

Tests and Procedures

Digoxin Level Test

- Digoxin is a medication used to treat congestive heart failure and certain heart rhythm abnormalities in dogs and cats.
- A digoxin level test requires a blood sample from your dog or cat, and the test can be performed at the hospital on an outpatient basis.
- The test results help determine if the dose of digoxin is in the correct range for treating the condition without causing harmful effects.
- Signs of digoxin toxicosis (disease caused by poisoning) include mild gastrointestinal upset and worsening of the signs associated with the heart condition.
- Pets with digoxin toxicosis should be taken off the drug immediately.

What Is a Digoxin Level Test?

The medication digoxin is used to treat congestive heart failure and a condition in which the upper chambers of the heart (the atria) beat faster than normal. This drug has a narrow therapeutic range, meaning that there is a narrow margin between the dose that improves the condition and a dose that could be toxic.

Many factors can alter the metabolism of digoxin in dogs or cats, including other medications the pet may be taking at the same time. A digoxin level test measures the level of digoxin in the blood to determine if the dose is within the therapeutic range (the correct range for treating the condition). This ensures that the pet receives the benefits of the medication without any harmful effects.

The test requires a small blood sample from your pet. Ideally, the sample should be drawn 8 to 10 hours after the pill is administered. Most hospitals send the blood sample to an outside laboratory for analysis, and the results are usually available within a few days.

When Do Pets Need This Test?

A digoxin level test should be performed 1 or 2 weeks after the pet is initially started on the medication. Your veterinarian may also recommend the test if the following occurs:

- The dose of medication is changed.
- Concurrent (simultaneous) medications are altered.
- The pet gains or loses weight.
- The pet experiences any signs of digoxin toxicosis.

The test results help determine if the dose of digoxin is in the correct range for treating the condition without causing harmful effects.

What Are the Signs of Digoxin Toxicosis?

While dogs and cats with kidney disease are at risk for developing side effects from digoxin, any pet could have a problem. Possible signs of toxicosis are mild gastrointestinal upset, including vomiting, diarrhea, loss of appetite, lethargy, or weight loss.

Pet owners may also notice worsening of signs associated with the heart condition, such as increased respiratory rate, difficulty breathing, coughing, fainting, or exercise intolerance. Rarely, seizures may occur. If you notice any of these signs in your pet, contact your veterinarian immediately.

How Is Digoxin Toxicosis Treated?

When digoxin toxicosis is suspected, administration of digoxin should be discontinued immediately. Some pets may be treated with intravenous fluids to help eliminate the medication from their systems. Early intervention affords the best prognosis.