Mast Cell Tumors in Ferrets: Signs, Diagnosis, and Treatment

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Mast cell tumors are a common type of skin tumor seen in many domestic animals. In ferrets, they are the second most common skin tumor and are usually benign. They may appear in both males and females, and usually in animals over 3 years of age.

What are the signs of mast cell tumors in ferrets?

Mast cell tumors often start as small, flat tumors with a button-shape and a tan color. They are usually found on the body, but may also be present on the toes, eyelids, or tail, and there may be more than one mast cell tumor present. Mast cells contain histamine, which, when released, from the cell, causes redness and itching. (It is histamine which is released as a result of insect bites, and causes the reaction.) As a result, some ferrets will scratch at the tumor, sometimes abrading the surface and causing oozing, crusts, and a scab. Some tumors may be hairless, and others may become thickened. In dogs, mast cell tumors are a significant health risk, often metastasize, and if malignant, have a poor prognosis. Unlike dogs, in ferrets, mast cell tumors are benign, do not pose a significant health risk, and have an excellent prognosis.

How are mast cell tumors diagnosed?

A mast cell tumor can not be diagnosed simply from its outward appearance. A biopsy needs to be taken and examined to confirm a diagnosis. Tumors removed prior to a biopsy should be removed entirely and a section of the tumor submitted for microscopic examination.

How are mast cell tumors in ferrets treated?

> In ferrets, mast cell tumors are usually benign, do not pose a significant health risk, and have an excellent prognosis.

Any treatment of a mast cell tumor in a ferret would consist of surgically removing the tumor. Because of the number of other tumors in ferrets that are cancerous, removal of all skin tumors is often recommended. Because of the large amounts of histamine, heparin, and proteolytic enzymes (enzymes which break down protein) present in mast cell tumors, care must be taken not to damage the tumor during removal.

References

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