

Primary Ciliary Dyskinesia of Old English Sheepdog (Bobtail)

A severe respiratory disease prevented thanks to a DNA test

Primary Ciliary Dyskinesia leads to respiratory issues. About 17% of Old English Sheepdogs are carriers of the gene responsible for the disease. A reliable DNA test can screen stud dogs and brood bitches, in order to adapt matings and avoid birth of affected puppies and spread of the disease in the breed.

A severe hereditary disease

Ciliary Dyskinesia leads to chronic respiratory issues. The first symptoms are associated from an early age to infections of the respiratory mucosa (nose, trachea, bronchi) that result in sneezing, cough and chronic bronchitis. Even if the disease is treated early, symptoms are amplifying and the dog is usually euthanized.

A frequent disease

Around 17% of Old English Sheepdogs in Europe are carriers of the genetic mutation responsible of Ciliary Dyskinesia. A breeder can mate without noticing a male « carrier » and a female « carrier » and produce a litter containing affected puppies.

A dog « carrier » of the mutation will not develop the disease but transmits it to 50% of the puppies. A stallion « carrier » of the mutation which is used a lot for reproduction, spreads the disease through the breed and helps to increase the frequency of the mutation and multiply the number of affected dogs.

A preventable disease

A puppy can be affected if his two parents are carriers of the mutation. Breeders unaware of Primary Ciliary Dyskinesia can mate stud dogs and brood bitches carriers of the mutation who are used a lot for reproduction. As a consequence, this would lead to increase the frequency of the mutation and multiply the number of affected dogs.

A DNA test called PCD test, can detect Primary Ciliary Dyskinesia of Old English Sheepdog with a reliability above 99%

Avoid the birth of affected puppies

In order to secure its kennel and avoid the risk of production of affected puppies, the breeder must screen its breeding dogs thanks to the PCD DNA test.

When acquiring a puppy for breeding or when a stud dog is used for a mating, the breeder verifies the genetic status of the dog for Old English Sheepdog asking for the result of the PCD DNA test.

A DNA test easy to perform

The veterinarian performs a simple cheek swab and sends it to the laboratory. The result, delivered within few days, indicates if the tested dog is clear, carrier or affected for Primary Ciliary Dyskinesia. A genetic certificate displaying the result must be used as a guarantee for a mating or to justify the sale of puppies clear of Primary Ciliary Dyskinesia.

The veterinarian who notices early respiratory issues in a young Old English Sheepdog puppy can process a DNA test to confirm or refute the diagnosis of Ciliary Dyskinesia. If the dog is affected, parents have to be screened as well.

A breeder who knows the genetic status of the dog can select its breeding dogs, adapt matings, avoid the birth of affected puppies and limit the spread of this severe respiratory disease in the breed.

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