Feline Arterial Thromboembolism

Feline Arterial Thromboembolism (FATE) is a disease affecting feline patients resulting from blockage of peripheral arteries by abnormal clot formation in the body. In cardiac patients, this often results as a complication of cardiac enlargement from underlying cardiac disease. Primary cardiac diseases that may result in clot formation include hypertrophic cardiomyopathy, restrictive cardiomyopathy, or other cardiac disease. Enlargement of the chambers of the heart from primary cardiac disease results in stagnation of blood in the heart with abnormal blood movement. This predisposes to clot formation in the heart, which may potentially lead to dislodgement and movement to other places in the body.

Clinical features of FATE
The most common site for thromboembolism in feline patients is to the limbs (primarily the hind limbs). This may result in variable degree of weakness ranging from mild lameness of a single limb all the way up to and including complete paralysis of the hind limbs. Other less common sites for embolism may include occlusion of arteries in the kidneys or brain which can result in laboratory abnormalities and clinical signs associated with kidney failure and/or neurologic illness respectively.

Managing cats with thromboembolic disease
Feline patients with thromboembolic illness may vary in their presentation ranging from mild lameness to complete paralysis, and treatment is likewise variable depending on the presenting signs. For individuals that are mildly effected, at-home management with pain medications and medications intended to help reduce further clot formation (anti-coagulants and anti-thrombotic agents) may be attempted. Additional treatments to manage underlying cardiac disease may also be employed. For more severely affected animals that have partial or complete loss of limb function and severe pain associated with vascular obstruction, hospitalization with injectable pain management and monitoring of lab values is recommended until pain may be managed with oral medications alone and laboratory values have stabilized, which may take anywhere from 24 – 72 hours.
Prognosis for my cat with FATE
Unfortunately, FATE can be a somewhat serious complication associated with underlying cardiac disease. Severely affected individuals may result in permanent mobility changes which may not completely resolve with appropriate treatment. Other factors influencing prognosis may include the severity of underlying cardiac disease and the presence or absence of congestive heart failure, which may infer a more guarded prognosis. On average, cats with a single episode of vascular obstruction with mild mobility changes may do well for months following the inciting episode. The majority of patients have a high risk for recurrent episodes within 6 months of the inciting event. Patients with lab work abnormalities as a result of their vascular obstruction also have a more guarded prognosis with potential for loss of limb or fulminant kidney failure.

Flow of blood through a normal heart