**Diagnoses of Parvo in puppies**

The Fecal Parvo ELISA Test is the most common test for parvovirus in puppies. The test has some limitations. Recent vaccination with a live vaccine (the type of vaccine that is most effective) may interfere with the test results. This means that the test may detect the live virus from the vaccine and show a positive reading when, in fact, the puppy does not have a parvo infection. Classically, this interference occurs 5 to 12 days after vaccination so if a positive fecal ELISA test is obtained within this period after vaccination, additional tests may be recommended.

The Drop in White Cell Count

The virus essentially turns the immune system off before making its deadly way to the GI tract. This is a feature of parvoviruses in all species which means that a characteristic drop in white blood cell count is seen on a blood panel. This characteristic finding is especially helpful in the diagnosis of a recently vaccinated puppy as the ELISA test maybe positive from the vaccine but if the white count is normal, the puppy is probably not infected. The white blood cell count is commonly monitored in the treatment of a parvovirus case.

Antibody Titers

There are two types of antibody titers that can be run: IgG and IgM. With the advent of ELISA testing, titers are not frequently used in making this diagnosis. The IgG titer is a more long-lasting antibody level. A high IgG titer would probably indicate active infection in a puppy that is old enough to generate antibodies and who has not yet received any vaccinations. Because parvovirus infected puppies have frequently received vaccinations in their recent past and are frequently too young to generate their own antibodies (which is how vaccinated puppies get infected in the first place), these test results are difficult to interpret.

Biopsy

Parvovirus lesions in the GI tract are of a classical appearance. There is no mistaking them under the microscope. Unfortunately, tissue samples of the GI tract are not readily available and most infected puppies are not good surgical candidates. Still, if a puppy has died and the cause is unclear, submitting samples of the GI tract can generally confirm or rule out a parvovirus diagnosis provided the tissue has not degenerated.