

Liver Diseases in Cats

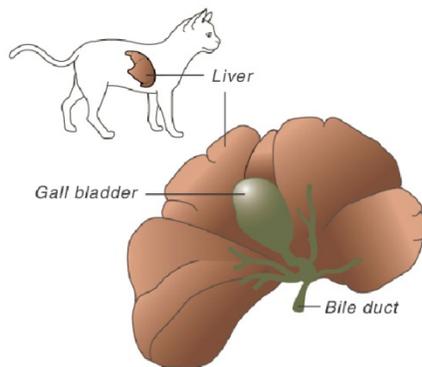
The liver is a complex organ that is responsible for many vital functions.

"The liver is...the 'factory of the body'..."

The liver is sometimes called the "factory of the body" since it is a metabolic organ that performs or controls many of the chemical processes necessary for normal bodily function. For example, the liver manufactures many essential substances such as proteins, bile and blood-clotting factors plays a role in controlling the metabolism and use of food substances –such as fats, carbohydrates and proteins, and detoxifies or removes many waste substances and potentially damaging drugs or chemicals.

Because of the liver's diverse functions, disease processes can affect the liver in many ways.

What signs and symptoms will you notice in a cat with liver disease?



Some signs are strongly suggestive of liver disease – most notably *jaundice*, which appears as yellow discoloration of the skin, eye and mucous membrane, and *ascites*, which appears as distension of the abdomen due to build-up of fluid. These are often accompanied by less specific symptoms that can be quite variable including lethargy and malaise, changes in appetite, excessive thirst and urination, weight loss, bleeding disorders, vomiting and diarrhea. These may be the only signs noted in some early or mild cases of liver disease. Unfortunately, jaundice and ascites can be symptoms of diseases in other body systems.

How is liver disease diagnosed?

In mild or early cases of liver disease, the signs are often relatively non-specific and further diagnostic testing will be necessary to identify its presence. Since the liver is responsible for such a diverse range of metabolic functions, there is a wide range of blood and urine laboratory tests that may be useful to assess liver disease and function. X-rays and ultrasonography will demonstrate any changes in the size or appearance of the liver.

What about a liver biopsy?

"A wide range of disorders may affect the liver resulting in abnormal liver tests."

A wide range of disorders may affect the liver resulting in abnormal liver tests. One of the chief limitations of blood and urine tests and non-invasive imaging techniques is that while they may indicate the presence of liver damage or dysfunction, they

cannot indicate the cause or potential reversibility of the problem. In some cases, a biopsy of the liver will provide a specific diagnosis, which will help your veterinarian determine the most appropriate treatment and an accurate prognosis. The small sample of liver tissue may be obtained by introducing a biopsy needle through the skin directly into the liver or by means of an exploratory surgery. A number of factors will be considered by your veterinarian in order to determine which method is appropriate for your cat. These may include the disease process that is most likely, and whether an exploratory surgery may provide the opportunity for treatment as well as diagnosis. Your cat will require heavy sedation or general anesthesia so that the biopsy sample can be safely obtained. There are some risks associated with anesthesia, sedation and biopsy, and the risks may be slightly increased with some forms of liver disease. Fortunately, in most patients, the risks are relatively low, and the technique can be performed safely and without any significant complications.

How is liver disease treated?



Specific treatment for the particular liver disease will depend on the diagnosis. However, certain basic and simple supportive measures are useful and strongly recommended.

"...a diet that "reduces the workload" of the liver."

Changing the diet is often helpful and may delay the progression of disease. Since the liver is involved in digestion and metabolism of all of the major food groups, the traditional recommendations are to provide a diet that "reduces the workload" of the liver. However, the most appropriate way of doing this in cats is less clear than in other species. Although a reduction of protein intake can be beneficial for some liver problems, the cat is an obligate carnivore that requires high levels of good quality meat protein in its diet. In most animal species that have liver disease, including people, dietary fats are restricted. In cats, dietary restriction of fats is of questionable benefit since cats also have high dietary fat requirements.

"...palatability is a crucial consideration..."

It is appropriate to minimize dietary carbohydrate levels in cats with liver disease. However, the overriding priority in feeding the cat with liver disease is that the cat must continue to eat. Therefore, palatability is a crucial consideration in determining the most appropriate diet for a cat with liver disease, especially if the cat has a poor appetite. Special prescription diets have been formulated to meet the needs of cats with liver disease and you may be asked to feed your cat one of these scientifically formulated diets.