

Hepatic Lipidosis (Fatty Liver Disease)

Hepatic lipidosis (fatty liver) is a treatable liver condition of cats. Although it can cause liver failure, this condition may be reversible if caught early and treated aggressively.

Cause

Hepatic lipidosis develops when a cat does not eat well for a period of time. The cause of why a cat may not eat for an extended period of time varies widely. This may induce medical as well as emotional reasons and at times there is no apparent reason. Because obese cats have larger fat stores to mobilize, they are predisposed to the development of fatty liver after shorter periods of anorexia.

The energy deficit that occurs when a cat is anorexic causes mobilization of fat stores in the body which then go to the liver. Because the liver is the organ that converts stored fat into usable energy, the liver becomes overwhelmed with this task and cannot perform normal daily metabolic functions.

Clinical Signs

Clinical signs of fatty liver depend upon the stage and severity of the liver failure as well as underlying conditions that predisposed to its development. Most cats are nauseated (drooling, anorexic), dehydrated, lethargic, and have jaundice (yellow) skin and gums. Severely affected cats can show neurologic signs such as inability to walk and (less frequently) seizures.

Diagnosis

Recommended testing is likely to include laboratory (blood and urine) tests as well as imaging studies such as radiographs (X-rays) and ultrasound. Blood tests usually show elevations in liver enzymes (particularly alkaline phosphatase/ALP, alanine aminotransferase/ALT, and total bilirubin/Tbili), ammonia, as well as anemia and high white cell counts. Abdominal radiographs often show enlarged liver and ultrasound reveals that the enlargement is not due to a mass or tumor. A needle aspirate or biopsy is necessary to confirm the diagnosis. This can usually be accomplished using ultrasound guidance. Because fatty liver often arises when a cat is anorexic because of a different disease process (such as intestinal, pancreatic inflammation, tumors, or organ failure), diagnostic tests to work up the primary disease process is often necessary.

Therapy

Patients with fatty liver are often quite ill and require hospitalization for intravenous fluids and supportive care while the diagnosis is being established. The definitive therapy for fatty liver is by reversing the negative energy cycle. This is best accomplished after other complicating disease conditions have been diagnosed and addressed as well. In some patients, diagnosis and therapy of the primary condition facilitates an improvement in appetite; However, when anorexia persists, a feeding tube is often necessary to ensure that the patient receives enough calories. There are several different types of feeding tubes available; their use is usually temporary until the patient feels well enough to eat adequately independently.

Prognosis

When diagnosed early and treated aggressively, most patients with fatty liver survive without long term effects. Prognosis and long-term survival may be affected by an underlying disease process that caused the patient to become anorexic.

Long Term Follow-Up

Cats with fatty liver are often followed by the internal medicine specialists at Veterinary Specialty Center during their hospital stay. Patients diagnosed with other, complicating disease processes that may have predisposed to fatty liver disease may need the help of other specialists as well. Recheck evaluations are necessary until the patient's appetite, lab values, and weight are back to normal. If a feeding tube is placed, an internal medicine specialist will evaluate it at each follow-up exam. Once your cat is eating well and no longer requires the feeding tube, it will be removed by the internist. Until the patient feels well enough for tube removal, frequent visits to Veterinary Specialty Center for tube maintenance as well as adjustment in the medication and nutrition plan are necessary.