A Longitudinal Study of Survival in Belgian Shepherds with Genetic Epilepsy

Background
Belgian Shepherds have focal genetic epilepsy. The prevalence of epilepsy has been estimated as 9.5% in the breed and as 33% in the family investigated. Dogs with epilepsy might have an increased risk of premature death.

Objective/Hypothesis
To investigate survival and selected risk factors for premature death in a Belgian Shepherd family with genetic epilepsy.

Animals
One hundred ninety-nine related Belgian Shepherds.

Methods
Longitudinal observational study, 2009–2011. Follow-up telephone interviews were all conducted using a structured questionnaire addressing epilepsy, including seizure history and phenomenology, possible remission, possible death, and cause of death.

Results
The life span of epileptic dogs was not significantly shortened by the presence of epilepsy (P = .87). Epilepsy was the predominant cause of death in the population (19/75 = 25%) and epilepsy-related deaths accounted for 70% (19/27) of all deaths in the group of dogs with epilepsy. Two probable sudden unexpected deaths related to epilepsy occurred in dogs with generalized seizures. Cluster seizures occurred in 33% (17/51) but did not significantly influence the life span of epileptic dogs. Dogs with epilepsy had an epilepsy remission proportion of 13.7%.

Conclusion and Clinical Importance
The Belgian Shepherds investigated in the present study display a focal genetic epilepsy with an overall benign course. The life span was not significantly affected by the presence of epilepsy.