

LIVER TUMOR REMOVAL: Huge is not necessarily bad



Overview—“I don’t understand what a liver tumor is; please help me understand the condition and the treatment.”

The liver is a major abdominal organ responsible for filtering toxins from the blood stream and help with digestion. It has more size than it needs to be an effective organ for the body, so this fact makes removing large portions of the liver reasonable.

The most common scenario for a surgical treatment of the liver is the solitary, large (often “massive”) hepatocellular carcinoma in dogs and less commonly the cholangiocellular adenoma in cats. Both are seen in older animals, often found incidentally on exam or when looking into elevated liver enzymes on bloodwork. Both of these tumors behave relatively benignly, with surgery often curative. Both can also be more aggressive and non-surgical as well. Other, less common, malignant liver tumors, and more frequent, metastatic liver tumors are rarely amenable to surgical treatment. Imaging studies and blood tests help narrow this field.

A quality ultrasound study or CT scan is instrumental in assisting the prediction of surgical ease vs. challenge and thus the risk of attempting removal of a liver lobe/tumor. The surgical act of removing large portions of the liver can be either simple as “pie” or as risky as any abdominal surgery can get. The specific location is very important, and the involvement of other vital blood vessels is important relative to surgical prognosis.

“Why is this procedure being recommended for my pet?”

Your pet has been diagnosed with a liver tumor that appears to be one of the above relatively benign solitary tumors that has a reasonable prognosis with surgical removal. Often these tumors get so big they interfere with the other nearby organs and their functioning (ex. stomach, pancreas, gallbladder, intestines). Removal of the large tumor can return the abdomen to normal comfort and function.

“What options do I have to treat my pet’s condition?”

It is reasonable to not pursue additional surgical or medical treatment if your pet is feeling well. Sometimes adjusting to a more frequent feeding schedule can make up for the fact that the stomach is being pushed aside by a large mass. Oral medications can help reduce stomach acid and improve intestinal movement that may ease symptoms.

There are no medications that effectively shrink these types of tumors.

Surgical removal is the only treatment that has potential benefit to eliminate the negative impact of these large tumors.

“What surgical and postoperative complications do I need to know and understand when considering this surgery?”

As mentioned, this is a big surgery. The liver is a major organ with a very large blood supply, and these tumors are often very large and difficult to manipulate during surgery. Serious and life-threatening blood loss during surgery is rare, but a real concern. Your pet could die during surgery if the blood loss cannot be stopped.

If the tumor is effectively removed, there can still be slow blood loss from the damaged liver site where the tumor was. It is rare, but possible, that your pet will need a blood transfusion soon after surgery to manage this slow loss. Transfer to an ICU would be necessary for this ongoing critical support.

This procedure is a major medical event, so your pet will need a month of calm, quiet recovery with very little activity. It is extremely rare, but fatal blood clots can occur days/weeks after surgery. Minor and rare complications include incision infections that will need attention, and an anemia that may need monitoring with blood tests every week or so.

“Are there situations when the surgical outcome is not what we hoped it would be?”

Even if the tumor is confirmed to be one of these benign-behaving tumors of the liver, they can recur (either at the same spot or in a new spot on the liver.) This is uncommon but possible. These tumors tend to be very slow in their growth, so signs of a recurrence may take years to develop.

“How is my pet’s life and lifestyle likely to change after this procedure?”

After the healing period (approx. 1mo), there are no restrictions or changes recommended or expected for your pet’s lifestyle.

“Are there things I can do to prepare myself, my home and/or my pet for this procedure?”

Most patients having liver surgery will be feeling poorly after surgery. Many will not eat or drink. Have a plan for good TLC at home with comfortable/warm bedding location, easy access to places to urinate/defecate, jars of meat babyfood, scrambled eggs or other enticing foods to promote appetite.

It is possible for these patients to need veterinary support after surgery, either inpatient at a 24hr hospital or outpatient with your primary care veterinary team. Plan for transport and time to make this possible.

Access to a full service, critical care veterinary hospital is essential for emergency complications. Please prepare accordingly.

In-patient surgery with onsite critical care is an option that should be considered when making decisions about treatment for your pet.

Outpatient surgery and anesthesia can be uncomfortable, painful, disorienting, and frustrating experiences for animals; watching your pet work through the early postoperative period and recover from anesthesia and pain

medications can be worrisome, scary and frustrating for pet owners. The vast majority of the time this period of difficulty is brief, and *your pet is actually more comfortable and secure at home with you*. Sometimes it doesn't feel like that at two in the morning when your pet is anxious and not consolable, and you are unsure of what to do. You always have the option of transporting your pet to a 24-hour veterinary facility postoperatively. If you do not want to have your pet home in the first few days postoperatively, please advise your primary care veterinary staff. They will provide contact information for a local 24-hour veterinary facility and help get an estimate for the ongoing care.

It is important that you have proper expectations about this procedure; your experience and you pet's outcome will benefit greatly. Please discuss this information with your veterinarian when working through the decision-making process regarding **Liver Tumor Removal**.

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