

A Case Report : Diagnostic and Treatment of Indolent ulcer in cat

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Introduction

Indolent ulcer is one of eosinophilic granuloma complex (EGC). Other similar name are feline eosinophilic granuloma, eosinophilic granuloma ulcer of cats, rodent ulcer. Indolent ulcer is unilateral or bilateral erosive lesion on the upper lip of cat of any age (5). The lesion on lower lip is uncommon. The lesions vary in size from a few millimetres up to several centimetres, and may be affected the margin of the upper lips. The cause of indolent ulcer is unknown. The presence of eosinophils suggests an allergic reaction, parasite problem, or immune problem. Recently emerging evidence shows a possible genetic predisposition in some cats to develop lesion when exposed to allergic triggers , particularly fleas. Eosinophilic granuloma complex (EGC) are well described in cats in three forms of cutaneous lesions patterns : 1) indolent ulcers. 2) eosinophilic plaque and 3) eosinophilic granuloma. EGC is a one of hypersensitivity of immune system. Hypersensitive immune system is one which overreacts to a stimulus (3). Definitive diagnosis of EGC must be made on histopathology. (2) Typical histopathological features that are described include eosinophilic inflammation and becomes a mixed granulomatous inflammatory reaction. The aim of this case report was to describe diagnostic method and treatment outcome of indolent ulcer on upper lip in a cat.

Materials and Methods

A 2-years-old persian breed , 3.2 kilogram, Male cat, presented complaining of a 1 week history of a lesion on his left upper lip .It was not itchy. He was eating well and other clinical sign was normal. He was an indoor cat and current complete on vaccinations in every years. He not had live fleas or substantial flea dirt present. His skin did not appear inflamed or irritated other. All other physical exam parameters were normal. The ulcerative lesion on left upper lip was firm consistency , size 1 x 2.5 cm with necrotic tissue , pink to red color (Fig. 1). In this case ,blood collection was performed to evaluate complete blood count , blood chemistry profile, blood parasite and rule out other systemic disease such as FIV/FeLV. The blood result are normal. Investigation of lesion on left upper lip was performed by direct impression smear method. Biopsy couldn't be done in this case because the owner doesn't want to invasive investigate. The cytology result from impression smear revealed red blood cells , segmented neutrophils, macrophages and numerous eosinophils. Based on the clinical presentation, the blood result and cytology of impression smear, Indolent ulcer, one of eosinophilic granuloma complex (EGC) was suspected. The treatment plan is use immunosuppressive therapy, systemic glucocorticoids are often effective. The

injectable methyl-prednisolone acetate was given dose 20 mg/cat subcutaneously every 2 weeks until resolve . Long-acting injectable methylprednisolone acetate was good response but should not be used more often than every 12 weeks because of the potential to induce hyperadrenocorticism and/or diabetic mellitus. Amoxicillin /clavulanate dose 15 mg/kg bid per oral has been used to control secondary bacterial infection continuously about 2 weeks . Chlorhexidine 0.2% dilute was used as a topical therapy drug for cleaning on ulcerative lesion.



Figure 1 Indolent ulcer on left upper lip.

Results and Discussion

The cat returned for recheck clinical presentation every 1 week later. After 1st times of methyl-prednisolone acetate injection, the lesion was improve, size 0.7 x 1.5 cm. , less necrotic tissue (Fig. 2). And after 2nd times of injection, the lesion was smaller than last times and good granulation tissue (Fig. 3). At 4th week of start treatment ,the lesion was resolve completely. The cat was good clinical sign and the recurrence of ulcerative lesion was not found. Indolent ulcer is associated with a specific underlying disease, should be made to reach an aetiological diagnosis. A hypoallergenic food trail should be perform(1). The most common treatment method for eosinophilic granuloma complex is using glucocorticoid. It has long been used as the initial treatment of choice for these lesions, especially for any of the “exudative” eosinophilic dermatoses. Prednisolone dose 1-2 mg/kg/day for four weeks and taper down , oral methylprednisolone or injectable methyl-prednisolone acetate offer alternatives. and using higher doses or more potent steroids (be-tamethasone, dexamethasone) may be worth trying in refractory cases. Cyclosporin has been used as oral immunosuppressive drug (4). Initial dose were 2.5 mg/kg PO q12hr , or 25 mg/cat q24hr or devided q12hr. Evidence

of improvement usually was seen within 10 days after initial of therapy (5).



Figure 2 Indolent ulcer , after 1st times of methyl-prednisolone acetate injection, the lesion was improve.



Figure 3 After 2nd times of methyl-prednisolone acetate injection, the lesion was good granulation tissue.

Antibiotic therapy should be instituted. Common regimes include Doxycycline dose 10 mg/kg daily, Amoxicillin /clavulanate dose 12.5 mg/kg bid ,Cefalexin dose 15 mg/kg bid. Although presumptive diagnosis of indolent ulcer may made by observing the physical appearance of the lesions, biopsy and histopathology are essential for the definitive diagnosis and for distinguishing them from other disease such as neoplasia, fungal, viral and bacterial infection, foreign body reaction, autoimmune disease etc (5). In this case couldn't definitive diagnosis Therefore, the diagnosis of this case depend on history taking, clinical presentation and response for steroid therapy.

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