

BORDER TERRIER BREED HEALTH GROUP UPDATE AT AUGUST 2017

Breed Health Co-ordinator Steve Dean has issued the below report on behalf of the Border Terrier Breed Health Group. This is to provide an update on activities since the Group's last review was issued.

The Group is pleased that much progress has been made on a number of fronts. It acknowledges however that several initiatives which are almost complete, still require finalisation subject to the necessary scrutiny of specialists in the areas concerned. It is hoped that these issues will be finally put to bed very soon and that the Border Terrier Health Group Website containing these further pieces of work will be available by the beginning of the autumn.

SLEM (Shaking Puppy Syndrome)

Since April three new cases of SLEM (Shaking Puppy) have been reported to the Breed Health Co-ordinator in the UK. Two cases were referred to the Animal Health Trust (AHT) and the third to the neurology team at Glasgow. Advice was given in each case for the collection of clinical evidence to support the diagnosis. In addition, samples were collected from litter mates of the affected pups and the sire and dam and these were transmitted to the Genetics Team at the AHT for follow-up at a later date.

As a result of the case referred to Glasgow Veterinary School, good communication has been established between Glasgow and the AHT which should aid the collection of further material as cases arise. In two cases a full clinical examination and post mortem were carried out and this has revealed a number of significant points which will affect how future cases are followed up. The third case has not been fully followed through as yet but should have followed the same protocols.

As a result of these cases changes have been made to a draft information sheet being designed for breeders to use in communication with their veterinary surgeon when following up cases of SLEM. In addition a protocol for a breeder to use where cases arise is now also close to completion when it has been subjected to further appropriate review. Both the Information Sheet and the Protocol will be released soon, although it should be recognised the situation may change quite rapidly as more cases are followed up by good clinical processes.

Ronnie Irving and Steve Dean have met with Cathryn Mellersh at the AHT to discuss the potential for accelerating the investigation of the recently sequenced genome from a known SLEM case with the intent of identifying potential mutations which could be responsible for the condition in Border Terriers. We are waiting for the AHT to provide us with a proposal for this work and likely associated costs.

The AHT have contacted the University of Missouri, who are working with the Border Terrier Club of America on a similar project and both sides have agreed to share information and samples to aid progress on this research.

Hopefully these initiatives may lead to the availability of a DNA test to establish definitive breeding strategies for the future. This however may be some time away, and will be subject to establishing the precise mode of inheritance for the condition.

Since the meeting with Janet Lee and others in April, a number of pedigrees from affected puppies and some background supporting evidence have been provided to the Health Group and we are grateful for the work done on these. These unsurprisingly support the theory that Scots Guardsman looks to be the common ancestor although two pedigrees from affected pups do not fit with this theory and at least one case in the USA appears to have arisen from stock prior to Scots Gaurdsman. The relevance of these anomalies must be the subject of further investigation before a final substantive verdict can be given on this issue.

CECS

At the meeting with Cathryn Mellersh, we discussed the possibility of including CECS in the AHT Genome Sequencing Project supported by the UK breed clubs however as CECS is unlikely to be single gene mutation and the diagnosis is more challenging it was agreed to take a different approach. This would require the comparison of samples from affected and unaffected Border Terriers and around 25 samples from confirmed cases would be required.

A meeting between representatives from the AHT and Mark Lowrie has been arranged (early September) to evaluate the characteristic symptoms (phenotype) of typical cases of CECS and the possibility for cases with verified diagnosis by Mark Lowrie to be used as a source of samples for this study. Once the AHT can secure a set of samples they will provide us with a work plan and associated costs. The AHT caution that this initial study may not prove successful and further work may be required.

Further work to assist progress with CECS has been initiated. We are close to finalising a clinical questionnaire to capture the clinical features of CECS cases and potential associations with other conditions. This will be released once it has been subjected to further review.

A fact sheet is being developed for owners to use when consulting their veterinary surgeon about suspect cases. The aim is to provide the veterinary surgeon with useful information about CECS and direct them towards further sources of advice and information. This will also be linked to a protocol to ensure effective veterinary help is accessed to provide a verified, accurate diagnosis and to ensure adequate relevant samples are taken and provided to the AHT as a reference source of genetic material.

Epilepsy

As a number of potential cases of CECS have been confirmed as cases of epilepsy and given the level of epileptiform seizures reported in the breed in epidemiological studies, the AHT has also been asked to include the Border Terrier in its work to identify mutations associated with Epilepsy.

Other actions

Breed Clubs have each identified a willing member to act as a contact point for those seeking advice and help with possible cases of both SLEM and CECS. Once they are able to have access to the advisory information being developed we can activate this network of volunteers to act as a primary source of help and guidance.

Various people have started local projects to help raise money for the Breed Health Fund.

These initiatives are greatly appreciated by the Breed Health Group. The willingness of breed supporters to play a significant part in the funding of future work, as well as being important in itself, will hopefully also help in persuading outside funding bodies to provide additional funds for the work that will require to be done.

The Breed Health Co-ordinator has been in touch with the Chairman of the KC Breed Health Group to ensure this advisory group to the KC Board is kept up to date with the health issues in our breed. This is a pro-active engagement to address some of the confused commentary on social media which has stimulated interest in the health of the Border Terrier.

The KC also plans to develop Breeding and Conservation Plans for all breeds and has recently announced that it plans to collect data on the Border Terrier and produce a draft plan by the autumn of 2018

A Breed Health website is under construction and will soon be operational to act as a reference point for information and guidance on the various health concerns in Border Terriers.