

Dog Tips

Cat Tips

Why Your Pet May Be Weak, Lethargic and Refusing to Eat

If your cat or dog appears weak, doesn't want to exercise, seems confused, displays rapid breathing, decreased appetite, or has a pale tongue or gums, this may be the reason why. A good reason to get your pet to the veterinarian immediately, this condition may be easily diagnosed.

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STORY AT-A-GLANCE

- Anemia is a condition in which there is an abnormally low red blood cell count; red blood cells contain an
 iron-containing protein called hemoglobin that moves oxygenated blood to all the body's tissues
- Anemia has three causes: blood loss, destruction of red blood cells (hemolytic anemia), or insufficient production of red blood cells (aplastic anemia)
- When your pet has insufficient hemoglobin to carry oxygen to the body's tissues, he experiences oxygen starvation; symptoms include weakness, lethargy, elevated heart rate, pale mucous membranes, loss of appetite and rapid breathing
- Anemia isn't difficult to diagnose, however, the underlying problem can be, and must also be identified and resolved; treatment depends on the root cause

Anemia is a condition characterized by an abnormally low number of red blood cells (erythrocytes). These red blood cells contain hemoglobin, an iron-containing protein that transports oxygen to all the tissues of the body.

As red blood cells age (they have an average lifespan of about two months) or are damaged, they're collected by the spleen and removed from circulation. Part of the hemoglobin molecule is recycled to the bone marrow to be included in new red blood cells, while other parts are processed by the liver.

Common Causes of Anemia

There are three causes of anemia:

- Blood loss
- Destruction of red blood cells (hemolytic anemia)
- Insufficient production of red blood cells (aplastic anemia), which is the cause of about 80% of feline anemia

Anemia caused by blood loss can result from trauma, surgery, or another bleeding disorder that results in a sudden reduction in the overall number of circulating red blood cells. However, anemia from blood loss can also be the result of a slower, chronic condition, including bleeding in the gastrointestinal (GI) tract due to ulcers, internal or external parasites, cancer, and a number of other conditions.

Hemolytic anemia is caused by the destruction or shortened lifespan of red blood cells, which means there is a low overall circulating red blood cell volume. This type of anemia can be either immune-mediated or non-immune-mediated.

Autoimmune hemolytic anemia is a condition in which an animal's body sees its own red blood cells as foreign invaders and sets out to destroy them. Non-immune-mediated hemolytic anemia is the destruction of red blood cells by other means, including red blood cell parasites, hereditary diseases, toxins, or a low phosphorous level.

Aplastic anemia, which is insufficient production of red blood cells, is caused by several different disorders, including tumors of the bone marrow, chronic kidney disease, and other conditions that affect the production of red blood cells. Infections like parvovirus or Ehrlichia can cause this type of anemia, as well as chemotherapeutic agents, sulfa drugs, estrogens, and sometimes exposure to radiation and toxins.

Symptoms and Diagnosis

When a pet has an abnormally low volume of red blood cells and consequently insufficient hemoglobin to carry oxygen to the body's tissues, he experiences oxygen starvation.

Symptoms can include weakness, lethargy, exercise intolerance, an elevated heart rate, pale mucous membranes (usually noticed in the mouth — the gums and/or tongue become pale pink to white), mental confusion, loss of appetite, rapid breathing, and collapse. If the animal is passing a large amount of digested blood from the GI tract, there will be a black tarry stool as well.

Anemia isn't difficult to diagnose. Typical diagnostic tests include a complete blood count, a packed cell volume, and a serum biochemistry panel. A blood smear can be analyzed under a microscope to evaluate the structure of the red blood cells.

A urinalysis may also be performed, as well as a test to check for Ehrlichia canis if the patient is a dog.

Your vet may also do a coagulation panel, as well as a mucosal bleeding time test to evaluate your pet's clotting ability. A fecal test may also be performed to check for occult blood loss, which is blood loss from the intestines.

A diagnosis of anemia doesn't identify the underlying problem, however. Diagnosing the root cause of why the anemia is occurring can be challenging. There are a multitude of other tests and diagnostics that often must be run to determine the cause of the low red blood cell volume.

These tests can include an abdominocentesis to check for fluid or blood in the abdomen due to trauma, a bleeding disorder, a problem with the spleen, or a complication from a prior surgery. Other tests might include abdominal X-rays, an ultrasound, or an endoscopy to look inside the abdomen for the presence of tumors or ulcers.

There are also tests that can identify the presence of infectious diseases, including mycoplasma or Babesia in the blood. Sometimes a DNA test is done to look for genetic defects in susceptible breeds. And, of course, there are tests to determine if cancer or auto-immune disease is present in your pet's body.

Treatment for Anemia Depends on the Underlying Cause

If you think your pet may be anemic, you should make an appointment with your veterinarian as soon as possible. Anemia can be life threatening, depending on what's causing it.

Treatment goals for patients with anemia are to control bleeding, restore blood volume, find and resolve underlying causes of chronic blood loss, and provide supportive care. Depending on the cause of the anemia, treatment options can include:

- Intravenous (IV) fluid therapy to increase blood volume
- Antibiotics if bacterial infection is present
- Antiparasitic medications
- Transfusions of packed cells, whole blood, platelets, or fresh frozen plasma
- Vitamin K1 for coagulation disorders or certain poisonings
- Potassium phosphate supplementation
- Transfusions of bone marrow
- Gl protectants
- Surgery to repair the source of the bleeding

Anemia is rarely related to iron deficiency in pets. Iron supplementation should be avoided, unless your pet is one of the very rare cases where actual iron deficiency is present. Anemic pets must be carefully monitored while undergoing treatment.

Acute aplastic anemia can usually be reversed within a few weeks once the cause is identified. Chronic aplastic anemia is usually a more serious condition and more difficult to resolve.

Blood loss anemia can be resolved as soon as the source of the bleeding is identified and repaired. Anemia caused by cancer has a less optimistic prognosis and depends on the pet's response to treatment for the cancer. Many causes of hemolytic anemia can be resolved once whatever is causing the destruction of the red blood cells has been identified.