



## New neurological problem in Greyhounds

Dear Greyhound breeders and fanciers,

Actually, several cases of Greyhounds with neurological abnormalities, like periodical scratching with the rear legs, biting into front legs, in some cases also progressive muscle weakness and ataxia, were presented. All of them were tested free of Hereditary Neuropathy.

Interestingly, in all of the cases abnormal fluid aggregations in the central nerve system could be detected, either by MRI or by autopsy. In some cases, the fluid was located around the brain stem and the medulla, in others it was present as subarachnoidal cysts in the cervical spinal cord. The different location of the cysts might explain the partially varying neurological symptoms.

Due to severity of symptoms and lack of a suitable therapy, most dogs have been put to sleep after diagnosis.

Each case viewed on its own would not lead the first suspicion to a hereditary problem. But what should raise serious concerns is the close relationship of all of the known five cases. Two are littermates, one more is sired by a half-brother to them, and two more are closely related to the mother of the third. That is definitely too much to be coincidental only!

We're actually at the level of collecting data, it's far too early to speculate about a mode of inheritance. Therefore, we're asking for help and more information. Please contact us if you bred or own or have owned a Greyhound showing one or more neurological symptoms as described above, or if you have/had a Greyhound who had cysts in the brain or spinal cord. Any information about diagnostics (MRI) or autopsy results would be of great value, too.

Unfortunately, at the time of writing four of the five known cases have been already put to sleep. As a detailed neuro-pathological examination of the alterations would be of utmost importance for further characterization of the disease, we're especially asking to contact us if you have an affected Greyhound who is still alive. An appropriate preparation of the tissue samples will be crucial for the examination, and probably cannot be provided by every vet clinic. We can refer you to suitable cooperation partners in nearly every European country and the United States.

If the suspicion of a genetic cause could be confirmed, the development of a gene test would be highly desirable. Like for the Neuropathy Project, we would need as many DNA samples from affected dogs, their parents, littermates, and other close relatives as possible. Absolute discretion is guaranteed.

If we share information and already start collecting samples now, we hopefully can prevent that a defective gene could spread widely over the population again!

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