# Five common mistakes with cancer surgery, and how to avoid them in your dog

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What are the common mistakes in connection with dog cancer surgery?

#### Mistake # 1: Watching and Waiting

**Don't:** Watch the bump or lump. **Do:** get an aspirate or biopsy.

I've blogged about this before, but it deserves repeating. No one, not even a boarded oncologist like me, can look at a skin mass, or a mass in the spleen, liver, or lung on imaging, and tell you what it is. I may have an educated guess. But every lump and bump should be aspirated or biopsied so the cells can be looked at under the microscope. Even if your dog has had 10 lipomas before – like Smokey who belonged to my head nurse – the 11<sup>th</sup> may be malignant. In Smokey's case it was a low grade soft tissue sarcoma (STS). (Click here to read more about Smokey's story and why you shouldn't watch and wait.)

If the aspirate is non-diagnostic — if it doesn't tell you definitively whether cancer is present or not — then get a biopsy. We need to know what that bump is before it gets cut out. I know it's tempting to just have your vet take the whole mass off, but you won't necessarily be saving time or money. If the bump doesn't get removed completely, for example, you might need to do a second surgery. That can lead often to a worse outcome for your dog. Biopsies help us plan surgeries — if the mass is malignant and the surgery is not properly planned, your dog will likely need a second surgery to get wider margins – that important normal rim of tissue around the cancer to prevent the cancer from coming back.

What's my recommendation? If your dog has a skin mass that is 1 cm (yes, get a ruler and measure it), and it's been there for a month, find out what it is; I call this "see something, do something."

## Mistake #2: Removing a Bump or a Lump Without Knowing It's Cancerous

**Don't**: Remove a mass without knowing what it is. **Do:** get an aspirate or biopsy BEFORE the surgery to remove the whole thing.

Please learn from the many patients I've seen over the years in my practice. The story goes something like this: the dog has a skin mass that was just removed, without knowing what it was. The tumor was malignant, and now the bump is back, because the margins from the first surgery were dirty (aka incomplete) or narrow. Now the pet needs a second surgery, also called a scar revision, to widen up the margins to prevent local recurrence near the scar.

When a vet removes a mass to diagnose AND treat a mass (or a bump or lump), it's called an excisional biopsy. Trust me, this is rarely the best first step in diagnosis for your dog. Excisional biopsy leads to incomplete margins, more treatment, more side effects to your dog, and more expense to you.

There are exceptions: excisional biopsy is okay when knowing the tumor type does not change surgery. For example, if a dog has a solitary splenic mass, the whole spleen should be removed whether it's a benign hemangioma or malignant hemangiosarcoma. Another example is a tumor in the testicle. A castration is recommended regardless of the tumor type.

But for a skin or subcutaneous mass, the extent of surgery is changed by tumor type and sometimes by the grade of the tumor. If it's a benign skin tumor, a marginal resection is fine, but for a STS like Smokey's or a mast cell tumor, the first surgery should be wide. If it is in challenging location like lower on the leg or an oral tumor, maybe a boarded surgeon should do the first surgery. We might want a CT scan before the surgery to allow the surgeon to plan appropriately and get clean, wide margins the first time.

Remember: for many tumors, the first surgery is the best chance for cure.

#### Mistake #3: Declining a Biopsy

**Don't**: Decline the biopsy. **Do**: Have your vet submit the tissue to the lab.

Every mass removed should be examined under the microscope at the lab. If your dog had 4 masses taken off, all should go to the lab —even if you or your vet thinks the masses "look" benign. Just this week, I saw Bella. She had two masses removed, but the vet only sent one to the lab. That one turned out to be malignant mast cell tumor (MCT). The other mass was not submitted. The MCT has narrow margins, so my surgeon had to do a scar revision. Was the other mass also a MCT? Maybe, maybe not. Fifteen to twenty percent of all dogs with mast cell tumors have multiple tumors — but we will never know at this point if Bella is one of them.

If it is important enough to remove, it is important enough to find out what it is – remember out vet eyes are not microscopes.

### Mistake #4: Assuming Clean Margins Are Really Clean

**Don't:** Assume clean surgical margins were clean. **Do:** Ask how wide those margins were, and are they wide enough for this tumor type.

I often see dogs and cats months after a tumor was removed and then grew back. When I read the original biopsy report, it will often read: margins were clean. Good news, right? BUT when I read the microscopic decision, the measurement will say <1mm. For a malignant tumor, this is not considered clean!!

For many malignant tumors 2 to 3 cm are recommended. For soft tissue sarcomas (STS), tumors with incomplete — "dirty" — margins are **ten times** more likely to recur.

So, sadly, I am not surprised that these malignant tumors that were removed with narrow margins grew back.

I'm a little surprised how often this important detail is overlooked. For a benign skin tumor like a

sebaceous adenoma or a benign liver tumor, margins of a few millimeters are fine, but NOT for the malignant ones. So, remember, size matters! Ask how wide the margins were (get numbers) and ask if that is wide enough for this tumor type. If your vet isn't sure, ask to see an oncologist.

#### Mistake #5: Thinking a Specialist Costs More

**Don't**: Be afraid to seek out a specialist for surgery. **Do:** Ask for a referral.

Boarded surgeons are more aggressive at surgery – in a good way. Studies show that for malignant tumors, patients often have better outcomes when the surgery is done by a specialist. Why? By removing more tissue, the first time, they are more likely to get those clean and WIDE margins and prevent the need for a second scar revision surgery. They are trained in advanced techniques, like flaps, which can help get margins. In the long run, this will save you money because you're paying for one surgery, not two. Your dog will also undergo less treatment, have lower risks of side effects, and a better recovery.

Boarded surgeons are also often trained in proper biopsy and surgery techniques to avoid contamination and spread at time of surgery.

Live longer, live well.

Dr. Sue