## **Heart Murmurs & Anesthesia**



A heart murmur indicates the presence of abnormal (turbulent) blood flow within the heart. Murmurs can be physiologic or benign (not causing harm). Physiologic murmurs can be heard intermittently with stress, growth, or other disease processes (ie: anemia). Physiologic murmurs do not usually impact the function of the heart or the health of the animal.

Pathologic murmurs are typically persistent and further diagnostics are needed to determine the presence or extent of heart disease (structural and/or functional changes to the heart). Recently there has been a link with **grain free diets** and development of <u>dilated cardiomyopathy</u>, a potentially lethal heart disease.

It is impossible to determine whether a heart murmur is benign or pathologic by auscultation alone (ie: listening to the heart with a stethoscope). An echocardiogram (ultrasound of the heart) is needed to confirm the cause (origin) of the murmur and severity of heart disease (if any) present. Unfortunately the "loudness" or "Grade" (I-VI) of the heart murmur does not necessarily correlate with either heart disease presence or severity. For example, some cats can have significant heart disease present WITHOUT having a murmur.

Most echocardiograms are performed by a veterinary specialist called a cardiologist. Chest x-rays, EKG (heart rhythm strip), a blood test called Pro-BNP, and blood pressure measurements also give helpful information, but are not a substitute for an echocardiogram.

Many pets with persistent heart murmurs can live normal lives and may not ever progress to significant heart disease requiring medication, however, some do benefit from medication or are at risk of congestive heart failure.

## **Puppy and Kitten Heart Murmurs**

Many young patients will have physiologic (transient) heart murmurs as they, as well as their heart, are growing. This murmur will often disappear as they continue to grow. It is important to have regular exams with your veterinarian during this critical growing stage to determine if the murmur persists. If the murmur is still present at the last set of vaccinations (around 16-20 weeks), additional diagnostics may be recommended.

For more information about **HEART MURMURS** in pets, please visit the **Veterinary Partner** website powered by VIN: <u>www.veterinarypartner.vin.com</u> and typing **HEART MURMUR** in the SEARCH BOX. This article allows you to hear what a murmur sounds like.

- Heart Murmurs in Dogs & Cats
  - This article allows you to hear what a heart murmur sounds like

## SURGERY, ANESTHESIA, AND HEART MURMURS

Heart disease places your pet at an increased risk for complications during and after anesthesia. Some of these complications include but are not limited to: abnormal heart rhythm, low blood pressure, development of congestive heart failure (CHF) post-procedure, sudden cardiac or respiratory arrest and death) Although an echocardiogram *is not a requirement* for an anesthetic procedure, knowing the origin of the murmur and the severity of heart disease present (if any) may help mitigate pre/during/post anesthetic complications.

A **HIGH RISK ANESTHESIA WAIVER** is required for *any* patient who has a heart murmur and/or underlying heart disease and is undergoing anesthesia.

## LOCAL CARDIOLOGISTS

- <u>Petcardia</u> multiple locations
- <u>Rocky Mountain Veterinary Cardiologists</u> multiple locations including mobile services
- Evolution Veterinary Specialists including mobile services
- <u>Choice Veterinary Specialists</u> Westminster