

Wave of Relief for Corneal Foreign Bodies

This retrospective case series of 11 dogs, 2 cats, and 2 horses was the first to describe hydropulsion with sterile isotonic buffered ophthalmic solution (eye wash) for superficial corneal foreign bodies. Superficial corneal foreign bodies may disrupt corneal epithelium but do not penetrate the corneal stroma. Removal includes use of needle, forceps, foreign body drill, or foreign body spud. Hydropulsion is an alternate technique that involves attaching a 25-gauge needle to a 6-mL syringe filled with sterile ophthalmic solution. The needle is broken off and a stream of eyewash is directed at a 45°-angle toward the edge of the foreign body until it dislodges from the corneal surface. Hydropulsion was successful for foreign body removal in all patients in this study. No complications were observed. In all cases, topical antimicrobial treatment was prescribed until

5–10 days' follow up. In the 9 cases that presented for follow-up, there was no retention of topically applied fluorescein stain. No patients demonstrated signs of ocular discomfort or corneal opacity at final follow up. Hydropulsion is less traumatic than other foreign body removal techniques, which involve touching the cornea with instruments. Hydropulsion, when used properly in appropriate cases (superficial corneal foreign bodies), may result in less corneal fibrosis; however, further studies are necessary.

■ Commentary

Removal of superficial corneal foreign bodies via hydropulsion provides an efficient, safe, and cost-effective approach that may be used by general practitioners and specialists alike. Of significant benefit, most patients are cooperative enough to

allow the procedure to be performed without sedation, utilizing topical anesthetic only. Whereas practitioners should not hesitate to employ sedation, it should be noted that visualization of the foreign body may be compromised by ventronasal globe rotation that occurs with sedation. However, only foreign bodies embedded on the corneal surface are managed by this method, as those penetrating any deeper into the corneal stroma are most appropriately managed by referral to an ophthalmologist for possible surgical intervention.
—Alison Clode, DVM, DACVO

■ ■ Source

Use of hydropulsion for the treatment of superficial corneal foreign bodies: 15 cases (1999-2013). Labelle AL, Psutka K, Collins SP, Hamor RE. *JAVMA* 244:476-479, 2014.

The Case for Removing & Sampling Mast Cell Tumors

Mast cell tumors (MCTs) are the most commonly diagnosed cutaneous tumors of dogs. In this retrospective study, two groups of dogs with cutaneous grade II MCT were compared to determine the prognostic value of lymph node (LN) metastasis. Fifty-five dogs with grade II MCT and either histological ($n = 35$) or cytological ($n = 20$) confirmation of LN metastasis were compared to 35 dogs with grade II MCT but no histological or cytological evidence of LN metastasis. Palpably enlarged LNs were more likely to be excised (60%) than were normal-sized LNs (40%). Although dogs with palpably enlarged LNs were more likely to have metastasis, no significant difference in survival time was found between dogs with or without LN metastasis. LN palpation was not found to be a predictor of metastasis. However, tumor location was

prognostic; dogs with cutaneous MCT on the extremities lived longer than dogs with tumors on mucocutaneous sites. The survival time was greater for dogs if metastatic tumors were removed.

■ Commentary

The behavior of grade II MCT is challenging to predict. Several predictive and prognostic parameters are currently being studied (eg, mitotic index, Ki67, c-kit status), and the value of each has yet to be fully clarified. This study compares grade II stage 2 MCT patients to those without metastatic nodes. Both groups enjoyed long survival times, and no difference in outcome was noted. This may be because of low numbers and the wide diversity of therapies employed. Removal of the node was associated with a better outcome, which is similar to findings of a previous

study.¹ Additionally, the nonsensitivity of size in detecting metastatic nodes is stressed, supporting sampling of all nodes regardless of size.—Cecilia Robot, DVM, DACVIM (*Oncology*)

■ ■ Source

The prognostic value of lymph node metastasis with grade 2 MCTs in dogs: 55 cases (2001-2010). Baginski H, Davis G, Bastian RP. *JAAHA* 50:89-95, 2014.

1. **Aggressive local therapy combined with systemic chemotherapy provides long-term control in grade II stage 2 canine mast cell tumour: 21 cases (1999-2012).** Lejeune A, Skorupski K, Frazier S, et al. *Vet Comp Oncol* doi:10.1111/vco.12042