

CAIRN TERRIER HEALTH GROUP REPORT 2017

Many Thanks to owners, who again have kept us informed or asked for advice! It has also been welcoming to receive updates on cases earlier reported on, especially nice to hear when a previously diagnosed dog is still doing well. Please continue to report on problems or ask for information if needed. The assembly of data, collected by the Cairn Terrier Health Group (CTHG), has been somewhat delayed due to ill health, but the work is still in progress. The internet connection is not very reliable here, so a `phone call can often get quicker result. Answering machine is in place and I return your calls, if a message is left.

KC PEDIGREE HEALTH SURVEY 2014 & DATA COLLECTION

The Survey was discussed in the 2016 Health Report and it was pointed out that the response had been rather poor and somewhat limited in reported conditions. Further analysis was undertaken and published by the KC this year. This did show that cases of 'Enlarged Heart' were deemed as above average. This is a rather vague description and the ages of the dogs are missing. The heart is an organ that tends to wear out with old age, in both man and `beast', and Cairns usually live to ripe old age, so that missing information could be relevant. No such cases have been reported to CTHG, so it would be most welcome if owners of affected dogs would notify us!

It is in the nature of questionnaires that collected data easily can be somewhat skewed. Another, and probably more reliable, method would be to gather information directly from the veterinary surgeries.

This was indeed realised, about a decade ago, at the Royal Veterinary College, where Dr Dan O'Neill and his team started a project called **VetCompass** (short for Veterinary Companion Animal Surveillance System). Disease information now is received directly from quite a large number of veterinary surgeries all over the country. VetCompass produces a profile of illnesses affecting all types of dogs, but do also run 2-year studies on specific breeds in turn. The breeds, so far included, have been those with perceived problems. The Cairns are not included in that group, because they are regarded as typically healthy dogs. I have however been in communication with Dr O'Neill about possibly doing a future study on our breed. We are therefore on the waiting list for the following year and then we have to see what eventuates.

GIVE A DOG A GENOME, UPDATE

It was mentioned, last year, that the breed had been entered for this project at the Animal Health Trust (AHT). The whole genome of a Cairn Terrier with Ocular Melanosis (OM) was sequenced by May 2017. Communication from AHT states that "The data will be added to the genome bank, and will begin contributing to studies in other breeds immediately. In addition, the data will be made available to other scientists for use in their studies, and your breed has therefore made a vital contribution to genetic research affecting the welfare of dogs worldwide." This data has also been shared with Dr Simon Peterson-Jones at Michigan State University, who is already doing research on Cairn Terriers with OM.

EYE CONDITIONS

No new cases of OM have been reported, but a new case of Suddenly Acquired Retinal Degeneration

Yvonne Catto has sadly decided to retire from her long-held post as Secretary & Treasurer. She has been with the CTHG from the beginning and I will miss her deeply. Thank You, Yvonne, for all your help and have a Happy Retirement!!!

We welcome Jennie Fairweather as the new Secretary & Treasurer.

Sincere Thanks to a benefactor for the generous donation of £100 to the Health Fund!

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Syndrome (SARDS) has come in. I first mentioned it in the 2014 report, after which an owner informed about other cases in the past. This really is such a strange condition and the first signs, even before sight loss, can be increased thirst and urination. Blood results can also be confusing and can easily mislead a veterinary surgeon, who hasn't come across this rare disease before. Ordinary eye examination cannot detect degeneration of the microscopic photoreceptors, so a specialist electroretinogram (ERG) is needed. There is no treatment or cure, but most dogs can luckily continue to live a happy life.

It is probably more upsetting to the owners, because eyesight is much more important to us humans than to dogs. They have thankfully got other senses so well developed that it is beyond our comprehension.

Cairn Terrier Health Group Report 2016

Introduction

Many thanks to all the owners, who have kept us informed during the year! Emails, letters and quite a number of 'phone calls have yet again been received. Some contacts have been re documented case histories, whilst others have been about more general concerns and worries. Notable cases reported this year include Addison's disease and Steroid Responsive Meningitis Arteritis (SRMA); both autoimmune conditions. Portosystemic Shunt (PSS) has sadly again been reported.

Health report data are typically dealt with on a generational basis for statistical purposes. This is also the method used by the Kennel Club (KC) for the intervals of their Health Surveys (see below). The end of spring 2017 marks the 10 years of data collection made by the Cairn Terrier Health Group (CTHG) and the results will be published, as soon as the data have been processed.

It would be most appreciated, if any information, you may have forgotten to report earlier, could be

forwarded to make the data as representative as possible!

KC Pedigree Breed Health Survey 2014

The results of this latest survey were published in the spring 2016 and can be viewed at www.thekennelclub.org.uk/vets-researchers/publications-statistics-and-health-results. The response to the 2014 survey was slightly better than to the 2004 one but still rather poor. 300 live and 38 deceased Cairn Terriers were represented. Most dogs (198 dogs or 66%) were not affected by a disease condition. The most common disease in live dogs was lipoma and the two most common, equally represented, causes of death were old age and hepatic(liver)tumour (median age for the latter 13.5 years). There were strangely no cases reported as diagnosed with neither PSS/MVD nor Ocular melanosis (OM), but they could of course be hiding under another umbrella.

Give A Dog A Genome

The Animal Health Trust (AHT), together with the KC, launched this worthwhile project early in the year. The aim is to get the genome sequenced for as many breeds as possible to enable/facilitate future research. It can be of benefit not only to one specific breed but also to other breeds involved in DNA analysis and sometimes even in human mutation research (e.g. certain cancers). The KC was subsidising a limited number of places, on a first come, first served basis. The normal price for sequencing is £2000/dog, but the KC are now paying half the cost. It was decided that the Cairn should have a place in this DNA collection, so an application was made and accepted and £1000 were sent from the CTHG. Comprehensive information, including on peer reviewed, published

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research, also had to be submitted. It was most encouraging to be notified that the researchers at AHT have decided to sequence the DNA from a Cairn with OM and cooperate with other research done on the condition. Very good news since a DNA test would be so much better than regular eye testing. Let us hope the research bears fruit!

Eye Testing

The CTHG has subsidised several sessions of Eye testing this year and paid £840 towards these. It is unfortunate that the BVA increases the cost so frequently, but regular testing of breeding stock is obviously very important.

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CAIRN TERRIER HEALTH GROUP REPORT 2015

Introduction

Many Thanks for keeping us informed during the year! Please continue helping to keep our records updated, even with earlier cases you may have forgotten to tell us about before. 2016 is the year of reckoning, when one generation has been reached and all collected data will be calculated and compared with results from other sources!

The latest KC Breed Health Coordinators Symposium did have two interesting talks, worth reporting on:

Dr Mike Starkey, head of Molecular Oncology at AHT, gave a presentation on **Canine Cancers**. He confirmed, as other oncologists have also stated, that the incidence of cancer (benign and malign together) is somewhere between 1in3 and 1in4. This is actually roughly the same risk as for human beings, so one should not be too surprised if ones dog becomes ill with the disease. It is also the No 1 cause of death in dogs over the age of 2 years old. Most cancers are due to sporadic mutations and not to inherited gene mutations.

Dr Tom Lewis, KC Quantitative Geneticist, introduced just finished research on **Trends in Genetic Diversity and Effective Population Sizes**. This is an extensive study covering all KC registered breeds.

The observed inbreeding coefficient (COI) for the Cairn Terrier has been considerably higher than the expected one and was at its highest in the 1980s and 1990s, with a genetic bottleneck and loss of genetic variation. There has been moderate replenishment since the early 2000s with negative rate of inbreeding and less extensive use of popular sires. Import of dogs may also have helped a little. Estimated effective population size = 70.3 (if below 50 the future of a breed may be at risk). Those wishing to read more about the issue can find the information at www.thekennelclub.org.uk/vets-researchers/publications-statistics-and-health-results/breed-population-analyses

Lungworm (*Angiostrongylus vasorum*)

This potentially fatal internal parasite is a rather new problem in UK and was, until relatively recently, confined to the southern part of the country. It is however now spreading quite rapidly and cases have been reported as far up as in Edinburgh. Location of reported cases can be found on www.lungworm.co.uk to aid risk assessment. Foxes and dogs serve as definitive host animals, but can not infect each other directly. Intermediate hosts, in the form of slugs or snails, who have come in contact with infected faeces, are needed for the parasite to spread. Dogs become

infected through, accidentally or on purpose, eating those slimy pests. It is therefore sensible not to leave toys and water- and food bowls outside, especially since it is suspected that also the slime can carry the infection. Faeces should also be removed promptly.

The symptoms can be rather varied and include lethargy, chronic cough, exercise intolerance, breathing problems and subcutaneous bleeding. Correct diagnosis is not always made, especially since the condition is fairly new and not very common. One little bitch, owned by Mr and Mrs Firth, almost lost her life due to a severe infection. The condition had not earlier been found in the area, so the local veterinary surgeon failed to diagnose it. The life of the bitch was thankfully saved by referral to The Queen's Veterinary School Hospital in Cambridge, where they had prior experience of cases. Most tests for internal parasites in dogs use faecal samples, but presence of this culprit has to be identified using a blood test, or SNAP test.

Prevention can be achieved by using a specific Advocate product or by using a product containing milbemycin oxime every four weeks.

DNA tests

Somebody asked, why no list of DNA tests for Cairns had been published by the CTHG. The simple answer is, that there is no such list, because no relevant tests have been found. Very many tests are now being offered from laboratories around the globe and

targeted at a great number of breeds. DNA tests can indeed be a valuable tool to help dealing with important hereditary conditions in a breed, but they are not a 'quick fix' to be used at random. One first has to ask IF a hereditary condition, and based on reliable, compounded information, is a problem in the breed? IF it appears to be relevant to use a genetic test, one then has to make sure that the specific test is accurate and has been validated for that specific breed i.e. one has to look at the scientific publication behind a test. The same inherited condition, e.g. PRA, can have a different mode of inheritance in different breeds, so that one test does not fit all. Tests also have to be incorporated in breeding programmes in such a way that the genetic variation is not unnecessarily reduced. Time and space does not allow for more in depth information on this somewhat complex topic, but I am more than happy to discuss further on the telephone!

Porto Systemic Shunt (PSS), or Liver Shunt; also MVD.

The number of breeders notifying about Bile Acid (BA) testing has not increased and the Scottish breeders are still top of the leader board.

1 case of PSS has been reported – a 7 years old bitch, who is thankfully doing well on conservative treatment.

Ocular melanosis (OM), Abnormal Pigmentation (APD).

The subsidized Eye examination was held in conjunction with the SKC show, with 8 Cairn Terriers being examined.

1 case of OM has been reported in a little bitch. She sadly had to lose one eye but is fortunately coping very well.

Many Thanks to Yvonne Catto for her invaluable help. Sonia White, our fellow Health Group worker, did sadly pass away during the year. She was a truly lovely person and is much missed.

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