

Mast Cell Tumors in Cats

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BASIC INFORMATION

Description

These tumors are composed of a white blood cell called a *mast cell*. Mast cell tumors (MCTs) are the second most common skin tumor of cats. Unlike in the dog, skin MCTs in cats are often benign.

Cause

The cause is unknown.

Clinical Signs

MCTs occur most often in middle-aged to older cats. Siamese cats may develop the tumors when they are young, however. Skin MCTs in cats are usually well-defined, firm, tan, hairless, small to medium-sized bumps. The most common areas affected are the head, neck, and upper regions of the body. Cats may develop only one MCT or several tumors separated by months or years. Rarely, numerous widespread tumors are found. Isolated skin MCTs are usually benign, but widespread MCTs may indicate spread of an internal MCT that is malignant. Occasionally skin MCTs are malignant and behave aggressively.

Diagnostic Tests

Taking a sample of the tumor with a needle (fine-needle aspiration) and examining the material under a microscope (cytology) is often helpful, because mast cells are unique. However, a biopsy of the tumor is needed to determine its aggressiveness (malignancy). If multiple tumors are discovered, then other tests may be recommended to evaluate the rest of the body for the presence of tumor. These may include:

- Checking nearby glands (lymph nodes) for mast cells
- Examining blood cells and the bone marrow for mast cells

- Performing an abdominal ultrasound to check the liver, spleen, and other organs
- Obtaining x-rays of the chest

TREATMENT AND FOLLOW-UP

Treatment Options

Surgical removal is the most common therapy if only one or several skin tumors are present. In this instance, it is best to remove and submit all tumors for biopsy. Most benign skin MCTs can be completely removed and do not recur. If multiple tumors are present or tumors cannot be completely removed with surgery, radiation therapy or chemotherapy with drugs such as steroids, or lomustine can be tried. Chemotherapy may also be considered when skin MCTs are associated with internal mast cell disease, but results have been mixed.

Follow-up Care

If the tumor is benign and has been completely removed, no follow-up may be required after surgery. Because cats can develop other MCTs over a period of months to years, periodic monitoring is recommended. If the tumor was malignant and chemotherapy was used, then recheck visits are scheduled at frequent intervals to monitor the response to treatment and side effects from the drugs. Always report the development of any new lumps to your veterinarian.

Prognosis

Prognosis for cats with isolated, benign MCTs of the skin is good. When skin MCTs are associated with internal mast cell disease, the prognosis is poor to guarded.