



media release

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PROGRESS IN THE FIGHT AGAINST EPILEPSY IN THE ITALIAN SPINONE

New research, conducted by veterinary charity the Animal Health Trust, shows that prevalence of idiopathic epilepsy is higher in Italian Spinoni than the UK's general canine population

In the first research paper of its kind to look closely at idiopathic (of no known cause) epilepsy (IE) in Italian Spinoni, the prevalence of IE within the breed has been found to be more than 5% (5.3%). Prevalence of IE among dogs generally is currently estimated in first opinion practice to be just 0.6% in the UK, but depending on country and breed, can be as high as 18.3%.

Dr. Luisa De Risio, Head of Neurology at the AHT and lead researcher on the paper, said: "Idiopathic epilepsy is the most common chronic neurologic disorder in dogs but it can be more common in some breeds than others, for example Irish Wolfhounds, Border Collies and Italian Spinoni. Sadly, we see a lot epileptic dogs in our clinic, including these breeds as well as Golden Retrievers and Labrador Retrievers, so research being undertaken at the AHT, and around the world, is very important in helping owners of dogs with epilepsy to be able to control the effects of the disease.

"The Italian Spinone is a wonderful breed but is highly affected by idiopathic epilepsy. To our knowledge, no one has conducted such a large-scale research study in this breed to be able to gain a better understanding of how the epilepsy manifests, how prevalent it really is and, importantly, which factors may contribute to survival in these dogs.

"With the backing of the Italian Spinone Club of Great Britain, the AHT was able to design a questionnaire for the research study and work with the Kennel Club to invite over 3,000 Kennel Club registered Italian Spinone owners to aid our research by completing the questionnaire.

"1,192 owners participated in the research and of this sample, 63 Italian Spinoni had IE. Owners of affected dogs were then invited to complete a further questionnaire and asked to make the dog's medical records available. This gave us a very large amount of data to

analyse from which we were able to glean a lot of very useful information about the clinical characteristics of idiopathic epilepsy in Italian Spinoni.”

The research also looked at survival times of those dogs in the study with IE. Survival was significantly longer in Italian Spinone with no cluster seizures and in Italian Spinone in which antiepileptic medication was initiated after the second seizure rather than after more than three seizures.

Dr Luisa De Risio continued: “From this sample we were able to conclude that idiopathic epilepsy in this breed often has a severe presentation but starting treatment with antiepileptic medication after the second seizure, and aggressive treatment of cluster seizures, may improve the survival of these dogs.

“The input in treatment design and modulation by a specialist veterinary neurologist with expertise in canine epilepsy can help to optimise treatment success and the dog’s quality of life.

“We hope these findings will help to increase veterinary knowledge and understanding of this horrible disease and give Italian Spinoni, and other affected breeds, the best chance of fighting IE.

“Epilepsy is one of the most complex and difficult diseases to treat, with several variables in any case, but it is important for owners not to give up hope and to seek a consultation with a veterinary neurologist who specialises in epilepsy, if possible.”

Epilepsy in dogs, as in humans, is a very complex disease which comes in many forms and can be very difficult to treat and is a very distressing condition for any dog owner to live with. The Animal Health Trust, based near Newmarket, Suffolk, has been leading the way in canine epilepsy research and treatment for several years.

The next phase of the AHT’s research in the Italian Spinone is to identify the genetic basis of this condition, with the aim of identifying the genetic mutations responsible so that a genetic test could be created. This research is currently ongoing in Italian Spinoni and Border Collies and requires more DNA samples from affected and unaffected dogs.

Luisa concluded: “A genetic test is the only way to successfully help breeders identify carriers and select matings which are most likely to produce unaffected dogs. However, the genetics, like the condition itself, are very complex so the development of such a test is still likely to be many years away. The most we can do for these lovely dogs now is to share

these findings across the veterinary profession and to do our best to treat each dog as well as we can.”

The full paper is titled '*Idiopathic Epilepsy in the Italian Spinone in the United Kingdom: Prevalence, Clinical Characteristics, and Predictors of Survival and Seizure Remission*' and is published in the *Journal of Veterinary Internal Medicine* on an open-access basis.

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Additional notes:

- The Animal Health Trust (AHT) is an independent charity, employing over 200 scientists, vets and support workers. It aims to improve the health and welfare of horses, dogs and cats through research. It also provides specialist referral services and continuous education to vets. Visit the website at www.aht.org.uk
- Dr Luisa De Risio has published widely on canine and feline epilepsy, including the extensive book *Canine and Feline Epilepsy Diagnosis and Management*, published in 2014 by Dr Luisa De Risio and Simon Platt.