Retrospective Study of Mast Cell Tumors in 10 Dogs

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Mast cell tumors(MCT) are very common in dogs, comprising 7% to 21% of all cutaneous tumors and 11% to 27% of all malignant cutaneous tumors. They occur often in the cutaneous and subcutaneous locations. Thay are initially diagnosed on the basis of fine-needle aspirtation cytology. Histologic evaluation needs to assess histologic grade and completeness of surgical margins. They are initially treated by surgical excision and are decided the treatment option on the presence or absence of negative prognostic factors and on the clinical stage of disease. Vinblastine and prednisolone or CCNU appear to be the most favored drug for the treatment of MCT

We reviewed 10 dogs diagnosed by mast cell tumors from 2004 to 2007 in Royal Animal Medical Center. All dogs were diagnosed on the basis of results of cytological examination of fine-needle aspirate specimens. We reviewed the breed, age, tumor location, clinical stage, AgNOR score and growth rate. We also reviewed the survival time and remission period.

The breed was included variously such as Boston terrier, Maltese, and so on. The mean age was 6.8 years old (from 2 to 11 years old). Lesions were in skin (9 dogs) and oral cavity (1 dog). At presentation, all dogs were estimated clinical stage to I. Three patients were treated with only surgical removal; One dog died 96 days after surgery, 2 dogs were surviving at the time of survey for 5 months and 10 months, respectively. 5 patients were treated with combination of surgical removal and chemotherapy(Vinblastine, CCNU, or prednisolone); Three patients died on 180, 255, and 653 days after initial treatment and 2 patients were surviving for 795 days and 623 days, respectively. Finally, 2 patients were treated with only chemotherapeutic agents because it was difficult that tumors were excised completely. But 2 patients all died within 3 months.

Through this survey, Clinicians should assess the biological behavior of mast cell such as histologic grade, AgNOR score, clinical stage, or etc to select the proper treatment protocol and to evaluate the prognosis.

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