



# “WHAT’S NEW” IN THE 2020 GUIDELINES

This document summarizes the updates made in the ‘Clinical Guidelines for the Management of Epilepsy in Adults and Children’ published in 2020.

## Defining Epilepsy

**Epilepsy is a disease of the brain defined by any of the following conditions:**

- ◆ At least two unprovoked (or reflex) seizures occurring >24 h apart
- ◆ One unprovoked (or reflex) seizure and a probability of further seizures similar to the general recurrence risk (at least 60%) after two unprovoked seizures, occurring over the next 10 years
- ◆ Diagnosis of an epilepsy syndrome

**Types of Epilepsy Depending on Underlying Etiology:**

- ◆ **Structural** - There is a structural abnormality or disease associated with an increased risk of developing epilepsy, e.g. stroke, trauma
- ◆ **Genetic** - Epilepsy results from a known or presumed genetic mutation, e.g. Dravet syndrome (>80% of patients have a mutation in the SCNA1 gene)
- ◆ **Metabolic** - Epilepsy results from a known or presumed metabolic disorder. Most metabolic epilepsies have a genetic basis, but others are acquired, e.g. cerebral folate deficiency
- ◆ **Infectious** - Epilepsy results from an infection, e.g. tuberculosis, HIV, cerebral malaria, neurocysticercosis and Zika virus
- ◆ **Immune** - Epilepsy results from an immune disorder, e.g. anti-NMDA (N-methyl-D-aspartate) receptor encephalitis
- ◆ **Unknown Cause** - The nature of the underlying cause is unknown; it may have a fundamental genetic defect as its core or it may be the consequence of a separate yet unrecognized disorder

## New Recommendations

### DRUG TREATMENT

#### Options for Anti-Seizure Drugs (ASDs)

- ◆ See Section 6.2 (pages 22-24) of the Guidelines for updated list of first-line and adjunctive ASDs

#### Effects of ASDs on Hepatic Enzymes:

- ◆ Physicians should exercise caution when withdrawing an enzyme-inducing drug from a polytherapeutic regimen
- ◆ Interactions should be especially considered for drugs with narrow therapeutic indices (e.g. carbamazepine, lamotrigine, phenobarbital, phenytoin, and valproic acid)

### WOMEN WITH EPILEPSY

- ◆ Avoid enzyme-inducing ASDs in women with epilepsy using oral contraceptives, transdermal patches, or levonorgestrel implants
- ◆ Whenever possible, valproic acid should be avoided in women of childbearing potential due to the risks to the fetus, including teratogenicity and neurodevelopmental delays
- ◆ Folic acid supplements (0.4 - 4mg/day) are recommended before and during pregnancy



New Recommendations (continued)

**SUDDEN UNEXPECTED DEATH IN EPILEPSY (SUDEP)**

- ◆ The incidence of sudden death is estimated to be approximately 11.2 cases per 1000 individuals with epilepsy per year
- ◆ Seizure freedom, particularly freedom from generalized tonic-clonic seizures, is strongly associated with decreased SUDEP risk
  - ◆ The risk may be reduced by lowering seizure frequency and by adherence to ASD treatment

**STIGMA**

- ◆ Stigma is experienced by people with epilepsy in two main ways:
  - ◆ **Felt (or internalized) stigma** - the shame of having seizures and the fear of encountering epilepsy-linked enacted stigma
  - ◆ **Enacted (or institutionalized) stigma** - reflects actions or discrimination that people with epilepsy face in their communities
- ◆ Stigma is associated with higher seizure frequency and linked to poor psychosocial outcomes (e.g. depression, anxiety, social isolation)
- ◆ Targeted educational programs, counseling, and self-help groups can be empowering for people with epilepsy

**DEPRESSION**

- ◆ Depression and anxiety are common in people with epilepsy
- ◆ Patients should be regularly screened for depression and offered supportive therapy
- ◆ Antidepressant use is generally safe in people with epilepsy when used at therapeutic doses

**PSYCHOGENIC NON-EPILEPTIC SEIZURES (PNES)**

- ◆ PNES look like epileptic seizures but are not caused by abnormal brain electrical discharges
- ◆ Between 53 and 100% of PNES patients have at least one comorbid psychiatric disorder, most commonly depression, anxiety, or posttraumatic stress disorder
- ◆ A PNES diagnosis is made by an epileptologist who monitors a patient until a seizure occurs and then interprets a video-EEG
- ◆ Cognitive behavioural therapy may be a first-line psychological treatment

For the full set of guidelines, and for more information, go to:

[www.ontarioepilepsyguidelines.ca](http://www.ontarioepilepsyguidelines.ca)

