

HEPATIC LIPIDOSIS

About the Diagnosis

Hepatic lipidosis is a very serious but potentially curable liver disease of cats. This disease occurs most commonly in cats that are overweight to obese and have undergone a period of decreased or loss of appetite (inappetence/anorexia) or excessively rapid weight loss. In the healthy cat, the liver performs many functions that are critical to life. These functions include making, breaking down, and temporarily storing fats. If the cat does not eat for a period of time, fat that is stored elsewhere in the body is moved to the liver where it is broken down or metabolized into energy that the body uses as fuel. However, the liver can become overwhelmed by the amount of fat that it suddenly receives from the rest of the body. If this happens, the liver no longer works properly, and fat accumulates in it. This fat remains in the liver and interferes with other functions that the liver is required to perform to keep the cat healthy.

Causes: There are many reasons why cats lose their appetite. Any change in the cat's environment such as a diet change, the presence of new pets in the household, or moving to a new house or apartment can affect the cat's appetite. Situations that may not seem stressful to people can actually be very stressful for cats, and many cats respond by not eating. Some diseases can occur at the same time such as hepatic lipidosis and may predispose to it; they include intestinal diseases such as inflammatory bowel disease, various types of heart disease, constipation, diabetes mellitus, and pancreatitis. Cats that consume diets deficient in certain building blocks of proteins (amino acids) may be at risk of developing hepatic lipidosis. In many cases, the specific cause of hepatic lipidosis in an individual cat is never known.

Symptoms: Outward symptoms (clinical signs) of hepatic lipidosis are often not very specific and simply reflect a cat that is not feeling well. These symptoms may include weakness, decreased alertness or hiding, a new onset of vomiting (not just hairballs), excessive drooling/hypersalivation, and a yellow tinge to the skin and/or the white of the eye (icterus/jaundice).

Diagnosis: To help your veterinarian determine if your cat has hepatic lipidosis, it is important to thoroughly discuss your cat's recent medical and environmental history, including diet, any changes in the household, periods of loss of appetite, and if your cat has ever been diagnosed with another medical problem or is taking medications. Your veterinarian will likely need to perform tests, since the initial symptoms of hepatic lipidosis are nonspecific and may easily be confused with symptoms of other, completely different problems. A blood sample may be drawn to assess how the liver and other organs are working and to help pinpoint the liver as the source of the problem; x-rays of the belly often are also taken to screen for abnormalities that could influence the liver and contribute to its malfunction. An ultrasound examination may be performed since it is the test of choice for looking within the liver tissue. An ultrasound exam of the liver in a cat is exactly the same as a sonogram (ultrasound) for a person, except that a cat's hair usually needs to be shaved from the belly for clearer ultrasound images. These tests help to pinpoint the liver as the source of the problem (or to identify impostor diseases and avoid the wrong treatment if in fact the cat has a disease other than hepatic lipidosis as the cause of the symptoms). The definitive diagnosis of hepatic lipidosis requires a small needle aspirate or biopsy sample of liver tissue obtained either under ultrasound guidance or via abdominal surgery. Depending on the extent of the required liver specimen, cats may comfortably undergo the procedure awake (if just a fine-needle aspiration is sufficient) or may require anesthesia if a true solid tissue biopsy is required. The decision about which type of procedure is best varies from case to case and is made based on the information derived up to that point; generally a biopsy is preferred but very ill cats who are poor anesthetic candidates may only tolerate a fine-needle aspirate.

Living with the Diagnosis

Since hepatic lipidosis may be fatal if left untreated, initial treatment usually involves intensive care. It is common for hepatic lipidosis to take several days of treatment before it is clear whether the situation is improving or deteriorating, and even then, a hospital stay of several more days is commonly necessary before a cat is self-sufficient and able to go home. Discharge to home care is sometimes possible after several days if close attention and treatment can be provided in the home, but even under the best circumstances, hepatic lipidosis is a disease that requires extensive and intensive initial treatment (hospitalization for 3 to 6 days is typical).

If the cat responds well to treatment and hepatic lipidosis is cured, it does not commonly recur. The exception is if there is persistent obesity or other, unrelated illnesses that can flare up and trigger periods of appetite loss, initiating hepatic lipidosis once again. There are no known long-term side effects of this disease after it is

successfully treated.

TREATMENT

Hepatic lipidosis is a potentially life-threatening illness that often requires intensive care and good nutrition (not too little, not too much) as the cornerstones of immediate treatment. Unfortunately, liver diseases in general often make cats unwilling to eat, and failure to eat allows hepatic lipidosis to worsen. Therefore, cats that cannot be coaxed to eat or cats that are vomiting (since liver disease creates nausea) may require the temporary placement of a feeding tube as a way of allowing the cat to regain strength and overcome the disease. This allows both food and medications to be given without handling the cat's head and mouth, which many sick cats resent and which can trigger nausea.

The cat with hepatic lipidosis is treated by giving complete nutritional support, minimizing stress, treating complications if they occur (such as vomiting), and treating the cause if it is known. An intravenous (IV) catheter may be placed to provide fluids and give medications in the hospital because most cats with hepatic lipidosis are dehydrated when first evaluated.

Occasionally, cats that are still eating even a small amount may respond to appetite-stimulant medications, feeding tubes placed through the nose, warming of the food, coaxing, and other measures to encourage appetite. However, many if not most cats require the placement of a temporary feeding tube as described above.

The cat can go home when he or she is tolerating the tube feedings, especially if you or the cat's caretaker can continue to feed through the tube at home. As appetite returns, the cat may eat a bit and receive the rest of the day's calories by tube feeding, with an increasing proportion of natural eating over time. Gradually, the amount of food given by mouth is increased as the amount of food given through the tube is decreased. The great majority of cats tolerate being fed through a tube very well at home.

The tube is generally left in place for a minimum of 1 week after the cat's appetite is completely normal, and stays in place for a few weeks to several months, based on need. Removal of the tube takes place when the cat's condition is mostly or entirely back to normal and the veterinarian feels that the risk of relapse is very low.

DOs

- Give medicine(s) exactly as directed.
- If you are feeding your cat through a tube, follow your veterinarian's instructions closely and stop if your cat begins to vomit.
- For all cats (not those with hepatic lipidosis): help to prevent the occurrence of hepatic lipidosis by monitoring your cat's weight closely; obesity plays a major role in the development of hepatic lipidosis and many other diseases and should be avoided to reduce the risk of this potentially very serious liver disease.

DON'Ts

- Do not start your cat on a diet before talking to your veterinarian.
- If **ANY** cat has not eaten for 24 hours or more (even if it has never been diagnosed with a liver problem before), do not wait longer before seeking veterinary attention. Regardless of the underlying cause, the simple act of not eating for more than a day may initiate hepatic lipidosis in cats.

When to Call Your Veterinarian

- If you cannot keep a scheduled appointment.
- If your cat will not eat or has not eaten for any period of time, particularly if your cat is overweight.
- When treating hepatic lipidosis at home: if you encounter any difficulty giving food through the feeding tube or if your cat shows any of the signs listed below.

Signs to Watch For

- Weakness, decreased appetite, vomiting, diarrhea, constipation, abnormal behavior (especially hiding more than usual), excessive drooling/hypersalivation, seizures, and so forth.

Routine Follow-Up

- For checking body weight, physical examination, and blood test values: initially within a week of discharge, but thereafter depends on progress and presence or absence of ongoing symptoms.