

Antibiotics for Eosinophilic Plaques

FOCUS:
Feline Medicine

Feline lip ulcers and eosinophilic plaques are common and often associated with underlying hypersensitivity disorders. In this study, cats with eosinophilic plaques and/or lip ulcers confirmed via skin biopsy were treated with antibiotics or placebo to determine response to amoxicillin trihydrate-clavulanate potassium (Clavamox, pfizerah.com) at 62.5 mg/cat PO q12h for 21 days. Sixteen cats (17 lesions) completed the study. Both lip ulcers and eosinophilic plaques were associated with secondary bacterial infections. Intracellular bacteria were found in at least one oil immersion site and lesional bacteria were found in 12 of 14 skin biopsy sites on histologic examination. Coagulase-positive staphylococci were the most frequently isolated bacterial spp. A 96.2% reduction in mean lesion size was noted in antibiotic-treated cats, as compared with placebo-treated cats with eosinophilic plaques. In the lip ulcer group, cats treated with antibiotics experienced a 42.6% reduction in lesion size. Both eosinophilic plaque and lip ulcer antibiotic-treated groups had significant reductions in mean percentage of fields showing evidence of bacterial infection.

Funding provided by Pfizer Animal Health.

Commentary

Eosinophilic plaques are most commonly a result of a pruritic trigger, not unlike pyotraumatic dermatitis in dogs. Impression

smears can be difficult to interpret because both neutrophilic and eosinophilic infiltrates exist, but bacteria are almost always seen. Careful examination may also reveal concurrent *Malassezia* overgrowth. Cats that do not respond to antibiotic therapy alone commonly respond to combined treatment with antibiotics and systemic antifungals (eg, itraconazole). It is important to note that medication needs to be given for 21 to 30 days and the underlying trigger must be investigated, otherwise relapse can occur.—*Karen Moriello, DVM, DACVD*

Source

Response of feline eosinophilic plaques and lip ulcers to amoxicillin trihydrate-clavulanate potassium therapy: A randomized, double-blind placebo-controlled prospective study. Wildermuth BE, Griffin CE, Rosenkrantz WS. *VET DERMATOL* 23:110-118, 2012.



Alternative to Sutures for Hemostasis

A bipolar vessel sealant device (VSD) can be used for hemostasis in advanced laparoscopic or invasive surgeries in animals. However, the quality of the seal can be affected by elastin and collagen in the tissue. Vessels can be safely sealed up to a diameter of 7 mm, but no studies have evaluated the efficacy of a VSD on a uterine horn or body in dogs. Uteri from 24 dogs were used in this study; 1 horn per uterus was sealed with a VSD and the other with silk suture. A pressure manometer system measured the pressure necessary to make the seal leak or burst.

Uterine bodies sealed with the VSD failed at lower pressures (average, 237 mm Hg) than did uterine bodies ligated with an encircling silk suture (average, 300 mm Hg), although this pressure was higher than what is considered physiologic in a

nonpregnant uterus. The diameter of the body had a significant effect on the number of VSD applications required to achieve macroscopic seal. Results suggested that a VSD can be used to seal uterine horns in dogs during ovariectomy; however, as the bursting strength of the uterine body was unreliable with larger diameters, its use on uterine bodies ≥ 9 mm in diameter is not recommended.

Commentary

The Ligasure (ligasure.com) VSD can be favored for its ability to seal blood vessels up to 7 mm in diameter while minimizing collateral damage. During ovariectomy or ovariectomy in dogs, the VSD seals arteries and veins in the ovarian pedicle. It has also been used to seal the cranial uterine horn with ovariectomy or the uterine body during ovariectomy. This is

the first experiment to test reliability of Ligasure in sealing the uterus. In some of the uterine bodies, the VSD had to be applied up to 5 times to achieve a visible seal. Even in uterine bodies < 9 mm in diameter, tissue texture sometimes made the VSD unreliable as well.

The Ligasure appeared to work best for laparoscopic ovariectomy; if laparoscopic ovariohysterectomy is performed, exteriorizing the uterine body through the caudal port site for traditional suture ligation is suggested.—*Jonathan Miller, DVM, MS, DACVS*

Source

Effectiveness of a bipolar vessel sealant device for sealing uterine horns and bodies from dogs. Barrera JS, Monnet E. *AM J VET RES* 73:302-305, 2012.