

Feline Hepatic Lipidosis (Fatty Liver Syndrome)

Hepatic lipidosis, also known as fatty liver syndrome (FLS), is one of the most common liver disorders of the cat.

Contributing Factors

In most cases, the cause remains undetermined (Idiopathic FLS). Obesity and a period of not eating normally lasting at least one week are common historical findings. This is often secondary to a disease that might lead to not eating such as cancer or an infectious disease.

Prevalence

Idiopathic fatty liver syndrome is most common in cats that are overweight. Many of these cats have lost up to 25% of their body weight when the liver problems are discovered. Also, most cats with idiopathic fatty liver are middle aged and female.

Clinical Signs

In the anorexic (not eating) cat, fat is broken down to supply energy for normal metabolism. As this fat is mobilized, it is deposited in the liver. Without an adequate source of dietary protein, the fat cannot be removed from the liver. It continues to accumulate until liver failure eventually results.

With time, the cat usually becomes icteric or jaundiced, as evidenced by a yellow color in the whites of the eyes or in the skin. As toxins normally processed by the liver continue to build up in the blood, the nervous system becomes affected. Depression, seizures, disorientation, and head pressing will occasionally occur.

Causes/Transmission

Fatty liver develops secondary to a disease that causes anorexia.

Diagnosis

Diagnosis of the FLS is made from history, physical exam, blood tests for liver function and ultrasound of the liver. Occasionally a surgical biopsy of the liver is needed.

Therapy

This condition is treatable, but aggressive intervention is necessary. The main thrust of treating FLS is geared toward nutritional support of the cat until it begins to eat voluntarily. A consistently high quality diet will allow the liver to resume functioning so it may remove the fat. This does not occur quickly and will take several weeks to reverse. Therefore, a method of tube feeding must be used to allow you to feed your cat at home.

Several routes are available for feeding the cat. Nutritional support can be by syringe feeding or a feeding tube. Syringe feeding is very time consuming, messy, upsets the cat, and is generally ineffective in a cat that does not want to eat. It is ok as way to supplement nutrition in cats that are nibbling at food. Feeding tubes are easier on both the person feeding the cat and on the cat. Feeding tubes can be placed through the cat's nose (nasogastric or NG tube) for liquid diets or can be placed in the cat's esophagus (esophagostomy or E tube) or stomach (gastrotomy or PEG tube). The later 2 require brief anesthesia and minor surgery. However these tubes allow feeding of soft, gruel type foods as opposed to only liquids. All 3 tubes are manageable by the owner at home. They also allow administration of antibiotics through them. As such, they greatly reduce the stress on the cat during the course of treatment. Because food, water and medication can be given through the tube, often the cat can go home much sooner.

Persistence is essential. The average cat requires several weeks of feeding before it begins to eat. At least once a day, offer your cat a small amount of its favorite food so that you will know when its appetite returns. The feeding tube will not hinder chewing or swallowing. After your cat has been eating well for 3-4 days, the tube can be removed by your veterinarian. You should not attempt to remove the tube yourself.

Prognosis

In most cases of FLS, the prognosis is good if nutritional intervention is undertaken before the onset of liver failure. When the underlying cause of the FLS is untreatable, the prognosis is not good.

Vomiting is an important sign in determining the prognosis. Although many cats with the FLS will vomit occasionally, those that vomit repeatedly have a lesser chance of recovery. Repeated vomiting usually means that the liver failure is very severe or that a disease of the pancreas (pancreatitis) is also present. Either may result in the cat not recovering.

Transmission to Humans

There is no associated health risk for the owners of cats with hepatic lipidosis.

Prevention

It is possible for FLS to occur again. It is helpful for owners to be observant of the cat's food intake and guard against stressors that might precipitate anorexia. Maintaining an ideal body weight and avoiding obesity in affected cats is advisable.