



MAMMARY TUMORS IN DOGS AND CATS

General Information

Mammary (breast) tumors are the most common tumors of the female dog, but are very rare in the male dog. They are less commonly found in the cat. Mammary tumors usually present as a nodule in the breast tissue area. Most affected are middle aged to older dogs and cats. Commonly affected breeds include German shepherds, Cocker spaniels, Poodles, various Terrier breeds and Siamese cats; however, these tumors may appear in any dog or cat.

Malignant tumors are those that spread locally at the tumor site or to distant areas. Approximately 50% of mammary tumors in dogs are malignant (the other 50% are benign, that is, they tend not to spread). In cats, however, 70-90% of mammary tumors are malignant. The most common areas of spread in both species are to the lungs and regional lymph nodes.

Risk Factors

Unspayed (intact) females have a sevenfold increased risk of developing mammary tumors compared to spayed females. Spaying before the first heat cycle reduces the risk dramatically. Spaying after the appearance of a mammary tumor probably will not reduce the risk of subsequent tumor development, but it is often warranted to do so to help prevent life-threatening uterine infections common in older unspayed pets.

Treatment

Surgery is the treatment of choice for mammary tumors. The extent of tissue removal is determined by the amount of tissue invasion and spread. Therefore it can vary from a simple lumpectomy (lump removal) to removal of entire chains of breast tissue. A biopsy sample of the tumor is usually submitted to the pathologist to assess the degree of malignancy (if any) and whether the surgical margins are clear of tumor cells.

Before surgery, we will consider necessary testing for your pet to evaluate the condition of the animal as an anesthetic/surgical candidate as well as to try to learn more about the extent of the tumor prior to considering surgery. These tests may include a complete blood count and profile, heartworm test, chest x-ray and/or an aspiration of the mass or any enlarged lymph nodes in the area.

Some malignant tumors may be responsive to chemotherapy following surgery. Based on the biopsy results, we will discuss this possibility in detail if it is warranted.

Prognostic Factors

The long-term prognosis following tumor removal improves if:

- The mass is small
- There is only a single mass
- The mass is non-ulcerated
- There is only a short period of time between appearance of the mass and surgery
- There is no evidence of spread to lymph nodes or lungs.

In summary, mammary tumors may be benign or malignant. If detected, early removal while the mass is still small may increase the chances of long-term survival. Most importantly, ***the best way to prevent mammary tumor development is through early spaying of your pet.*** As always, if you have any questions or concerns, please contact the office at 508-478-7300.