

**BREAKING NEWS: *CONFIRMED CRGV CASES IN ABBEYFIELD (STAFFORDSHIRE), CHANDLERSFORD (HAMPSHIRE), NW LONDON, AND BOLTON (GREATER MANCHESTER).***

**ALABAMA ROT' WHAT IS IT? CAN MY NORFOLK GET IT?**

**Introduction**

Over the last few years there has been much talk about how we need to be extra vigilant after a number of dogs died of a disease that resembled Alabama Rot, a flesh-eating infection that eventually results in death. To date around 60 dogs in the UK have died from it.

A statement from the Forestry Commission (England) on the 21<sup>st</sup> January 2014 informed dog owners of the following: *Between December 2012 and April 2013, a spate of dog deaths in the New Forest prompted an investigation into the mystery dog illness.*

**What is this disease?**

Its currently correct name is CUTANEOUS AND RENAL GLOMERULAR VASCULOPATHY. This is because it starts out as a skin problem, with small red and raw looking areas on the lower legs, and sometimes around the mouth and on the tongue, which around a week later results in death from kidney disease. The most likely passage of events that causes CRGV is a local bacterial infection that produces toxins that causes changes to tiny blood vessels in the skin and kidneys that, in the end, is fatal. The dogs that do not die in

the first week, will die in the medium term after that usually. There may have been rare survivals, with some kidney function remaining.

Researchers have concluded that the disease is caused by ‘certain bacteria or a bacterium’, including a rare form of E. Coli, and possibly even *Aeromonas hydrophila* (an ulcerative skin disease of water animals, and other animals in wet ecosystems). The UK disease does not seem to resemble known E. Coli outbreaks, and remains a mystery.

### **What are the implications for Norfolk Terriers?**

Our dogs are low to the ground and have harsh and protective coats. Logically, therefore, the first signs of the disease may be spotted on the entire underside and face of the dog, and possibly the sides and top as well. The general advice out there suggests we check out dogs’ lower legs, below the knee and elbow. In the Norfolk Terrier, we need to check the entire body, therefore.

The harsh coat may be protective, preventing the suspected bacteria from reaching the skin. It may also be, however, that a generous coat is more likely to gather up more of those bacteria, and allow them to sit on the hairs for longer.

The advice from the Health Subcommittee of the Norfolk Terrier Club of Great Britain is that we REACT TO ANY DISCRETE RAW RED AREAS ANYWHERE ON THE BODY AND IN THE MOUTH, AND ESPECIALLY WHEN THE DOG IS ALSO LETHARGIC.

### **Why have we not heard about this disease before?**

As we have seen, infectious diseases can both spread and retreat, jump species, lay dormant, suddenly emerge, and so on. CRGV has been affecting dogs in the USA for more than 30 years, according to a paper published in the British Medical Journal. The same paper also stated that it was occasionally diagnosed outside the USA.

These cases reported and confirmed in Great Britain, are the first. A further 41 cases were excluded from the recent study because the medical records were incomplete. Sometimes owners simply do not want invasive tests or post-mortems. This is understandable.

### **What do these cases have in common, if anything?**

Out of the first 30 cases confirmed, there were 5 Springer Spaniels, 4 Flat Coated Retrievers, 2 Border Collies, and the rest were a variety of breed and cross-breeds.

Dogs showing symptoms (with the disease not necessarily confirmed) came from Hampshire, Northamptonshire, Yorkshire, Dorset, Shropshire, Surrey, Cornwall, Worcestershire, County Durham, Monmouthshire, Staffordshire, Greater Manchester, and NW London.

The conclusion, therefore, is: ALL DOGS, ANYWHERE MAY BE AFFECTED BY CRGV.

### **How do I know my dog has CRGV?**

The dogs that developed CRGV were taken to the vet because they had small areas of skin disease on their legs and were generally unwell at the same time. These skin lesions looked like small 'hotspots', wet eczema, reddish swelling, ulcers, or infected wounds. The dogs that were unwell showed tiredness, loss of appetite, and vomiting, and a few days later they developed a fever. These are the symptoms that herald the onset of kidney failure.

It is important to note that the early symptoms may be mistaken for a 'stomach virus' (a 'diagnosis' made too frequently in my view) or just 'feeling under the weather'.

### **How does CRGV cause my dog to die?**

All the deaths were caused by kidney failure. The kidney disease was caused by damage to the small blood vessels inside it (renal thrombotic microangiopathy)

There are other diseases that damage the kidneys in the same way, but these are never associated with the skin disease.

### **But is it definitely Alabama Rot?**

The BMJ report stated that it was unclear whether this set of symptoms is an ‘emerging disease’ or ‘one that was previously present but unrecognised’. It also stated that ‘Continued detailed clinical, clinicopathological and epidemiological evaluation will further enhance the understanding of the disease and will hopefully help to identify possible triggers, define prognostic indicators and determine the most appropriate management for these patients’.

Alabama Rot was first identified in the USA in the early 1980s, but affected Greyhounds almost exclusively. It was, therefore, considered to be breed specific. In the UK, however, a similar disease outbreak was found to not discriminate between breeds, size, or age of dog

### **How does my dog catch this disease?**

Dogs may catch this disease as a consequence of contact with bacteria while walking in woodlands. These woodlands were damp, with rotting vegetation, and had standing water, ponds, and streams.

The disease is not known to spread from dog to dog.

### **My advice**

In my practice I am inclined to always say to owners that they know their animals better than I do, and that they will always know when something is not right before I, as the vet, do. So, when your dog seems ‘under the weather’, immediately do the following:

- ≡ Under a good light, thoroughly check your dog for small patches of skin disease (see above). I mean thoroughly! Start with the feet, including between the toes, parting the

hair so you can see the skin. Work your way slowly up the legs. Do the whole body the same way.

≡ So, you have found a skin lesion! What do you do now? Phone the vet immediately, and say you are on your way. And be a little insistent, because the person answering the phone may not be entirely qualified to identify the situation or understand your anxiety. There is every chance that your dog may simply have a normal hotspot (you would have seen him/her licking the area profusely, however), an infected wound, an interdigital pododermatitis, or whatever, and the vets will say there is no urgency. They may say the same thing even *after* you have been. This is the danger, with any 'vague disease'.

≡ I am going to put my neck on the block, and suggest you do the following immediately after you suspect that your dog has caught this infection. This is what I would do, if I suspected the disease in one of our dogs:

CLIP/SHAVE THE HAIR AROUND THE LESION TO 1 – 2 CM; SCRUB IT AGGRESSIVELY WITH AN ANTIBACTERIAL SOAP (EG HIBISCRUB) OR SHAMPOO (MALASEB, VETSOLUTIONS). THEN WASH THE WHOLE DOG USING THE ANTIBACTERIAL SHAMPOO. IT MAKES SENSE, DOESN'T IT? THEN APPLY NEAT HYDROGEN PEROXIDE (THE STANDARD 6% SOLUTION AVAILABLE FROM THE PHARMACY) TO THE SKIN LESION(S), USING COTTON WOOL OR COTTON BUDS (I will explain in a minute). THEN REPEAT THE WASHING, SHAMPOOING, AND PEROXIDE PROCEDURE 20 MINUTES LATER (most bacteria will start to reproduce in around 20 minutes).

≡ Why Hydrogen Peroxide? We know from the management of necrotising skin infections in humans (the flesh eating bugs) that the infected tissue needs to be cut out

because the bacteria in this flesh is producing the toxins that produce the fatal disease. We can do something similar (apart from cutting out the infected skin) with Peroxide. When peroxide is applied to tissue, it 'oxidises' and kills off a layer of cells. These cells may already have infection present, so it is wise to get rid of them. By scrubbing with the antibacterial soap you will have eliminated a large number of bacteria on the lesion, and by shampooing the whole dog with an antibacterial shampoo you will have eliminated any remaining bacteria on the hair. By cauterising the skin with Hydrogen Peroxide you will have killed several layers of cells that may contain the bacteria. This may be the saving of your dog.

- ≡ Then go to your vet (again). Your vet will probably, at that point, admit your dog for aggressive fluid therapy (this is to flush the kidneys), intravenous antibiotics, and blood tests. The prognosis, if your dog has CRGV, remains poor, however.

### **But how to I protect my dog from the disease?**

The disease is currently poorly understood. Until our Health Subcommittee can be more specific about what to recommend, we suggest you do the following:

- ≡ Avoid areas where the disease, or even suspected disease, has been identified.
- ≡ Avoid damp woodlands with rotting vegetation and wood, and wet areas within these woods.
- ≡ Wash any mud, dirt, and debris from your dog's coat as soon as you arrive home.

### **Conclusion**

This disease, whatever it turns out to be, is very rare. By far more dogs die of obesity related problems and incorrectly managed everyday diseases. If you have any concerns, keep an eye

on the news and on the internet. There are interactive websites on the internet where there is information specific to your area. Below are a couple:

<http://alabamarot.co.uk/map/alabama-rot-uk-cases-map/>

<https://www.google.com/mymaps/viewer?mid=zIJgTt19x6zk...hl=en...>

Andre Hess MRCVS and the Health Subcommittee of the Norfolk Terrier Club of Great Britain

Copyright A Hess MRCVS and the NTCGB