, it is advised to schedule at least an annual structured check-up.

Referral back to the (paediatric) neurologist is recommended in the event of seizure recurrence, medical problems interfering with seizure control, major life events (such as start anticonceptive

medication, pregnancy), or consideration of tapering anti-seizure medication.

Measuring Serum Levels of Anti-Epileptic Drugs

Routine monitoring of anti-seizure drug (ASM) serum levels is not recommended. Measurements should only be done when clearly indicated and interpreted within the clinical context. Reference values for "therapeutic levels" are population-based averages and may differ for individual patients. It is therefore not always necessary to adjust the dose for slight sub- or supra-therapeutic levels in the absence of seizures or side effects.

Situations where serum level measurement may be useful:

- Suspected non-adherence
- Expected pharmacokinetic changes (e.g., starting/stopping interacting medications, renal/hepatic disease, changes in ASM formulation, pregnancy).
- Treatment-resistant epilepsy (persistent seizures despite usually adequate dosage or recurrence after a seizure-free period).
- Suspected side effects (especially nonspecific symptoms or when communication about side effects is limited, such as in children or individuals with cognitive impairments or altered consciousness).
- Monitoring phenytoin, which has non-linear kinetics; small absorption differences or interactions may lead to loss of efficacy or toxicity.

If possible, measure trough levels (blood sample taken just before the next dose).

Certain life stages with increased pharmacokinetic variability may justify more frequent monitoring to allow dosage adjustments:

- Children: age-dependent variability in absorption/metabolism.
- Pregnancy: increased metabolism can lower serum levels.
- Elderly: less predictable pharmacokinetics, large inter-individual variation. Laboratories usually determine the total plasma concentration, but only the unbound fraction is pharmacologically active. This is especially relevant for protein-bound drugs like valproate and phenytoin. Changes in blood protein (e.g., due to liver disease, old age) can alter the free drug fraction.

Blood Tests for General Chemical and Hematologic Parameters

Various ASMs can induce chemical or hematologic abnormalities (e.g., elevated liver enzymes, blood cell changes like thrombocytopenia with valproate, or hyponatremia with oxcarbazepine). Routine monitoring is not indicated. Extended testing is warranted when side effects are suspected.

A one-time baseline check several weeks after starting ASMs may be helpful for drugs like phenytoin, phenobarbital, valproate, lamotrigine (complete blood count (CBC) and liver enzymes), or carbamazepine and oxcarbazepine (CBC, liver enzymes, sodium). For valproate, clotting parameters and bleeding time should be checked prior to surgery.

Screening for Osteoporosis

People with epilepsy have an increased fracture risk. This is due to seizures, medication-induced sedation or ataxia, or underlying disability (e.g., wheelchair use). ASMs - especially carbamazepine, phenytoin, phenobarbital, topiramate, and valproate - can reduce bone mineral density. The first four induce vitamin D metabolism; valproate and topiramate may also increase osteoporosis risk via unknown mechanisms.

Patients on these ASMs should be advised to get adequate exercise and consume sufficient calcium and vitamin D. Annual vitamin D level checks and supplementation as needed are also recommended (1).

2. When to Refer to a (Paediatric) Neurologist

New Diagnosis of Epilepsy

A diagnosis of epilepsy must be made by a (paediatric) neurologist. This involves a (hetero)anamnesis about seizure episodes, review of any home videos, EEG, brain MRI, and possibly genetic or immunologic tests (2). Additional exams like cardiac evaluation, polysomnography, or seizure recording may be needed to differentiate epilepsy from mimics such as migraine, syncope, parasomnias, psychiatric disorders, etc.

Follow-up

Once epilepsy is diagnosed, the medical record should include the seizure type, syndrome classification, underlying etiology, last seizure date, and seizure frequency, current treatment and also co-morbidities. Changes in frequency or seizure characteristics require prompt referral.

Most patients with active epilepsy should have at least annual follow-up with a (paediatric) neurologist. This consultation addresses seizures, medication side effects, and the psychosocial/societal impact (including fitness to drive). Children, individuals with intellectual disabilities, or those with significant comorbidities often require more frequent follow-up.

The treatment goal is seizure freedom without side effects and with good quality of life. If seizure freedom is not achieved after two adequately dosed ASM trials, referral to a specialized epilepsy centre is necessary. Non-drug treatments (surgery, vagus nerve stimulation, deep brain stimulation, ketogenic diet) should then be considered.

Additional consultations may be warranted in case of:

- Pregnancy or pregnancy planning – short-term referral to a neurologist.
- Newly emerging comorbidities (e.g., anxiety, depression, cognitive decline, behavioural problems) – may be related to the condition or medication.
- Severe allergic or idiosyncratic reactions within 6–12 weeks of starting ASMs (especially lamotrigine, phenytoin, carbamazepine, oxcarbazepine, cenobamate):
  - Painful skin rash with blisters or peeling and fever
  - Bleeding or bloody crusts on lips, tongue, gums, palate, or inside cheeks
  - Genital mucosal bleeding
  - Red, burning eyes (conjunctivitis)
  - Malaise, confusion, cognitive impairment
  - Fever
  - Swollen lips, mouth, throat, or face
  - Swollen lymph nodes
  - Leukopenia or aplastic anaemia – urgent recognition required
- After 2 years of seizure freedom – medication tapering can be considered (especially in children) and should be discussed with a (paediatric) neurologist.

3. Epilepsy and Pregnancy

See also review paper (3).

There are several important risk factors related to epilepsy and pregnancy requiring a multidisciplinary approach involving GP, gynaecologist, and neurologist.

Seizure frequency can change significantly during pregnancy:

- In 30%: increased frequency (check adherence).
- In 20%: decreased frequency.
- In 50%: no change.

There is an increased risk of birth defects due to ASM use during pregnancy. The risk of major congenital malformations in the general population is 2–3%, with ASM use 3–10% Preconception counselling for optimal treatment is essential. The priority is seizure control, preferably with the lowest effective ASM dose. Women should not enter pregnancy unmedicated. Monotherapy is preferred. Divide the daily dose over 3–4 intakes.

Risk of major malformations by ASM:

- Valproate: 10% at ≥700 mg/d, 23–24% at ≥1500 mg/d
  → should be avoided
- Lamotrigine: ~2–3% at <300 mg/d, 4% at ≥300 mg/d
- Phenobarbital: ~4% at <150 mg/d, 10% at ≥150 mg/d
- Carbamazepine: ~3–5% at <1000 mg/d, 8% at ≥1000 mg/d
- Levetiracetam: ~3%

Lamotrigine and levetiracetam appear to carry the lowest risk and are well-studied.

Folic Acid Supplementation

Start ≥1 month before conception and continue through the first trimester:

- 0.4 mg/day (standard)
- 4 mg/day in case of: known deficiency, neural tube defect in a previous pregnancy, or folate-related disorders

During Pregnancy

- Long seizures, repeated seizures, or seizure-related trauma
  → consult a gynaecologist to assess foetal status
- New tonic-clonic seizures in the third trimester
  → urgent gynaecologic evaluation to exclude eclampsia

ASM Serum Levels in Pregnancy

Hormonal changes can significantly affect drug levels.

- Lamotrigine: clearance may double
  → dosage may need to be increased 2–3×
- Oxcarbazepine: up to 36% lower levels
- Levetiracetam: up to ~50% lower levels
- Phenobarbital: up to 50% lower levels
- Valproate, phenytoin, carbamazepine: little change

Recommendation: For lamotrigine, oxcarbazepine, and levetiracetam, check serum levels monthly preconception and throughout pregnancy; adjust dosage if levels drop substantially.

Breastfeeding

No absolute contraindication.

However, monitor the infant for sedation if the mother is using phenobarbital or benzodiazepines. Avoid abrupt weaning, as it may cause withdrawal symptoms in the baby (e.g., irritability, tremors, insomnia).

4. Epilepsy and Psychological and/or Cognitive Problems

Due to the interplay of seizures, the stigma and social consequences of an epilepsy diagnosis, possible side effects of medication, and especially the underlying causes of epilepsy, the risk of psychological issues such as anxiety, depression, and low self-esteem is significantly increased in people with epilepsy. The likelihood of developing a psychiatric disorder or suicidal behaviour is 2.5 to 5 times higher than in the healthy population. Cognitive problems such as concentration difficulties, ADHD, memory problems, and executive dysfunction are also more frequent for these reasons. In addition, developmental issues such as intellectual disability and autism are common comorbidities. Conversely, up to 25% of individuals with intellectual disabilities develop epilepsy. Many of these comorbidities result from a complex interaction of factors and not solely from medication, as patients often believe.

Routine and repeated screening for and early treatment of psychological problems are therefore of paramount importance. Supporting appropriate self-care, coping mechanisms, and stress management can also have a beneficial effect on seizure frequency. It is important to promote a healthy lifestyle with sufficient physical and social activity, a regular sleep-wake rhythm with adequate sleep, healthy nutrition, and avoidance of alcohol and drugs. Timely referral to a psychologist or psychiatrist is recommended. For cognitive complaints impacting functioning, a neuropsychological assessment can help identify strengths and weaknesses and suggest appropriate interventions. This type of assessment is offered to people with refractory epilepsy during evaluation in an epilepsy surgery centre. Individuals with well-controlled epilepsy may also benefit from such an assessment.

In children with epilepsy, an increased risk of learning difficulties, ADHD, and other behavioural problems has been shown, particularly when epilepsy begins at an early age, seizure frequency is high, and multiple anti-seizure drugs are required. Again, the cause is multifactorial. The importance of neuropsychological diagnostics and initiating the right support or medication should be particularly emphasized in this group.

There is no contraindication to initiating antidepressants or other psychotropic medications when clinically indicated. SSRIs are the first choice for moderate to severe depression (4). However, some combinations of anti-epileptic drugs and antidepressants may increase the risk of sedation, hyponatremia, cardiac arrhythmias, sexual dysfunction, urinary retention, and osteoporosis. Benzodiazepines are used in epilepsy for seizure control or as part of therapy in complex epilepsy. For other indications, their use should be avoided.

Several anti-seizure drugs may have negative effects on mood, anxiety, and cognitive functioning. An increased risk of suicide has also been described, particularly during the initial treatment phase. Cognitive issues may sometimes be alleviated through better seizure control or by selecting more appropriate anti-seizure medications. Close consultation with a (paediatric) neurologist is therefore always indicated.

Psychogenic or functional non-epileptic seizures (PNES or FNES) are episodes of altered awareness and/or perception and/or signs of neurological dysfunction that are not caused by hypersynchronous abnormal brain activity as seen in typical epileptic seizures. These can be categorized as symptoms of conversion, psychosomatic, or dissociative disorders. Such episodes can closely resemble epileptic seizures, and misdiagnosis is common. Due to their sometimes long duration, abnormal movements, and high frequency, these episodes can have a significant impact on quality of life. Positive and supportive psychoeducation is the first step, and anti-epileptic medication generally has no effect on these types of seizures. Coordinated communication within the treatment team leads to better long-term outcomes. Given the complex differential diagnosis and challenging treatment, referral to a specialized epilepsy centre for diagnosis and care is recommended. Psychological treatments such as cognitive behavioural therapy have shown a positive impact on quality of life, even independently of their effect on seizure frequency (5).

5. Acute Seizure Management in Convulsive Seizures

The convulsive (motor) phase of most epileptic seizures usually lasts no longer than 1 to 2 minutes, as the inhibitory systems in the brain are capable of neutralizing excessive excitation. A short convulsive seizure in itself does not cause brain damage. However, secondary injuries can occur during this phase (such as head trauma, traffic accidents, burns, drowning, etc.).

If a seizure lasts longer than 5 minutes (T1 in the definition by the International League Against Epilepsy, ILAE), the risk increases that the brain's protective mechanisms will fail and the seizure will not stop spontaneously. This condition is called status epilepticus. In status epilepticus, there is a higher risk of brain damage from the seizure itself, which typically occurs after about 30 minutes (T2 in the ILAE definition). The development of cerebral oedema can cause additional morbidity. It is therefore important to prevent prolonged convulsive seizures as much as possible and to act appropriately during a convulsive episode.

In non-convulsive seizures, the time frame in which brain damage occurs is less clear, and likely takes longer. Nevertheless, it is generally accepted that the chance of spontaneous resolution also decreases after 5 minutes in these cases.

Various products are available on the market to rapidly stop epileptic seizures, all of which belong to the benzodiazepine class. The most commonly used medications include lorazepam, midazolam (buccal Buccolam® 2.5, 5, 7.5, and 10 mg or compounded intranasal Dormicum®), clonazepam (Rivotril® drops), and rectal diazepam.

For every patient known to experience convulsive seizures or prolonged epileptic episodes, an individualized treatment plan should be discussed. In addition to chronic medication management, the approach to potential acute seizures must also be reviewed. This acute management is highly patient-specific.

The following guidelines may be helpful (6, 7):

- An acute seizure plan is primarily necessary for recognizable convulsive seizures. These are seizures with a clear motor component (such as tonic-clonic seizures).
- It should be agreed upon when to administer a benzodiazepine: usually after 5 minutes of convulsive activity, but in certain severe epilepsy syndromes (e.g., Dravet syndrome), where seizures frequently last longer, this may be earlier (at onset or after 1 minute). Time indications always refer to the convulsive phase of the seizure (not to postictal confusion, sleep, etc.).
- Type of medication and dosage should be agreed upon in advance. This should preferably be recorded in an epilepsy "passport" that the patient carries at all times.
- It must also be clarified who is authorized to administer the seizure medication (parents, grandparents, partner, school or workplace staff, etc.).
- A single adequate dose of benzodiazepines very rarely causes respiratory depression.
- A prolonged epileptic seizure should always be considered a serious medical event. Therefore, it is recommended to contact emergency services after administration of benzodiazepines, especially if the seizure does not resolve after 3–5 minutes. A second dose (preferably intravenous or intramuscular) should only be given under medical supervision due to the increased risk of respiratory depression.

6. Interaction Between Anti-Epileptic Drugs and Other Medications

Most interactions between ASM's and other medications occur with enzyme-inducing ASMs such as:

Carbamazepine (Tegretol®), phenobarbital (Gardenal®), phenytoin (Diphantoine®), oxcarbazepine (Trileptal®), primidone (Mysoline®), topiramate (Topamax®) at doses >200 mg/day, felbamate (Taloxa®), rufinamide (Inovelon®), and perampanel (Fycompa®).

A key issue is the interaction with contraceptive treatments, particularly enzyme-inducing ASMs and the oral contraceptive pill (OCP) (8).

Enzyme-inducing ASMs reduce serum levels of ethinylestradiol and progesterone, thereby lowering the effectiveness of OCPs.

Recommendations:

- Use a higher-dose progestin OCP (e.g., doubling the regular pill dose).
- Continuous use of pills during the "pill-free" week offers better protection when using enzyme-inducing ASMs and lamotrigine (avoids partial ovulation during the break).
- After switching from enzyme-inducing to non-enzyme-inducing ASMs, continue the high-dose pill for at least 1 month due to the "carryover effect" of enzyme induction.
- Combining the pill with condoms increases protection.
- Depo-Provera ("injection contraceptive"): Lacks strong evidence for effectiveness when used with enzyme-inducing ASMs. Consider more frequent administration every 6–8 weeks instead of every 12 weeks. Not a first-choice method.
- Progestin-only pills ("minipill") are not recommended.
- NUVA ring: Releases oestrogen; presumed interaction with enzyme-inducing ASMs and lamotrigine (limited studies); not recommended.
- Morning-after pill: Consider 1.5 tablets (2.25 mg) of levonorgestrel. Intrauterine copper device placement within 5 days is preferred.
- Hormonal IUDs are likely the safest contraceptive option with enzyme-inducing ASMs and lamotrigine.

Interaction with other medications

Enzyme-inducing ASMs can reduce serum concentrations of various drugs, including traditional oral anticoagulants, calcium channel blockers, corticosteroids, and benzodiazepines.

Enzyme-inhibiting drugs can increase concentrations of several ASMs. For example:

- Ketoconazole and fluconazole can raise levels of phenytoin, valproic acid, and phenobarbital.

– Erythromycin, grapefruit juice, and fluoxetine inhibit CYP3A4, potentially increasing carbamazepine levels.

Avoid using meropenem and valproic acid together, as meropenem can reduce valproic acid blood levels by 60–100% within two days.

To check drug interactions, you can use tools such as the Medscape Drug Interaction Checker.

7. Fitness to Drive

When a diagnosis of a first epileptic seizure or epilepsy is made, a person is legally deemed unfit to drive. A distinction is made between Group 1 driving licences (categories AM, A1, A2, A, B, BE, G) and Group 2 licences (categories C1, C1E, C, CE, D1, D1E, D, and B for remunerated transport). The duration of being unfit to drive depends on various factors.

If someone is declared unfit to drive, they must surrender their driving licence and have it medically suspended by the competent authority within four working days of the diagnosis. For this purpose, the doctor provides a 'Model VII certificate' confirming unfitness to drive. This certificate can be issued by any doctor, including a general practitioner.

Below is an overview of the minimum period of driving disqualification for Group 1 (Table 1). More detailed information can be found in the brochure on driving fitness from the Epilepsy League (https://www.epilepsieliga.be). When the patient is deemed fit to drive again, the doctor issues a new 'Model VII certificate' specifying the duration and any restrictions of the driving fitness. The validity period for the first issuance is 1 year, then up to a maximum of 5 years after the last seizure, and after that, fitness to drive may be granted without a time limit. For subcategories 6 and 7 in the table: four times for 1 year first, and then possibly for an unlimited duration.

TABLE 1: Group 1 : overview of the minimum period of driving disqualification

Condition	Earliest Possible Declaration of Fitness to Drive
First provoked seizure (e.g., due to alcohol withdrawal, sleep deprivation, acute illness)	After 6 months if the provoking factor is clear and not repeated
First unprovoked seizure	After 6–12 months seizure-free, based on neurological evaluation
Epilepsy diagnosis (i.e., two or more unprovoked seizures)	After 1 year seizure-free
Seizure relapse due to medication adjustment	After 6 months seizure-free following dose change
Seizures occur only during sleep	After 3 years of purely nocturnal seizures
Seizures without loss of awareness (e.g., focal aware seizures)	After 1 year, if these remain the only seizure type
Seizure-free patient after stopping anti-epileptic medication	After 6 months of continued seizure-freedom

Interpretation: You can interpret the table as follows: A person with a … can be declared fit to drive again after … seizure-free period.

For Group 2, the regulations are stricter and the disqualification period is longer. Driving fitness can only be regained if all investigations are normal and the patient has been seizure-free for at least 10 years without anti-epileptic drugs. In Belgium, the occupational physician makes the final decision about Group 2 driving fitness, in consultation with the neurologist.

See also:

https://werk.belgie.be/nl/themas/welzijn-op-het-werk/het-gezondheidstoezicht-op-de-werknemers

8. Epilepsy and Sports

Adequate physical activity and active participation in sports have a proven positive impact on seizure control in people with epilepsy, in addition to the broader benefits of sports for health and general well-being. Physical exercise is associated with a reduction in epileptiform discharges on EEG and increases the seizure threshold. However, sports are often discouraged in people with active epilepsy, usually due to fear, overprotection, and lack of knowledge about the specific benefits and risks of such activities.

Many people with epilepsy are less physically active than their peers, and this more sedentary lifestyle negatively affects psychosocial development, independence, and mental well-being. Of course, some sports do carry an increased risk for people with epilepsy. When providing advice about sports, the benefits and risks must be weighed, considering the type of sport, type and severity of seizures, existence of prodromal symptoms, known seizure-provoking factors, and the possibility of supervision during the activity.

The assessment of risks involved in participating in sports is a shared responsibility between physicians, the person with epilepsy, and/or parents/guardians.

For most sports, there is no specific regulation regarding medical fitness to participate for individuals with epilepsy. The International League Against Epilepsy (ILAE) has published guidelines to help physicians discuss risks with patients or their parents. It is helpful to distinguish three categories of sports (9):

1. *Sports with minimal risk* to the person with epilepsy and/or bystanders (e.g., ball sports, most athletics disciplines, dancing, cross-country skiing, most contact sports). These are generally allowed for all people with epilepsy, unless the neurologist believes the seizures are triggered by specific sports.
2. *Sports with moderate risk* to the individual but not to bystanders (e.g., swimming, cycling, skiing, high jump, gymnastics, horse dressage, high-impact contact sports such as boxing). These are generally allowed after 12 months of seizure freedom but can sometimes be permitted earlier in consultation with the (paediatric) neurologist if certain conditions are met (e.g., continuous supervision possible, only nocturnal seizures, or seizures without loss of awareness).
3. *Sports with high risk* to the individual and/or bystanders (e.g., scuba diving, windsurfing, motocross, skydiving, flying, mountaineering, solo sailing). Here, risks must be clearly discussed with the patient, and a minimum of 1 year seizure freedom is generally recommended—especially if there is potential danger to bystanders. Some organizations, like diving clubs, require a medical assessment and may not permit people with epilepsy to participate regardless of seizure-free duration, while others may allow participation after 5 years of seizure freedom without medication.

9. Epilepsy and Work

Some professions are not accessible to people with epilepsy, such as active duty in the fire department, police or military, pilot, maritime occupations, professional drivers (taxi, bus, and truck drivers,

ambulance personnel, driving instructors), and train operators. Generally, one must be seizure-free for at least 10 years (sometimes with at least 5 years without medication) before being eligible for these professions. For individuals with a one-time (provoked) seizure, slightly less strict rules usually apply. Regulations may change over time, so it is best to consult the most recent laws when making career choices.

Well-controlled epilepsy does not necessarily affect a person's ability to work. For active epilepsy, a risk assessment should ideally be performed, considering the type of seizure, postictal phase, severity of epilepsy, job content, and work environment. Certain professions pose risks for people with active epilepsy. In consultation with the occupational physician, (temporary) restrictions may be imposed, such as restrictions on working at heights (e.g., construction workers, painters), operating machinery (e.g., forestry), or working with hazardous materials (e.g., chemicals, gas fitting).

The occupational physician may also, with input from the neurologist, recommend workplace adjustments to ensure safety, such as exemption from night shifts, flexible working hours post-seizure, availability of a quiet recovery space, or delegation of riskier tasks (e.g., working on high ladders) to colleagues.

See also:

https://werk.belgie.be/nl/themas/welzijn-op-het-werk

10. Sudden Unexpected Death in Epilepsy Prevention (10)

People with epilepsy are at a slightly higher risk of sudden death. This is referred to as SUDEP, or Sudden Unexpected Death in Epilepsy. The estimated incidence is 1 in 4500 patients per year for children and 1 in 1000 patients per year for adults. The incidence is highest in people aged 20 to 45 years.

It is suspected that problems with the autonomic nervous system during seizures lead to cardiac arrhythmias and/or respiratory disturbances that cause death.

Studies have shown that certain patient groups are at increased risk:

- Patients with nocturnal generalized (tonic-clonic) seizures
- Patients with long-standing refractory epilepsy
- Patients with poor seizure control (e.g., due to poor medication adherence)
- Patients whose epilepsy began before the age of 10

To reduce the risk of SUDEP, achieving and maintaining seizure freedom is crucial. Medication adherence is essential. For patients with refractory epilepsy, trying new anti-seizure drugs and considering alternative treatments (such as epilepsy surgery or neurostimulation) remains important.

Sometimes monitoring is used for patients with frequent nocturnal seizures. It is important to stress that no monitoring system is foolproof, and reliance on them should not create a false sense of security.

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