

Mammary Tumors in Dogs

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Unspayed female [dogs](#) are at risk for mammary or breast [tumors](#). In dogs, there is a 50-50 chance that a mammary mass is [cancerous](#) vs. benign. This is the reason why veterinarians often insist on the importance of spaying your dog.

What causes mammary tumors in dogs?

Mammary tumors develop because of spikes in female hormone (estrogens) that take place during a dog's heat cycle. By spaying a dog at 6 months of age or before the first heat cycle, it virtually eliminates the risk of getting mammary tumors, which starts at only about 0.5%. Once a dog goes through one single heat cycle, the risk increases to 8%. After a second heat cycle, the risk shoots up to 26% ([says the American College of Veterinary Surgeons](#)).

If a dog is spayed after 2 years of [age](#), then there is no more protection. Over 25% of non-spayed female dogs will develop mammary tumors. This is a huge percentage! Being [obese](#) or receiving hormones (estrogens, progesterone) can further increase that risk.

What if your dog already has mammary tumors?

Since spaying prevents mammary tumors, should a dog older than 6 months old with mammary tumors be spayed? Yes, without any doubt. Again, spaying at that age will not prevent mammary tumors. However, it would eliminate the risk of [pyometra](#), a life-threatening [infection](#) of the uterus. Therefore, if you are in this situation, you should have an open discussion with your [veterinarian](#) to understand the pros and cons, and decide on what makes the most sense.

How will your veterinarian check for mammary tumors?

Most mammary masses are found on physical exam by a veterinarian. Occasionally, a mass is found by the guardian or by a groomer, especially in a dog who enjoys belly rubs. Most masses are not painful. When they outgrow the skin or rub on the floor, they can become ulcerated, which means that the [skin](#) has opened up and the mass can bleed.

How can your veterinarian tell if a mammary mass is benign or cancerous?

Looking at a mass, or feeling it, doesn't help vets determine the diagnosis. The only way to diagnose the type of mammary mass is by [taking a biopsy](#) and sending it to the lab for analysis. In most cases, the mass is [surgically](#) removed first, and then sent to a pathologist.

How will your veterinarian decide whether to biopsy the mass first or not?

As a general rule, I recommend taking a biopsy first if there is a chance it will change the treatment plan. This is the case when the tumor is an inflammatory carcinoma. This type of cancer, although rare, has a very poor prognosis and surgical removal is not recommended. This is one situation where a good exam should make us very suspicious.

What's inflammatory mammary carcinoma?

Inflammatory mammary carcinoma is red, firm and very painful. This is unusual for a mammary tumor. Unfortunately, there is no good treatment for inflammatory carcinoma. Radiation therapy, pain [medications](#) and non-steroidal anti-inflammatory drugs can be used to control pain.

Next Steps

Before anesthesia is undertaken, [blood](#) work should be performed to make sure major organs are functioning well. Before a biopsy or surgery is performed, chest [X-rays](#) should be taken to make sure the tumor hasn't spread to the lungs.

Patients go home the day of or the day after surgery. They need 2-3 weeks of recovery, confinement and an [Elizabethan collar](#). Antibiotics and pain medication are prescribed for about 1 week. Stitches are removed after about 2 weeks. If biopsy results show a benign mass, then all is well and it's time to celebrate. If the tumor

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turns out to be cancerous, your veterinarian might suggest consulting with an oncologist or cancer specialist, to see what else can be done beyond surgery to help your dog.

As with all masses, the sooner mammary gland tumors are addressed, the more options you have to treat and the better the outcome. If you feel a mass on your dog, please make an appointment and discuss all treatment options with your veterinarian.

Questions to ask your veterinarian:

- Should we biopsy the mass or go straight to surgery?
- Should we spay my dog in addition to removing the mass?
- What did the blood work and the chest X-rays show?