

CANINE JUVENILE CELLULITIS IN LABRADOR PUPPY

K.K. Murabiya¹, *V.D. Dodia², V.L. Parmar², H.M. Padheria¹ and M.D. Khatariya¹

²Assistant Professor, ¹M.V.Sc Scholar

College of Veterinary Science and A.H., Junagadh Agricultural University,
Junagadh-362001 (Gujarat)

E-mail: dr.vaibhavsinh@gmail.com (**Corresponding Author*)

Abstract: A 4 month old Labrador puppy suffering with juvenile cellulitis due to accident with concentrated washing powder is successfully managed by the use of immunosuppressive therapy in the form of oral corticosteroids prednisolone for 10 day with gradual tapering. The onset is sudden and lesions developed within 48 hours vesicular, pustular, crusting and serous lesions appeared with extensive exudation lesions typically form fistulae that drain.

Keywords: Canine Juvenile Cellulitis, Juvenile Cellulitis, Immunosuppressive therapy

INTRODUCTION

This is also known as puppy strangles or juvenile pyoderma. It is a common disease in puppies from 3 weeks to 12 months of age (Muller, 1989). As some breeds and families are predisposed. The mandibular lymphnode is enlarged and rapidly developing edema, papules, and pustules are seen at lips, eyelids and around nose. The lesions start to produce serous to purulent exudate. There is an acute swelling of the face, affecting the muzzle, lips and eyelids. The primary clinical lesions seen in affected dog was dermatitis of the head and face. Microscopically, an epithelioid macrophage was the predominant inflammatory cell. Often high fever will accompany the disease causing lethargy and depression as well as a loss of appetite.

MATERIAL AND METHODS

History & Clinical Observations

The four months old Labrador puppy normally borne, weaned at 7 weeks of age, deworming and vaccination was regular was reported with history of accidental dipped mouth in to concentrated washing powder bucket 10 days back. Following which puppy had developed the small pustular lesions on muzzle and around the nose.

Patient was not responded to any antibiotic treatment and within 5 days of accident with washing powder solution inflammatory swelling and dermatitis with alopecia was occurred.

*Received May 18, 2016 * Published June 2, 2016 * www.ijset.net*

After 7 days vesicular, pustular, crusting and serous lesions appeared with extensive exudation lesions typically form fistulae that drain.

Microbiological examination

Sterile swab was collected from the lesion for culture examination (Microbial examination) to check for any bacterial growth.

Histopathological examination


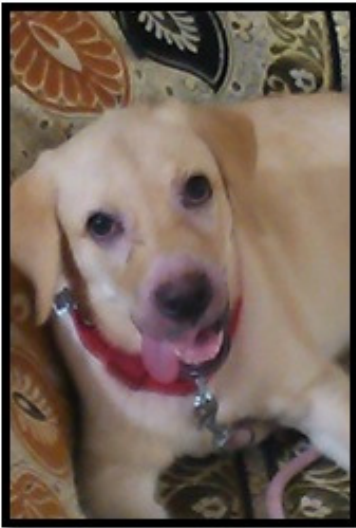
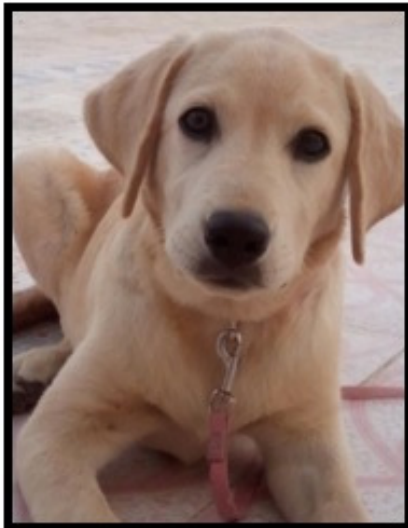
Biopsy of skin and lymph nodes were fixed in 10% neutral buffered formalin, embedded in paraffin, then routinely sectioned and stained with hematoxylin and eosin for histologic examination.

Treatment

On the basis of clinical sign and symptoms like an acute swelling of the face, affecting the muzzle, lips and eyelids followed by vesicular, pustular, crusting and serous lesions appeared with extensive exudation lesions and histopathological examination revealed the case of Canine Juvenile Cellulitis.

Therapy involves the use of immunosuppressive therapy generally in the form of oral corticosteroids i.e Tab. Wysolone 5mg (@ dose rate of 0.7mg/kg) with gradual tapering. After three days dryness on lesion and after 7 days healing was observed. Alopecia recovered within 30 days.

RESULTS

		
0 Day (Before treatment)	3 rd Day (After treatment)	30 th Day (After treatment)

Use of immunosuppressive therapy generally in the form of oral corticosteroids i.e Tab. Wysolone 5mg (@ dose rate of 0.7mg/kg) with gradual tapering. After three days dryness on lesion and after 7 days healing was observed and Alopecia recovered within 30 days. Antibiotics were often used but response was not in this case.

Sterile swab collected from the lesion for culture examination (Microbial examination) to check for any bacterial growth was negative which is also reported by Dell (2011).

Biopsy samples were processed and found that cells were arranged in circumscribed aggregates with neutrophils and diffusely infiltrated with epithelioid macrophages, lesser number of lymphoblast was found in biopsy taken from lymph node.

DISCUSSION

Glucocorticoids at high doses are the cornerstone of therapy. Most cases respond to prednisolone given at a dose of 2mg/kg once daily. This dose is continued until resolution of lesions (usually between 2 and 4 weeks) suggested by David (2015). Reimann (1989) has reported in two clinically affected dogs, all signs of disease had resolved without treatment within 7 weeks.

The inflammatory cell in juvenile cellulitis, characterized by light microscopic staining (H & E), was an epithelioid macrophage is also reported by Baker and Stannard (1975) and Davidson (2006). Carpenter (1987) reported many of these cells were arranged in circumscribed aggregates with neutrophils and fibro- blasts were present at the periphery of pyogranulomas and diffusely throughout the lymph node. Reimann (1989) reported that diffusely infiltrated with epithelioid macrophages and lesser numbers of lymphoblast, neutrophils, and plasma cells were found in biopsy taken from lymph node.

Thus, case of juvenile cellulitis is successfully managed by the use of immune-suppressive therapy generally in the form of oral corticosteroids with gradual tapering.

REFERENCES

- [1] Baker BB, Stannard AA (1975): Nodular panniculitis in the dog. *J Am Vet Med Assoc* 167:752-755,
- [2] Carpenter JL, Thornton GW, Moore FM, King NW Jr (1987): Idiopathic periadnexal multinodular granulomatous dermatitis in twenty-two dogs. *Vet Pathol* 24:5-10.
- [3] David Grant (2015). Canine juvenile cellulitis (Juvenile pyoderma, puppy strangles). *Veterinary practice* P: 37, May.
- [4] Davidson (2006). Juvenile Cellulitis. *Clinician's brief*. P: 21-22.

- [5] Dell (2011): Juvenile Cellulitis (Puppy Strangles). *Derm Digest*: 1-4.
- [6] Muller GH, Kirk RW, Scott DW (1989): *Small Animal Dermatology*, WB Saunders, Philadelphia, PA., 4th ed., pp. 840-841.
- [7] Reimann, Evans, Chalifoux, Turner, Deboern, Kjing, and Letvin (1989): Clinicopathologic Characterization of Canine Juvenile Cellulitis. *Vet. Pathol.* 26:499-504