Brittle bone disease leads to an extreme bone fragility. About 12% of Dachshunds 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

Brittle bone disease, also called Osteogenesis Imperfecta leads to an extreme bone fragility. The puppies die usually in the first days following birth. Surviving puppies will have brittle bones, suffer from deformities and should be killed rather quickly. In the current state of knowledge, we can not exclude the existence of milder forms that would affect dogs later.

A common disease

Around 12% of Dachshunds in Europe are carriers of the genetic mutation brittle bone disease. 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 brittle bone disease 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 OI test, can detect Osteogenesis Imperfecta of Dachshund 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 OI 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 Dachshund asking for the result of the OI 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 Osteogenesis Imperfecta. A genetic certificate displaying the result must be used as a guarantee for a mating or to justify the sale of puppies clear of brittle bone disease.

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 disease in the breed.

Dr Guillaume QUENEY
ANTAGENE