THE ABCs OF

TEAM EDUCATION & CLIENT COMMUNICATION

ANAPLASMOSIS

Co-infection

LYME DISEASE

WHAT IS CO-INFECTION?

Ticks can transmit more than one organism, resulting in multiple infections in the same dog, or co-infection. Lyme disease is caused by infection with the bacterium *Borrelia burgdorferi*, and anaplasmosis is caused by *Anaplasma phagocytophilum*. Both diseases are spread by the same type of tick: the deer tick (*Ixodes pacificus*) and the eastern black-legged tick (*Ixodes scapularis*).

WHAT SHOULD YOU WATCH FOR?

Many dogs won't show any clinical signs of Lyme disease or anaplasmosis, making diagnostic testing extremely important. If dogs do exhibit signs, they will likely show the following:

- fever
- lethargy
- anorexia
- arthritis
- lameness
- swollen lymph nodes

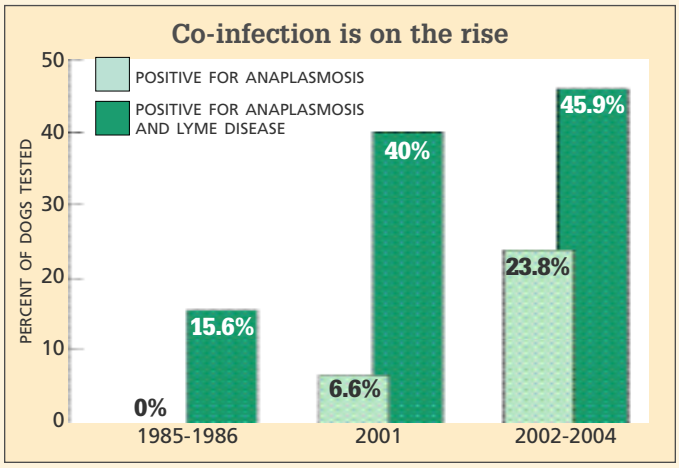
Dogs with anaplasmosis may also experience red, swollen eyes and suffer from low platelet counts.

WHY IS CO-INFECTION DANGEROUS?

When a dog contracts Lyme disease or anaplasmosis alone, its immune system is more likely to suppress disease. However, a dog with both infections at once is more likely to become sick.

HOW CAN YOU DETECT CO-INFECTION?

Lyme disease can be easily diagnosed with the IDEXX SNAP 3Dx test, but until now there hasn't been a simple test for anaplasmosis. Luckily for dogs, the new SNAP 4Dx test detects both *B. burgdorferi* and *A. phagocytophilum* organisms, so both diseases can be successfully diagnosed. Now veterinarians and team members can ensure they're offering dogs the best care.



Source: Steve Levy, VMD

Matt Eberts, DVM, says

52%

of dogs in his clinic, Lakeland Veterinary Hospital in Minnesota, test positive for *Anaplasma* infection.

WHEN TESTING IS A MUST

It's smart to test every dog for *B. burgdorferi* and *A. phagocytophilum* infection, says Matt Eberts, DVM, at Lakeland Veterinary Hospital in Baxter, Minn. But he says some dogs always require testing:

- Dogs that show signs of Lyme disease or anaplasmosis
- Dogs that live in high-risk areas, especially if they spend time outdoors
- Dogs that visit high-risk areas

STEPS FOR PREVENTION

1. Recommend that all dogs be treated with a tick-control product.
2. Follow up with clients to ensure that they're using the product—and using it correctly.
3. Suggest vaccinating at-risk dogs to protect against Lyme disease.

This information is provided by IDEXX Laboratories as an educational service to team members.

IDEXX LABORATORIES

ANAPLASMOSIS
Co-infection
LYME DISEASE

COMMUNICATING WITH CLIENTS

USE THESE TIPS TO TALK TO DOG OWNERS

By testing patients and treating infections early, Matt Eberts, DVM, has seen illness related to Lyme disease decrease in his practice by

80%

ANSWERS TO CLIENTS' MOST COMMONLY ASKED QUESTIONS

Q. What is my dog's health outlook now that he's infected?

A. Infection doesn't necessarily mean disease, so running more tests will help determine whether the infection is active. If it is, we've caught it early and treatment will likely be successful.

Q. Can I catch tick-borne diseases from my dog?

A. No, you cannot contract Lyme disease or anaplasmosis from your dog. However, you are exposed to the same ticks in the environment, so be sure to use tick repellant and check for ticks regularly.

Q. Do cats get these diseases?

A. Cats are sometimes infected, but less often than dogs. Also, cats are not as likely to develop clinical disease.

HOW TO EDUCATE CLIENTS

Clients who understand the basics of co-infection are more likely to comply with prevention and testing recommendations. Gretchen Patrick, CVT, at Lakeland Veterinary Hospital in Baxter, Minn., teaches clients these points.

- Both Lyme disease and anaplasmosis are transmitted by ticks.
- Dogs protected with tick-control products are still at risk for infection, so every dog needs testing.
- Co-infection with both Lyme disease and anaplasmosis can be dangerous, so this makes testing even more important.
- If infection is caught early, dogs can be treated more easily. Patrick says this point is especially important because most clients want to keep their dogs healthy.

WHY CLIENTS SHOULD HAVE THEIR PETS TESTED

Without performing a laboratory test, it's difficult for veterinarians to diagnose tick-borne disease and to determine the right treatment. The SNAP 4Dx test helps team members quickly determine a dog's infection status so treatment can begin immediately, if necessary.

TALKING ABOUT PREVENTION

Tick-control products are the best way to prevent tick-borne infections, and vaccination can protect against Lyme disease. However, no vaccine exists for anaplasmosis, and dogs can be infected even with proper tick control. Think about it, Patrick says: If you sprayed yourself with bug repellent and walked into a cloud of mosquitoes, you'd still probably be bitten once or twice. The bottom line? Dogs still need regular testing.

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