IDIOPATHIC EPILEPSY (IE)
Condensed Version

**Presentation:**
- Dogs, 1-5 years old
- Less common in cats and horses (Arabian foals)

**Test of choice:** Diagnosis of exclusion of other causes of seizures
- Bloodwork to rule out metabolic or toxic cause
- Bile acids to rule out hepatic encephalopathy
- MRI or CT of brain to rule out structural disease
- Cerebrospinal fluid analysis to rule out encephalitis
- Monitor anticonvulsant levels

**Rx of choice:**
- **Acute treatment to halt seizure activity:** benzodiazepines (diazepam, midazolam, lorazepam), propofol, inhalent anesthetic
- **Maintenance therapy:** phenobarbital, KBr, levetiracetam, zonisamide

**Prognosis:** Guarded to good. May have normal lifespan if well-controlled.

**Prevention:** Spay females; do not breed affected dogs; be compliant with medication

**Pearls:**
- **It’s an emergency when:**
  - More than 3 seizures in 24 hours
  - A single seizure lasting more than 5 minutes
- **Kindling effect:** Seizures themselves seem to increase seizure frequency over time
- Don’t combine or change anticonvulsants unless the therapeutic blood level is achieved with 1st drug
- Large breed dogs may be more difficult to control
- May not achieve adequate control in 25% of dogs

---

**Classic Question(s)**

Name seven differential diagnoses for epilepsy.

What is the emergency acute treatment for seizures?
Name four maintenance anticonvulsants used in dogs.

A client presents a five-year-old Bichon Frise with recent onset seizures. She wants to make absolutely sure of a diagnosis and cost is not an issue. List the tests that should be run and what they would rule in or out.

A dog presents with seizures due to hepatic encephalopathy. Name 2 anticonvulsants that would be safe to use.