

## **Guinea Pig Heart Disease Information**

The vet will listen to the heart with a stethoscope and note any abnormal sounds like arrhythmia or murmurs. He/she will observe respiratory rate and examine the mucous membranes. Pale or cyanotic membranes may indicate poor blood circulation. *Note: Most enlarged hearts sound normal.* Some animals also have a heart murmur.

Diagnostics can help identify cardiac diseases and assess heart function and condition. *Note: enlarged hearts may not show up on x-ray or ultrasound. We usually treat by symptoms and only do x-rays for diagnosis if needed. Myocarditis from scurvy will not show up on x-ray.*

**X-rays:** Radiographs show the thoracic cavity, relative size of the heart, and the presence of fluid in the pericardium (the fibrous sac that surrounds the heart) and/or lungs. They can help the vet distinguish between Congestive Heart Failure and respiratory disease. However, many heart pigs also have respiratory disease including pneumonia.

**Signs:** These signs may occur daily or only occasionally. If your Guinea pig exhibits any of these signs, seek veterinary care immediately. Go only to a vet familiar with heart disease in Guinea pigs. Dr. Sari Kanfer (626-405-1777) is an expert, Dr. Ridgeway (562-434-9966) is familiar with it..

- Labored breathing
- Cough or wheezing, rattling (fluid in the lungs)
- May produce a "hooting" sound (sounds like a dove or owl)
- Chronic upper respiratory infections (URIs)
- Reduced activity, lethargy
- Loss of appetite and/or weight loss (breathe or eat phenomenon)
- Malocclusion from not being able to eat hay properly
- Enlarged heart on x-ray
- Ear margins may become necrotic from poor circulation
- Bluish or pale mucous membrane color
- Difficulty coming around after being put under anesthesia
- Deep sleeping, easy to pick up (does not run away)
- Pale hind feet or bright red feet (high blood pressure), cold hind feet.
- Bumblefoot
- Crusty eyes
- Nasal discharge
- Pea eye

### **Scurvy and vitamin C:**

Scurvy has been found to be a significant factor in causing CHF, as well as many other illnesses and conditions like arthritis. Supplemental vitamin C is absolutely necessary with a minimum of 50ml or 50mg daily for a healthy pig. 1cc per day of Child Life baby liquid C or 1 tablet of Oxbow vitamin C tablet per pig daily. Double the amount if the animal is ill. The liquid is preferred in this situation to be sure they get the correct amount if not eating well.

It only takes 60 to 90 days without adequate vitamin C for a human to develop scurvy. The same is true for other primates, Guinea pigs, etc. to develop scurvy. They can not get enough in veggies or pellets because there is no way to determine exactly how much they actually process, how much is in a given vegetable or how many pellets they eat each day. You can not overdose vitamin C in these quantities. It is water soluble and any excess will be excreted in the urine.

### **Drugs that can be useful in the treatment of CHF:**

**Benazepril (Lotensin®)**, an ACE inhibitor used to treat heart failure. Compounded 2mg/ml. .5cc twice a day no matter what the pig weighs, is the standard dosage.

**Furosemide (Lasix®)** a diuretic used to treat pericardial effusion and/or pulmonary edema. 10mg/ml compounded. .3cc – 2-3 times a day when animal is in distress with fluid on lungs. After stabilized, .3cc at night only. This can be used as needed and many pigs are on it their entire lives, depending on the severity of their symptoms.

**Vetmedin 1.25mg** is used when there is a heart murmur present. 1/4 tablet twice a day, crushed and mixed with 1cc water is the standard dosage. It can also be used with animals in severe heart distress.

**Baytril** is used for URI symptoms. Many Guinea pigs do better faster with the addition of Baytril in case they also have underlying infections.

### **Signs of scurvy are similar to those for heart disease.**

Tiredness	Diarrhea
Loss of appetite	Lethargy
Irritability	Slow wound healing
Inability to gain weight	Anemia
Muscle weakness	Depression
Joint and muscle aches and stiffness	Unusual paleness
Bulging eye balls	Fever
Eventual death due to cardiac failure	