

capsules

THE CURRENT LITERATURE IN BRIEF

Mast Cell Tumors: Prednisone Before Resection?

Neoadjuvant chemotherapy is the use of chemotherapy as the initial treatment in animals with localized disease, followed by local treatment, such as surgery or radiation therapy. Current treatment for mast cell tumors (MCTs), the most common cutaneous tumor in dogs, is typically wide surgical resection. However, recommended resection margins are not always feasible due to tumor size and/or location. Development of techniques to consolidate and reduce tumor burden before surgery would be beneficial, particularly if complete resection margins could be achieved. A study was conducted to evaluate the efficacy of prednisone as a neoadjuvant treatment for the reduction of tumor burden in dogs with MCTs. Medical records were retrospectively reviewed for dogs with primary untreated cutaneous MCT managed with neoadjuvant prednisone administration and surgery. A prospective subset of dogs assigned a low-dose (1 mg/kg) or high-dose (2 mg/kg) was evaluated to determine effects of dose. When response to treatment was grouped categorically, 13% of cases were classified as a complete response, 57% were classified as a partial response, 19% as stable disease, and 11% as progressive disease. Thus, 70% of dogs were considered to have responded to prednisone treatment; however, response was not significantly related to the dose of neoadjuvant prednisone, and mass location did not significantly affect response to treatment. Treatment with neoadjuvant prednisone appears to be useful for inducing reduction of MCTs and may facilitate resection when adequate surgical margins cannot be easily achieved due to mass location, size, or both. A larger study is still needed to determine the equivalence of or difference between the 2 prospectively investigated doses.

COMMENTARY: This innovative approach attempted to completely remove canine MCTs in areas where wide excision was not feasible. Although this approach has merit, radiation therapy remains the best approach for canine MCTs that cannot be completely excised.

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Evaluation of neoadjuvant prednisone administration and surgical excision in treatment of cutaneous mast cell tumors in dogs. Stanclift RM, Gilson SD. *JAVMA* 232:53-62, 2008.