



## American Epilepsy Society

### Practice Tools for Cognitive and Behavioral Effects of Epilepsy\*

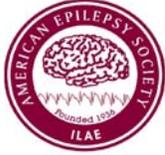
\*These Practice Tool review points are meant to be for discussion and are not required\*

#### PRACTICE TOOL - Children and Adolescents with Epilepsy

*Note: In all discussions, emphasize the balance of all risks and the goal of controlling seizures.*

- **Cognitive (neuropsychological) well being:** Children with epilepsy are at an increased risk for cognitive and behavioral impairment. Consider referral for neuropsychological evaluation for children/adolescents with epilepsy who are experiencing difficulty at home or in school. In particular, children are at risk of neuropsychological deficits who present with two or more of the following:
  - epileptiform activity on EEG;
  - regression in academic abilities or motor function
  - abnormality on MRI (or symptomatic epilepsy syndrome\*\*);
  - absence seizures;
  - use of antiepileptic medications;
  - undercontrolled (pharmacoresistent) seizures
    - Cognition generally improved for individuals who are seizure free.
  
- **Anti-epileptic drugs:** Discuss / review potential impact of anti-epileptic drugs (AEDs) on child's cognitive functioning and behavior. Cognitive and behavioral functions generally improve for individuals who are seizure free.
  
- **Academic Success:** Verify with parent that school has assessed child for attention deficits, intellectual delays, and learning disability to determine if an individualized educational plan is warranted. Assess for regression in academic abilities.
  
- **Behavioral/psychological/psychiatric problems:** Screen for symptoms of depression and anxiety and other behavioral problems and treat or refer accordingly.
  
- **Attention:** Screen for attention problems/ Attention Deficit Hyperactivity Disorder (ADHD) and treat or refer accordingly
  
- **Sleep:** Assess sleep behaviors/environment and provide children, adolescents and parents with lifestyle changes to improve sleep for optimizing seizure control and cognitive and behavioral functioning. Consider evaluation of seizure patterns to assess if having negative impact on sleep. If sleep problems persist after implementing lifestyle changes, consider formal sleep consultation.
  
- **Quality of Life/Psychosocial adjustment:** Ask patient how epilepsy affects them the most in everyday activities and explore resources to address those concerns/needs. More information/resources available at [www.epilepsy.com](http://www.epilepsy.com).

Note: Neuropsychological evaluation is *not* a substitute for Psychiatric evaluation. Both are likely to benefit patient and family.



## American Epilepsy Society

### Practice Tools for Cognitive and Behavioral Effects of Epilepsy\*

\*These Practice Tool review points are meant to be for discussion and are not required\*

#### PRACTICE TOOL - Adults with Epilepsy

*Note: In all discussions, emphasize the balance of all risks and the goal of controlling seizures.*

- **Cognitive (neuropsychological) well being:** In general, cognitive functioning is normal or nearly normal for adults with epilepsies that are well controlled with medications. Consider referral for neuropsychological evaluation, especially for adults with additional risk factors for cognitive deficits and for cognitive decline over time:
  - Seizures are pharmacoresistant (medication refractory)
    - Risk for cognitive deficit is higher for patients with focal seizure onset (e.g., temporal lobe or frontal lobe epilepsy)
  - Symptomatic\*\* (e.g., underlying pathology/abnormality on MRI) epilepsies;
  - Frequent, recurrent seizures
  - Longer duration (time) patient has experienced seizures
  - History of multiple episodes of status epilepticus (generalized or focal);
- **Anti-epileptic drugs:** Discuss / review potential impact of anti-epileptic drugs (AEDs) on cognitive functioning and behavior. Cognitive and behavioral functions generally improve for individuals who are seizure free.
- **Vocational Success:** Evaluate extent ability to work affected by adverse effects of:
  - seizures/epilepsy and/or antiepileptic drugs
  - cognitive and/or behavioral problems.Consider referral to Vocational rehabilitation program/system as available in patient's region
- **Behavioral/psychological/psychiatric problems:** Screen for symptoms of depression and anxiety and other behavioral problems, including suicidal thoughts or wishes and treat or refer accordingly.
  - Depression Screening may consider Neurological Disorders Depression Inventory for Epilepsy (NDDI-E; Gilliam et al. 2006).
  - Anxiety screening may consider brief screening instrument for Generalized Anxiety Disorder (GAD-7; Spitzer et al. 2006)

Note: Neuropsychological evaluation is *not* a substitute for Psychiatric evaluation. Both are likely to benefit patient and family.
- **Sleep:** Assess sleep behaviors/environment (lifestyle factors) to assure adequate sleep for optimizing seizure control and cognitive and behavioral function. Treat or refer accordingly.
- **Quality of Life/Psychosocial adjustment:** Ask patient how epilepsy affects them the most in everyday activities and explore resources to address those concerns/needs. More information/resources available at [www.epilepsy.com](http://www.epilepsy.com).

**Continued**

## **ADDITIONAL PRACTICE ISSUES FOR OLDER ADULTS WITH EPILEPSY**

- Increased risk for dementia / cognitive problems. Screen and treat or refer accordingly
- Cognitive problems/dementia may reduce ability to manage medications, make decisions, and live independently.
- Older adults may be more sensitive to adverse effects of antiepileptic drugs (AED)

Approved 2012

**\* Practice Tools (Fact Sheets, Frequently Asked Questions)** are less restrictive than a checklist, with no perception that something has to be done. These are at the bottom of the hierarchy of practice-related documents with regard to rigorous process. “Things to Consider” is one example of a practice tool. Information listed is to help you do your job, not tell you what to do. Practice tools should not be interpreted as the ‘standard of care’,

*Approval process:* Approval is obtained from at least one of the 4 Council for Clinical Activities (CCA) committees, then circulated to CCA and the Board of Directors for approval.

*Disclaimer:* AES is providing this document without representations or warranties of any kind and for information only, and it is not intended to suggest how a specific patient should receive medical treatment. Determination of whether and/or how to use all or any portion of this document is to be made in your sole and absolute discretion. No part of this document constitutes medical advice. As a clinician, your knowledge of the individual patient and judgment about what is appropriate and helpful to them should be used in making clinical decisions.

\*\*ILAE (1989) terminology, subject to change.