

Cardiac tumors

Just as tumors can form elsewhere in the body, they can also form on or inside of the heart. Tumors can be due to highly aggressive cancers, however benign growths are also possible. Given the location, however, all tumors associated with the heart can be problematic. There are two types of heart tumors which are most commonly diagnosed in dogs: hemangiosarcoma and chemodectoma. The most common tumor type diagnosed in cats is lymphoma. Other types of tumors exist, but are less common.

Animals who have a tumor on the heart may show no outward signs. Sometimes this is diagnosed simply because the heart looks enlarged on a radiograph (x-ray) or because there is an abnormal heart sound present prompting a cardiac evaluation. If an animal is showing symptoms related to a tumor, it may manifest as signs of weakness, lethargy, collapse, or even sudden death. Unfortunately, there is little in the way for treatment options for most cardiac tumors. Given the location, it is rare for surgery to be an option. Occasionally there are chemotherapeutic drugs or radiation therapy that may be useful or an herbal supplement to help decrease the risk of bleeding.

Hemangiosarcoma

This is the most common cardiac tumor in dogs. Hemangiosarcoma is a tumor of blood vessels that most commonly affects the heart and spleen. This is a highly aggressive cancer. Typically, by the time it is diagnosed, it has already spread to other places in the body. Hemangiosarcoma frequently causes bleeding into the sac around the heart, called pericardial effusion, causing the heart chambers to collapse. This can cause signs of weakness and collapse. An emergency pericardiocentesis is required to drain the fluid from around the heart, allowing the heart to reexpand. Chemotherapy may have a mild effect on prolonging survival with this cancer, (median survival time with surgery and chemotherapy is 5-6 months, versus 5-6 weeks without chemotherapy), but requires frequent visits to the hospital. Golden Retrievers and German Shepherds are considered predisposed to this tumor type.

Chemodectoma

This is a less aggressive type of tumor but can be still problematic because it is located on the heart, adjacent to the aorta. These tumors can be present for prolonged times without ever causing problems, however they also have the potential to bleed, or cause fluid to accumulate in the sac around the heart, called pericardial effusion. This can accumulate rapidly, causing the pet to collapse, or can accumulate more gradually, causing vague signs of lethargy and exercise intolerance. The fluid can cause the heart chambers to collapse, requiring a procedure called pericardiocentesis to drain the fluid, allowing the heart to reexpand. Though this type of tumor is less likely to spread, it can metastasize to the lungs in some patients. It can also cause problems as the tumor grows and puts

pressure on surrounding structures, such as the trachea.

Lymphoma

Lymphoma is the most common cancer diagnosed in the heart of cats, but can also occur in dogs. Lymphoma is a cancer of a special type of white blood cells called lymphocytes. This cancer typically affects multiple organs in the body. As with the other cardiac tumors, this has the chance of causing fluid to accumulate in the sac around the heart resulting in collapse of the heart chambers. Immediate treatment is needed if this occurs. This cancer is typically responsive to chemotherapy.