

Endocarditis

- Endocarditis is an infection of the heart valves and/or inside lining of the heart.
- The disease is more common in dogs than cats and usually affects male dogs.
- Endocarditis occurs when bacteria from another location in the body travel through the blood to the heart.
- Signs of endocarditis include coughing, difficulty breathing, getting tired quickly, and fainting episodes.
- Diagnosis may require blood tests, radiographs (x-rays), electrocardiograms (ECGs), and an echocardiogram (an ultrasonic examination of the heart).
- Treatment includes antibiotics and medications for heart failure.

What Is Endocarditis?

Endocarditis is the infection of the heart valves and/or inside lining of the heart. In most cases, the infection involves bacteria, but a fungus may also be responsible. The disease typically occurs in dogs, especially mid-size to larger breeds, and is rare in cats. Male dogs are most commonly affected.

What Causes This Condition?

Endocarditis is often initiated by a bacterial infection somewhere else in the body, such as the mouth, urinary tract, prostate, lungs, or bones. Bacteria from these locations can spread to the bloodstream. When the bacteria-filled blood flows through the heart, the heart valves can become infected.

In addition to bacteria, platelets and fibrin (substances responsible for clotting) build up on the valves, forming clumps known as *vegetations*. These vegetations eventually interfere with heart valve function, often leading to heart failure. The left side of the heart, which receives blood from the lungs, is most often infected, resulting in lung congestion.

Fragments of the vegetations can also break loose and travel through the blood to other parts of the body. These fragments can act like a clot and deprive tissues of oxygen, or cause infections in other locations, such as the joints, nervous system, and urinary tract.

What Are the Signs of Endocarditis?

The signs of endocarditis are usually associated with left-sided heart failure and lung congestion. These signs may include coughing, difficulty breathing, getting tired quickly, and fainting episodes. Other signs are more general or may be associated with clots or infections in other parts of the body. These signs include:

- Lethargy or weakness
- Weight loss
- Loss of appetite
- Fever
- Limping or lameness

How Is This Disease Diagnosed?

Diagnosis is often difficult and may require several tests and procedures. Blood tests are usually performed to check for signs of infection and to determine if other organs are infected. The veterinarian will usually want to take several blood samples over a 24-hour period to be tested. The tests determine the exact bacteria involved and the most effective antibiotics to use against them.

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Other procedures may include radiographs (x-rays) to assess the heart, as well as ECGs (electrocardiograms) to evaluate heart rhythm and function. An echocardiogram, which is a heart exam with an ultrasound machine, is often useful to help the veterinarian visualize the heart valves and identify vegetations.

How Is Endocarditis Treated?

Treatment usually involves antibiotics for a number of weeks. If the pet has heart failure, additional

Common Conditions

medications may be necessary to help the heart function properly and to relieve congestion in the lungs. Follow-up examinations are important to

determine the effectiveness of treatment and to ensure that your pet is comfortable. Early diagnosis and treatment offers the best prognosis.