

Should My Cat Have a Liver Biopsy?

Dr. Plotnick gives his advice on what warrants a liver biopsy.

Q: My cat Oliver is a healthy neutered male who is about 8 years old and 12 pounds. I took him to get a dental cleaning. When the staff did his blood work it showed raised liver enzymes. To investigate further, they did radiographs and found no abnormalities. They also performed an abdominal ultrasound, echocardiogram, coagulation profile, fine needle aspirate of the liver and bile acids. The coagulation profile was normal, the fine needle aspirate found nothing abnormal and the bile acids were returned as normal. His blood pressure was normal, thyroid profile was normal, and his FIV and FeLV tests were negative. His urinalysis also revealed no abnormalities. The ultrasound and echocardiogram found that he has a grade II heart murmur and that he has hypertrophic cardiomyopathy.

I took Oliver back to get another set of blood work tested, and they found that his liver enzymes were still a little elevated but no worse than before. I was told to wait six months and then do all the tests again to check the heart, liver and kidneys. Because of his heart condition, they thought it was best to wait before putting him through an invasive liver biopsy. However, I was contacted and told that the internal medicine vet said the liver enzymes were a concern and that the staff wanted to do the liver biopsy as soon as possible to cut a piece of the liver to find out what was causing the increased liver enzymes.

Is the liver biopsy necessary? What is the risk of putting him under with the heart condition that he has?

A: I do not think that a biopsy is necessary. When a cat has elevated liver enzymes, it suggests that something might be going on with this cat's liver. Exactly what is going on usually cannot be determined by simple blood tests. A definitive answer is achieved through a liver biopsy. The question therefore becomes: Are we justified in subjecting this cat to a liver biopsy?

A bile acid test answers this question. The bile acid test is a liver function test. It tells us if the liver is working properly. If the bile acid test comes back elevated, it suggests that the disease process is affecting the liver's ability to do its job, and a biopsy is warranted. In Oliver's case, however, the bile acid test came back normal, suggesting that the liver is still functioning properly. In these instances, I put the cat on supplements that have been proven to help support liver function, such as SAME and silybarin, and recheck the liver enzymes in three to six months.

You already went a step further and had a fine-needle aspirate performed. This procedure, while not as informative as a biopsy, still yields useful information — and this test came back normal as well. Based on these tests and Oliver's clinical condition, I'd forego the biopsy.

Regards,
Dr. Arnold Plotnick, DVM