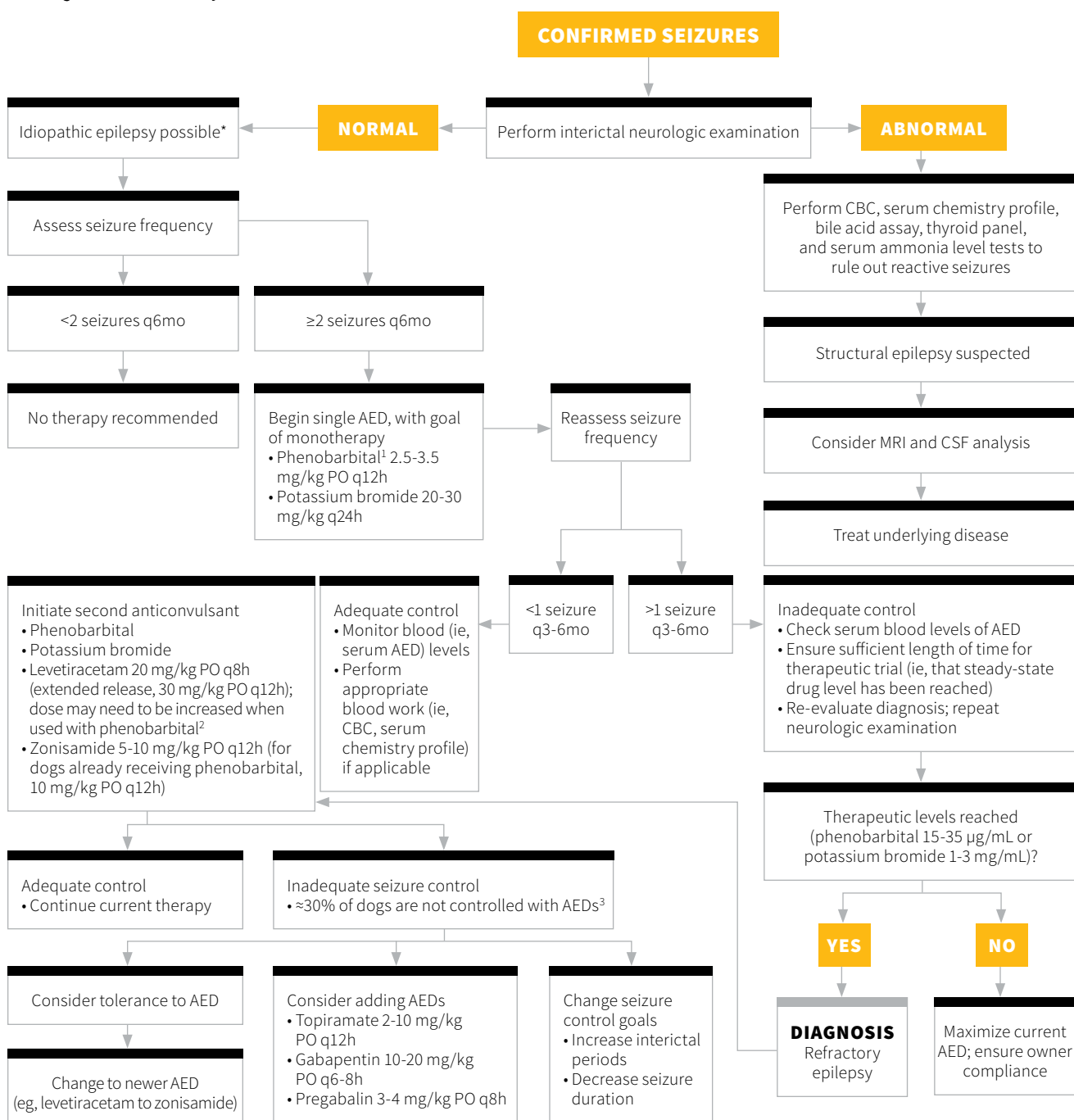


Refractory Seizures

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NOTES

- ▶ A definition of refractory epilepsy is not established for dogs, but it is generally agreed that an animal with frequent or severe seizures or intolerable side effects despite appropriate antiepileptic drug (AED) therapy is considered refractory to treatment.³
- ▶ Levetiracetam and zonisamide are increasingly the drugs of choice for monotherapy by some neurologists. A recent study found no reduction in monthly seizure frequency when levetiracetam was used as a sole agent.⁴ However, little additional information is available in the veterinary literature on the efficacy of these medications as sole agents.
- ▶ Some AEDs (eg, levetiracetam, zonisamide) have a reported “honeymoon effect,” with dogs developing tolerance over time.
- ▶ Gabapentin and pregabalin are not known efficacious AEDs but anecdotally may help with seizure control in patients tolerant to other medications.

* Idiopathic epilepsy can be subclassified into genetic epilepsy (identified genetic background), suspected genetic epilepsy (breed prevalence >2%), or epilepsy of unknown cause (nature unknown with no structural disease).⁵ Diagnosis of idiopathic epilepsy can be suggested if there is a history of ≥2 unprovoked epileptic seizures occurring ≥24 apart, the patient’s age at epileptic seizure onset is between 6 months and 6 years, interictal physical and neurologic examinations are unremarkable (except for antiepileptic-drug-induced neurologic abnormalities and postictal neurologic deficits), and no clinically significant abnormalities are found on minimum database blood tests and urinalysis.⁶ However, diagnosis is ideally made on exclusion (ie, normal brain MRI and CSF analysis) or further supported by electroencephalography.⁵

AED = antiepileptic drug

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