

A Holistic Alternative to Vaccination

An alternative to routine vaccination of every pet is the use of vaccine (antibody) titers. These simple, inexpensive blood tests can give us information about an individual pet's antibody status in relation to specific diseases.

In simple terms, antibodies are proteins made by the pet's white blood cells (specifically B lymphocytes.) These antibodies are made whenever a pet contacts an infectious organism (virus or bacteria, as a result of a natural infection) or is vaccinated (the vaccine uses low doses of infectious organisms, tricking the immune system to form protective antibodies without causing disease as might occur in a natural infection.) Using a titer test reveals each pet's antibody status. These results are then interpreted to determine if the pet is currently protected against a specific infectious disease or if the pet may require immunization. Thus, this is a very personalized, individualized approach to each pet. No longer are vaccine recommendations made to a "generic" population of pets, but rather the use of titers allows veterinarians to make a specific recommendation for each and every pet.

In my own practice, the use of titers has allowed me to seriously decrease the amount of vaccinations we give to pets. Most pets maintain protective titers for 5 or more years, and none have ever developed an infectious disease as a result of not vaccinating them.

There are both pros and cons to the use of vaccine (antibody) titers to determine the need to immunize pets.

Pros:

1. Easy to perform.
2. Inexpensive (usually \$100 or less.)

3. Gives us specific information about each individual patient, allowing the doctor and owner to make a rational and informed decision.
4. Replaces the current recommendation for annual vaccination for every pet regardless of actual need.

Cons:

1. While inexpensive, the extra cost may prohibit some owners from taking advantage of the testing.
2. Some diseases will not be titered; rather, automatic immunization will still be given. This is the case for the rabies vaccine. The 3-year rabies vaccine (used by most if not all practitioners) only needs to be given every 3 years. Some states require more frequent immunization regardless of the 3-year duration of immunity. These states may not accept titer information and would still require immunization, regardless of titer status. However, titers showing adequate protection against rabies are accurate and used in people such as veterinarians to determine when a booster rabies vaccine is needed. At this point, I know of no state which routinely accepts rabies titer testing in place of immunization. Interestingly, some countries will accept rabies titer information for animals that will be exported to these countries.
3. Not all diseases produce a measurable titer. For example, antibody levels have been shown to correlate with protection against canine distemper virus, canine parvovirus, canine adenovirus, feline panleukopenia virus, and Lyme' disease. Serum titers do not correlate with protection for the following diseases: kennel cough (*Bordetella bronchiseptica* and parainfluenza,) canine coronavirus, feline enteric coronavirus, and feline chlamydial infection. Cellular immunity utilizing white blood cells to kill the infection, rather than antibodies, provide protection against feline rhinotracheitis virus and feline infectious peritonitis virus, making titers inaccurate in interpreting protection

for these diseases. Antibody levels (IgG titers) do provide information about protection against canine leptospirosis, although immunity against this disease following vaccination with inactivated leptospirosis organisms is generally believed to be short-lived (6-12 months.)

Despite lack of a protective titer, there is still adequate protection due to the cellular immunity the vaccines for these diseases produce.

4. Titers, like vaccines, are not perfect. There is no guarantee that a pet with an adequate titer (or an annual vaccination) will not become infected or become ill with a disease. The titer only tells us that the pet should have adequate antibodies to fight off the infectious organism and that the pet possesses the ability to mount a secondary antibody response (and fight off the disease.)

To keep your pet safe and not pay for unnecessary vaccinations, insist on titer testing and promote natural health for your pet!