

# Mast Cell Tumor Update

## HIGHLIGHTS

- Mast cell tumors are common in dogs and cats.
- Cytology is often used for diagnosis.
- Surgical excision is recommended.

Mast cell tumors (MCTs) are the most common tumor in dogs and the second most common tumor in cats. They are usually seen in older dogs and cats, but have been reported in very young animals as well. Several breeds are at increased risk for MCTs, including boxers, Boston terriers, Labrador retrievers, terriers, beagles, and Siamese cats. These tumors are often diagnosed with fine-needle aspiration and cytology (FNAC). Staging is somewhat controversial, but the author recommends a full physical examination, blood analysis and urinalysis, FNAC of any local lymph nodes, and abdominal ultrasonography. Additional diagnostics, such as thoracic radiographs, bone marrow aspiration, and cytologic evaluation, can also be done to help identify the presence of metastatic disease. If there is no evidence of metastasis, surgical excision is the preferred therapy. The author recommends 3-cm lateral margins and 1 fascial

plane—deep margins, although less of a margin may be sufficient for most grade 2 MCTs. Recent studies in cats indicate that MCTs are minimally invasive and may not require surgical margins as wide and deep. However, cats should be staged to ensure that they do not have a splenic primary tumor that is metastasizing to the skin or other sites. Radiation therapy is recommended when complete surgical removal is not possible. A recent study suggested good results in dogs with incompletely resected grade 2 MCTs, although most oncologists still recommend chemotherapy for this grade of tumor.

Mast cell tumor update: Staging, margins and prognostic factors. Bergman PJ. *ACVIM PROC*, 2007.