

## **Denise Flaim's Animal House Column: Pros and Cons of Lyme Vaccine**

**Newsday, Melville, NY, July 17, 2006**

Here's a question to make your head hurt this fine Monday morning:

### **SHOULD YOU VACCINATE YOUR DOG FOR LYME DISEASE?**

Tick season, now in full swing, brings with it concerns about this complex disease, caused by a spiral-shaped bacterium called a spirochete. Notoriously difficult to diagnose, Lyme has diffuse symptoms -- arthritis, lameness, joint pain, fever, lethargy and weight loss -- and some dogs may not show any.

If you live in an area where ticks are not an issue, or your dog is a devoted couch warmer, your decision might be a simple one: Classified as "non-core" by the American Animal Hospital Association, the Lyme vaccine is "generally recommended only for use in dogs with a known high risk of exposure, living in or visiting regions where the risk of vector tick exposure is considered to be high, or where the disease is known to be endemic," according to its 2006 canine vaccine guidelines.

But for dogs that romp in fields of green in areas where the disease is entrenched, decision-making gets murkier.

"It's not black and white -- it's a real dilemma," says holistic veterinarian Allen M. Schoen, author of "Kindred Spirits: How the Remarkable Bond Between Humans and Animals Can Change the Way We Live" (Broadway, 2002). "What I tell my clients is you have to weigh the risk-benefit ratio of the exposure rate of your animal versus the side effects of a vaccine."

There are two types of vaccines used to prevent Lyme disease. The first, called a bacterin, contains multiple antigens that manufacturers say are necessary to best protect against Lyme. These vaccines also include preservatives called adjuvants, which some experts believe are responsible for vaccine reactions that mimic symptoms of the disease itself.

The second type, recombinant vaccine, contains only outer surface protein A, which manufacturers contend is the principle antigen required to prevent Lyme transmission. This vaccine does not contain adjuvants, and so theoretically should have a lower risk of reactions. At least one of the recombinant Lyme vaccines available has demonstrated

100 percent efficacy in clinical trials -- a success rate that has not been proven with older bacterin vaccines -- and been proven to provide protection for at least a year.

Veterinary immunologist Jean Dodds of Santa Monica, Calif., says owners who choose to vaccinate for Lyme should request that their vets use the recombinant form of the vaccine. But that does not mean all dogs should be reflexively vaccinated, even in high-risk areas.

Schoen reminds owners to review their individual animal's health. In a dog with an immune-mediated disease such as cancer, the administration of a vaccine may ultimately do more harm than good.

Schoen, who lives in Connecticut -- whose charming town gave the disease its name -- decided not to vaccinate his elderly golden retriever.

Instead, "I kept a close eye on him," Schoen says. Because tick prevention is a huge safety measure -- more important than vaccination alone -- he sprayed his dog daily with a nontoxic insect-repelling spray (Quantum's Skin and Coat Conditioner). If he saw a tick bite, or noticed symptoms, he began antibiotic treatment immediately.

"During peak tick season -- the four- or five-week periods in the spring and fall when ticks were the worst -- I also used Frontline," he adds. And just once, when the grounds of his practice were infested with ticks, he had the lawn sprayed to get them under control.

While it might sound anathema for a holistic vet to use a topical tick repellent or -- horrors! -- insecticide, Schoen notes the whole point of being holistic is doing what works.

"My attitude is don't let your dogma kill my karma," he says. "Holistic medicine is about the judicious use of everything." Schoen also gave his dog milk thistle to help the liver process the topical treatment, and researched insecticides to find an environmentally gentle one.

But Schoen cautions against thinking more is more. "My concern is that we're using a lot of different chemicals in the body simultaneously, and no one has done any studies looking at their interactions. Each can be an insult to the immune system. And at a certain point, one is the needle that breaks the camel's back."

Dodds notes that vaccinated dogs can turn up false-positive on the so-called ELISA test for a month or more after vaccination. Only a Western blot or C6 antibody test distinguishes natural infection from the vaccine.

Very occasionally, if untreated, Lyme disease can progress to renal failure or neurologic problems. But that fear-based motivation to vaccinate is a red herring, Dodds says, because of its rarity. And if Lyme is caught early enough, it is easily treated with antibiotics.

"You can get the serious stage of the disease because some people don't watch their dogs closely enough to know when they are 'off,'" she concludes. "Perhaps the danger is more about busy people having so little time, or even a cavalier attitude about their animals."