

# Hypertension and Your Pet

- Hypertension, also known as *high blood pressure*, can affect dogs and cats.
- In people, the most common type of hypertension is known as *primary* or *essential hypertension*, which means that high blood pressure is the main disease process.
- Cats and dogs, on the other hand, rarely develop primary hypertension. Instead, hypertension in pets is usually the sign of another illness. This is known as *secondary hypertension*.
- Because hypertension in dogs and cats is usually secondary to another illness, some of the clinical signs may be due to the hypertension, while other signs are attributable to the underlying illness.
- Hypertension can be difficult to diagnose based on clinical signs because many of the associated signs can be attributed to any number of diseases.
- Once your veterinarian identifies hypertension in your pet, he or she will search for the underlying cause of the condition. Often, treating that illness can correct the hypertension.

## What Is Hypertension?

Hypertension, or high blood pressure, occurs when blood moves through the body's arteries with too much force. Blood pressure can be increased by several factors, including faster heart rate and increased cardiac output (the amount of blood that is sent out into the body with each heartbeat). In animals with hypertension, the increased force or "pressure" of the blood damages the arteries as the blood tries to move through. Imagine a firefighter trying to force a high-powered stream of water through a garden hose. The pressure would tear the hose apart. Similar damage to the body's arteries is possible if high blood pressure is left untreated.

For example, blood vessels in the retinas (in the eyes) can become damaged from hypertension. This damage can eventually cause blindness. For some pet owners, sudden blindness can be the first noticeable sign of hypertension in a pet. The heart and brain can also be damaged by hypertension.

## What Causes Hypertension?

Hypertension in pets is often the result of other illnesses. Some possible causes in dogs include kidney disease, adrenal gland disease, and diabetes. In cats, the most common causes are kidney disease, hyperthyroidism (overactive thyroid gland), and heart disease.

Because hypertension in dogs and cats is usually secondary to another illness, some of the clinical signs may be due to the hypertension, while other signs are attributable to the underlying illness.

## What Are Possible Signs of Hypertension?

Because hypertension in dogs and cats occurs secondary to an underlying illness, some of the clinical signs may be due to the hypertension, while other signs are attributable to the underlying illness. Clinical signs of hypertension (or associated illness) may include the following:

- Redness in one or both eyes
- Vision loss
- Seizures
- Lethargy (tiredness)
- Depression
- Difficulty breathing
- Increased thirst and urination
- Weight loss
- Increased or decreased appetite

## How Is Hypertension Diagnosed?

Hypertension can be difficult to diagnose based on clinical signs because many of the associated signs can be attributed to any number of diseases. If your veterinarian suspects a problem, he or she will measure your pet's blood pressure.

## Common Conditions

Initial blood pressure readings in pets are sometimes artificially high due to the animal's anxiety level in the veterinary clinic (often termed *white coat hypertension*). Your pet may need to stay a few hours in the clinic until he or she calms down enough to get an accurate reading.

### How Is Hypertension Treated?

Once your veterinarian identifies hypertension in your pet, he or she will search for the underlying cause. Often, treating that illness can correct the hypertension. In other cases, medication to treat high blood pressure may be prescribed. Typically, drugs control hypertension by slowing the heart rate, modifying cardiac output, or relaxing the walls of the arteries to make

blood flow more easily. Sometimes, combinations of drugs are required to control a pet's blood pressure. In pets in which high blood pressure has caused eye problems, eye drops may be prescribed as well.

Your veterinarian may also recommend a diet with reduced salt, which may mean feeding your pet a prescription diet.

Pets being treated for hypertension should be checked regularly to ensure that their blood pressure remains within a healthy range. Your veterinarian will recommend a schedule for recheck examinations. Repeat blood testing or other diagnostic testing may also be recommended periodically. As in people, pets with hypertension may require medication for life.