

# Information for patients with cardiac disease

Anesthesia for patients with heart disease:

Quite a few of our dental patients are presented to us with some form of heart disease. With smaller, older dogs, this is usually due to a heart murmur that is heard by the veterinarian, before there is a decline in heart function.

If your dog has a heart murmur, that means at least one of the heart valves is not as efficient at closing during contractions of the heart and that allows blood to flow backward, causing the turbulent flow that we hear as a murmur. Murmurs are graded on a scale of 1 to 6, depending on the extent of the backflow.

If your dog has a murmur, additional work-up is recommended, including a blood test to check for damage or stretch to the heart muscle (ProBNP) and chest xrays (interpreted by a radiologist) to look for an enlargement to the heart's shadow.

**You can also help monitor the disease by counting the number of breaths per minute that your pet takes when asleep and keeping track of that number before and after surgery.** Generally, under 30 breaths per minute is usually good.

If these are increased, we will recommend an echocardiogram (ultrasound of the heart) and preferably a consultation with the cardiologist. If there is sufficient disease to warrant medication before proceeding with the anesthetic event, we will go with the cardiologist's recommendation.

Once it is determined that the risk is reasonable, we provide special care for our cardiac patients, including cardiac sparing medications, pre-operative oxygenation if needed, a slightly lower intravenous fluid rate and careful monitoring by our team of experienced technicians.

We understand that there are certain risks and anxieties that pet owner's experience when their pet needs anesthesia. Our goal is to minimize that risk while still allowing your pet to have necessary surgery to remove infection, pain, and increase their quality of life.

## Needed prior to anesthesia: (in addition to regular pre-operative blood work)

- Bloodwork with Cardio ProBNP
- Chest xrays (evaluated by a radiologist)
- Echocardiogram (if ProBNP or chest xrays abnormal)
- Cardiologist evaluation (for patients with clinical disease)
- (Less commonly needed) Antibiotics prior to procedure (ex: subaortic stenosis): \_\_\_\_\_