

Spasticity (myopathy) for the sphynx and Devon Rex

A genetic disease prevented thanks to a DNA test

A serious inherited disease

Spasticity is characterized by a muscular weakness due to dysfunction of neuromuscular transmission.

Affected cats from 1 to 5 month old suffer from a muscular weakness, fatigue, ambulant difficulties, prominent downward flexion of the head and neck, protrusion of the scapulae, head bobbing.

A french discover

Research conducted by Dr Marie Abitbol (ENVA) in collaboration with the team of Dr Stéphane Blot (Neurobiology department of ENVA) and ANTAGENE identified the mutation responsible for Spasticity, also called Myopathy, for Devon Rex and the Sphynx.

A preventable disease thanks to a DNA test

About 3,7% of Sphynx in Europe are « carrier » of the mutation responsible for Spasticity. A breeder can mate unknowingly a male carrier and a female carrier and generate a litter with affected kittens.

A stud cat « carrier » of the mutation will not develop the disease (recessive disease) but transmits it to 50% of its offspring. A Sire « carrier » of the mutation which is used a lot for reproduction, spreads the disease through the breed, contributes to increase the frequency of the mutation and may multiply the number of affected cats in the end.

A kitten affected by the disease means that its 2 parents are « carrier » of the mutation. A breeder unaware about Spasticity can mate unknowingly a male carrier and a female carrier and generate a litter with affected kittens.

A DNA test, called CMS, allows to screen Spasticity for the Sphynx and the Devon Rex with a reliability above 99%

Avoid the birth of affected kitten.

The breeder, to secure its cattery and avoid the birth of affected kitten, must screen its stud cats thanks to the CMS DNA test.

During the acquisition of a kitten for breeding purposes or when using a stud cat for a mating, the breeder checks the genetic status of the cat for Spasticity, asking for the result of the CMS DNA test.

A DNA test easy to perform

Thanks to a simple cheek swab sample, the veterinarian performs the CMS test to determine if the tested cat is clear (Normal Homozygous), carrier (Heterozygous) or affected (Mutated Homozygous) for Spasticity. The result is displayed under a genetic certificate format and must be used as a warranty for reproduction purposes.

If the tested male is carrier, the breeder will have to be careful to mate the male with a « clear » female to make sure to avoid the birth of affected kittens.

The veterinarian who notices myopathy symptoms for Sphynx or Devon Rex kittens between 1 to 5 months old can perform the CMS DNA test to confirm or refute spasticity.

A breeder who knows the genetic status of the cat takes no risk, secures its cattery and can then select its breeding cats, adapt matings, avoid the birth of affected kittens and limit the spread of this disease in the breed.