## Mast Cell Tumour

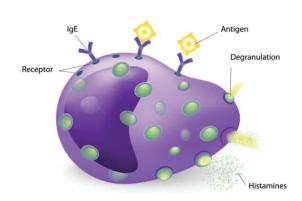


This is a very common form of skin cancer and can take many different forms: from a fatty-looking mass to a nasty lesion. These types of tumours are sometimes referred to as "the great pretender" because they can deceive us into thinking it is only a bug bite or pimple on our dog's skin. Sometimes they even fluctuate in size. In many cases, lowgrade mast cell tumours can be treated and cured if caught early. Mast cell tumours account for 16% to 21% of all tumours found in the skin. The earlier they are found and dealt with the better – small, discreet tumours that are easily removed surgically have a better prognosis than large, ulcerated masses.

Male and female dogs are equally likely to develop mast cell tumours, but several breeds of dogs are predisposed. Brachycephalic breeds (flat-faced dogs) such as Boston terriers, boxers, pugs and bulldogs, as well as golden retrievers and Labrador retrievers, have a higher risk of developing mast cell tumours. However, any breed of dog can develop this skin cancer.

### AN IMPORTANT PART OF THE IMMUNE SYSTEM

#### **MAST CELL**



Mast cells are a type of white blood cell and a component of the immune system. Most mast cells are found in areas that come in contact with the outside environment, such as the skin and the lining of the intestinal tract. They are one of the body's first line of defences against invading organisms and assist in wound healing. Unfortunately, mast cells also have a downside; histamine is one of the chemicals contained within mast cells, making them a key player in asthma and severe allergic reactions.

# GRADING TO HELP DETERMINE TREATMENT & PROGNOSIS

Over the years, several grading systems for mast cell tumours have been developed to help make predictions on tumour behaviour and guide therapy

One of the earliest and most widely used mast cell grading systems placed tumours into one of three categories from least to most aggressive – Grade 1, 2 or 3. If you've had a dog diagnosed with a mast cell tumour in the past, this would be the grading system you're probably familiar with.

Approximately 10 years ago, a new grading system was developed to improve diagnostic consistency among pathologists while providing more accurate treatment and prognostic information to veterinarians and dog owners. A new mast cell tumour grading system was proposed consisting of just two categories – low grade and high grade.

The two-tiered grading system is a significant improvement in terms of predicting how mast cell tumours may behave and leads to better agreement between pathologists when they look at the same biopsy. This should increase the ability of veterinarians to make evidence-based decisions as to how to treat these tumours.

#### **DIAGNOSIS & TREATMENT**

Most mast cell tumours are diagnosed by fine needle aspirate, a simple procedure done by any veterinarian. Once a diagnosis is made, additional tests may be performed to determine if there are any signs of tumour spread, which can influence not only treatment but prognosis.

Surgical removal remains the primary treatment for mast cell tumours. Your veterinarian may perform this surgery or refer you to a specialist since complete removal is essential to

preventing recurrence.

For higher grade-tumours, tumours that have recurred at a surgery site, or tumours that are more diffuse, chemotherapy or radiation therapy are used. In these cases, your veterinarian or veterinary oncologist will determine the best course of action based on your pet's individual needs.

Some mast cell tumours can arise from deeper tissues under the skin. These types of subcutaneous mast cell tumours often are mistaken for fatty masses (lipomas). The good news is that subcutaneous mast cell tumours are slow to spread and have only an 8% chance of returning after surgical removal. Because subcutaneous mast cell tumours behave differently than mast cell tumours arising in the skin, the common grading systems aren't used to characterise them.

Mast cell tumours can be successfully treated and cured in many cases. Small, isolated, lower-grade tumours have an excellent prognosis if caught early. Unfortunately, high-grade tumours have a very poor prognosis with most dogs dying of their disease in less than one year, even with aggressive chemotherapy. Average survival time for dogs with high-grade Mast Cell Tumour is leass than four months.

#### **SEE YOUR VET**

Finding a lump or bump on your pet can be a worrisome experience, but don't panic. Masses of all kinds, from harmless skin growths to malignant tumours, are fairly common. While most are benign, it's always better to err on the side of caution by getting it checked out.

Schedule an appointment with your veterinarian for every new growth you find just in case.

#### **IDENTIFY IT**

When it comes to cancer, early detection is the key to successful treatment. The first step in diagnosing any new lump or bump is to perform a fine needle aspiration, or FNA. This simple procedure allows your veterinarian to determine the nature of the growth by collecting a sample of cells and viewing them under a microscope. Keep in mind that malignant masses are not painful; therefore the only definitive way to know whether a growth is cancerous is to examine the cells.

Occasionally, an FNA does not provide enough information and a biopsy is also needed. An FNA can provide basic information about the tumour type and identify certain types of cancer, but a biopsy is often necessary to confirm the diagnosis and help determine if the abnormal mass is benign or malignant. This procedure involves collecting a small tissue sample and sending it to a laboratory for examination.

# CONTACT YOUR STATE BREEDCLUB FOR FURTHER INFORMATION ...... HTTPS://AUSNGRC.ORG/STATEBREED-CLUBS/