

Dog Tips

The Strange Rot That's Killing Dogs — What You Need to Know

This bacteria-related condition was first seen in the US but is now spreading across the UK. Know the first signs to look for so you can get immediate treatment (which is limited in the traditional community), before it progresses to kidney failure.

Analysis by Dr. Karen Shaw Becker

STORY AT-A-GLANCE

- A strange and potentially fatal canine disease called Alabama rot, scientific name idiopathic cutaneous and renal glomerular vasculopathy (CRGV), is spreading across the U.K.
- CRGV was first identified in U.S. racing Greyhounds during the 1980s, and was thought to be related to bacterial toxins produced by E. coli
- The U.K. cases seem unrelated to E. coli, and may instead be linked to bacteria from rotting vegetation or in streams or ponds
- The primary symptoms are red patches of skin and/or ulcers on the skin, which can be followed in the most serious cases by kidney damage and potentially, kidney failure
- U.K. veterinarians are advising dog owners to wash off woodland mud after walking their pets, and keeping a careful watch for skin redness or lesions that should be reported to a veterinarian right away

Editor's Note: This article is a reprint. It was originally published April 19, 2017.

Recently I ran across a headline in a U.K. online publication that was rather disturbing. It read: "Alabama Rot is spreading and killing dogs — here's how to stop it." Many people have never heard of Alabama rot, formal name idiopathic cutaneous and renal glomerular vasculopathy (CRGV).

Since it sounds so completely horrible, and is indeed a terrible and potentially fatal disease, I thought I'd provide some additional information, especially for Healthy Pets readers in the U.K.

Alabama Rot First Reported in Racing Greyhounds

Alabama rot was first identified in racing Greyhounds in the U.S. during the 1980s. According to Greyhound Companions of New Mexico (GCNM), a nonprofit organization that rescues retired racing Greyhounds, Alabama rot is thought to be associated with toxins produced by bacteria such as E. coli, which is commonly found in the raw meat the dogs are fed.²

It's important to note that Greyhound protection groups have long alleged that breeders and racing groups feed their dogs "4-D" meat. According to one group, **Grey2K USA**, 4-D meat is used to reduce costs:

"At racetracks across the United States, dogs are fed a diet based on '4-D' meat. This is meat derived from dying, diseased, disabled and dead livestock that has been deemed unfit for human consumption.

The United States Department of Agriculture requires that charcoal be added to this meat to discourage human use.

According to an [dog racing] industry handbook, '4-D' meat is used at commercial dog tracks because 'it is the most economically feasible for the Greyhound industry at this time.'"³

Also:

"The dog racing industry defends the use of '4-D' meat by claiming that it is also used by commercial pet food companies. While it is true that '4-D' meat may be found in commercial pet foods, the use of '4-D' meat at commercial dog tracks is distinctive because it is fed to dogs raw.

Cooking meat destroys bacteria, but greyhound trainers are reluctant to do so for fear of negatively impacting racing performance."⁴

Since Alabama rot was first reported in Greyhounds, and since there's a very high likelihood racing Greyhounds are fed raw 4-D meat, it's a good bet the primary cause of the disease in those dogs was toxic bacteria.

UK Cases Don't Appear To Be Linked to E. Coli

The first cases of Alabama rot in the U.K. were reported in England in November 2012, and affected a wide range of breeds (including just one Greyhound). Since then the disease has continued to spread across the U.K., with over 80 confirmed cases as of December 2016, and many more suspected cases.⁵

Interestingly, the U.K. outbreak doesn't appear to correspond with any known E. coli outbreak, so veterinarians and health agencies are unsure what's causing it.⁶

Since the first reports of illness in 2012 involved dogs who became sick after walking in the New Forest in England,⁷ one theory is pets are being exposed when they come in contact with bacteria from rotting vegetation or in streams or ponds while out walking.

According to U.K. veterinarian Dr. Pippa Elliott, tests have ruled out E. coli, and are currently focused on a bacteria called aeruginosa.

"Part of the problem is that the toxin can be long gone by the time the dog becomes ill," says Elliott. "A bit like a hit-and-run victim, the dog is seriously injured but there's no evidence to say what the vehicle's license plate was."

Germany Also Reported a Single Case of the Disease 15 Years Ago

A decade before the 2012 U.K. outbreak, but long after CRGV was discovered in U.S. Greyhounds, a report surfaced that a Great Dane in Germany had become ill within a few hours of walking along the shore of the North Sea.⁹

The dog was ultimately euthanized, and a postmortem examination revealed lesions consistent with those found in U.S. Greyhounds with Alabama rot.

In addition, the exam revealed abnormalities similar to the hemolytic-uremic syndrome seen in humans from Shiga toxin-producing E. coli (STEC) that is often linked to eating undercooked hamburger meat.

However, to confuse matters further, analysis of the dog's intestinal samples showed no evidence of STEC.

Disease Symptoms and Diagnosis

The primary warning sign of CRGV is a distinct swelling, a patch of red skin, and/or the development of small ulcerations, typically on the face, tongue, stomach or back legs. If you have a long-haired dog, it can be difficult to spot the lesions.

Other symptoms can include lethargy, vomiting and loss of appetite, which can easily be mistaken for a minor GI disturbance. The GI symptoms tend to appear between two and seven days after the skin signs, indicate the disease is doing damage to the dog's kidneys and require immediate veterinary intervention.

Fortunately, in some dogs the disease never progresses to kidney damage and those dogs generally recover on their own. About 25% of dogs do develop kidney problems, but if treated promptly, many can make a full recovery.

Definitive diagnosis of Alabama rot is done with a kidney biopsy, but by then, the damage is usually irreversible. A better approach if you're concerned about red skin or ulcers on your dog that have no obvious cause, is to ask your veterinarian to measure your pet's kidney function with a blood test and **urinalysis**.

If the lesions worsen over the next day or two, repeating those tests should show whether the kidneys are being damaged.

Treatment and Prevention

Because the cause hasn't been discovered, conventional veterinary medicine doesn't have a whole lot to offer dogs with CRGV. Early and intensive treatment can improve the prognosis, but if the kidneys are damaged, the outlook is generally poor.

My approach would probably be aggressive fluid therapy, IV vitamin C therapy, ozone therapy and hyperbaric oxygen to address the vasculitis. I would treat the lesions with natural disinfectants and antimicrobials, along with immediately instituting natural kidney support.

If you're in the U.K., it's important to know that while Alabama rot is certainly a frightening condition and seems to be spreading, the number of dogs that have actually acquired the disease is quite small.

According to Vets4Pets, the condition seems to be picked up on the paws and legs on muddy walks, so it's important to always wash off woodland mud, keep your eyes peeled for signs of CRGV and call your veterinarian if you have any questions or concerns.¹⁰ You can also search a map of confirmed cases **here**.

Sources and References

- ¹ Coventry Telegraph February 17, 2017
- ² GCNM
- ^{3,4} Grey2K USA
- ⁵ Wikipedia
- ⁶ Care2, May 6, 2015
- ^{7,8} Petful November 15, 2018
- ⁹ <u>The Veterinary Record, 2002 Oct 26;151(17):510-12</u>
- 10 Vets4Pets