

Condition: Congestive Heart Failure

Your pet has been diagnosed with congestive heart failure (CHF). Their condition is critical at this time. We are treating to get the symptoms under control, but unfortunately, pets in heart failure are at risk for sudden cardiac arrest.

The heart's job is to pump blood through the lungs to receive oxygen - then out of the lungs and to the rest of the body so that organs can use the oxygen. As pets age, the heart can become diseased, just like in humans. The most common disease is valvular disease. The valves that keep blood flowing one way in the heart start to leak. As a result, blood flows both forwards and backwards (regurgitation). This leads to enlargement of the chambers of the heart. As the chambers enlarge, the heart beats less effectively. When this happens, blood starts to back up into the lungs. When this happens severely enough, the pet is said to be in "congestive heart failure." The lungs are congested with fluid (pulmonary edema).

Emergency treatment for heart failure must be started ASAP, as this can be a quickly fatal condition. Treatment most often consists of the following:

- **Diuretics:** Furosemide is the most commonly used diuretic, and one of the most critical medications. It draws fluid out of the lungs and encourages the pet to urinate this fluid out of the body.
- **Oxygen therapy:** Increasing the patient's oxygen levels will help enormously. This is accomplished with an incubator or oxygen cage. Sometimes, a catheter is placed into the patient's nose to allow oxygen to flow directly into the back of the nose, down the windpipe, and into the lungs.
- **Pimobendan (Vetmedin):** This medication helps the patient's heart relax and beat more effectively - letting more blood flow forwards with every pump.
- **Sedatives:** Often a light sedation for a pet will help with the feeling of panic associated with struggling to breathe. We often use butorphanol, acepromazine, and other medications to assist with this.

A definitive diagnosis of the cause of heart disease can often be reached with an echocardiogram (ultrasound) performed here at USVC. However, in other cases the diagnosis can be more difficult and tricky to reach. Every case is unique!

Patients in CHF are often in the hospital for at least 1-3 days - while we work on getting the condition under control and your pet out of the most life-threatening danger. Unfortunately, heart disease is not curable. Your pet will likely be on medications for the rest of their life. These include the medications listed above, as well as potential medications such as enalapril/benazepril, digoxin, and others.

Longterm, your pet is always at risk for sudden onset pulmonary edema, and your pet will need life-long monitoring and lifestyle changes such as very restricted exercise and excitement. However, with proper medications and lifestyle changes, dogs with heart disease can often live for extended periods of time with a good quality of life.