

ABSTRACT

Charles University

Faculty of Pharmacy in Hradec Králové

Department of Pharmacology & Toxicology

Student: Monika Šenková

Supervisor: PharmDr. Ivan Vokřál, Ph.D.

Title of diploma thesis: Therapy of epilepsy in dogs and cats

Epilepsy is a common neurological disorder affecting dogs and cats. This chronic disorder is manifested by recurrent epileptic seizures. The true prevalence of epilepsy in dogs and cats is unknown. It is estimated to be 0,6-0,75 % in general dog population, and 1-2 % in hospitalized dog population. There is no known estimate for general cat population, but it is estimated to be 0,5-3,5 % in hospitalized cat population. Genetic predisposition has been proved in several dog breeds, and in some breeds, it is assumed. Diagnostics of epilepsy could be often difficult, and it reflects only the symptoms described by the pet owner, therefore the close cooperation between the pet owner and the veterinarian is needed.

The aims of the treatment are to decrease seizure frequency, duration, severity, and the total number of epileptic seizures that occurs with none or at least minimal adverse effects, to maximize the dog's and owner's quality of life. Currently, there is no guideline for choice of treatment and a final decision should be made on a case-by-case basis. Monotherapy is preferred for initial therapy, in case of its failure, another drug should be added. There is wide spectrum of antiepileptic drugs including phenobarbital, primidone, potassium bromide, benzodiazepines, phenytoin, imepitoin, levetiracetam, zonisamid, gabapentin, pregabalin, felbamate, topiramate, lacosamide and rufinamide. But not all of them are used in practice. The most used drugs are phenobarbital, potassium bromide and novel drugs such as imepitoin, levetiracetam and others. Recently, the interest in alternative non-pharmacological treatment increases. The aim of this thesis is to provide a complex summary of the pharmacological and non-pharmacological therapeutical options in dogs and cats.