Clinical and therapeutic aspects of juvenile cellulitis in a Labrador puppy

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Abstract
A forty days old male Labrador pup was presented with acute swelling of face and reddening of muzzle. On examination, swollen face, enlarged submandibular lymph node, pustules over muzzle and eyes were noticed. Clinical signs and Cytology revealed Juvenile cellulitis. The puppy undergone treatment with oral corticosteroids for 14 days along with antibiotic for 5 days orally and recovered uneventfully with no relapse.

Keywords: Labrador, pustules, cellulitis, corticosteroids

Introduction
Juvenile cellulitis is a nodular pyogranulomatous inflammation, pustular dermatitis in canine with no specific causative organism. It is a rare disease which usually affects the puppies with the age group less than four months of age. The etiology and pathogenesis of the disease is unknown. The clinical signs include swollen face, alopecia, papules and pustules over muzzle, eyelids and lips. The lesions fistulate initially, drained and followed by crust formation. Enlargement of submandibular lymph nodes occurs frequently in Juvenile cellulitis. The corticosteroid is the drug of choice and antibiotics has to give alongside to control secondary bacterial infection. Prognosis is good, if the treatment is initiated as early as possible.

Materials and Methods:
A forty days old canine is presented with the history of acute swollen face and reddening of muzzle and eyelids (Fig 1). The clinical examination reveals that the dog had inappetence for the past two days and swollen lymph nodes noticed. Swollen face along with pustules was noticed over muzzles and eyelids.

Fig 1: Day 1
Diagnosis and Treatment
The skin scraping was negative for any mange infections. Upon cytological examination with Diff quick stain, numerous non-generative neutrophils were observed. Based on the clinical signs and cytological examination, the case was diagnosed as juvenile cellulitis. On that day, the dog was given fluid therapy along with Inj. Prednisolone (1mg/kg) and Inj. Ceftriaxone (25mg/kg). Then it had been advised for tapering dose of Tab. Prednisolone (5mg SID) for 14 days and Tab. Cefpodoxime (100mg SID) for 5 days.

Discussion
Juvenile Cellulitis is also known as Puppy pyoderma or Puppy strangles. It is an uncommon (3) pyogranulomatous disorder of the face, pinnae and submandibular lymph nodes affecting young puppies with the age group of less than four months old. The breeds such as golden retriever, dachshund, labrador, beagle, pointer and rottweiler are predisposed to this disease (5). Clinical signs include pyrexia, lymphadenopathy and bilateral pruritic lesions in the periocular regions, face, muzzle, pinnae and rarely inguinal regions which may develop to crust formation and alopecia. Occasionally, the lesions also found on feet, abdomen, thorax, vulva, prepuce and anus (3). Pustular otitis externa is a marked symptom with thickened and edematous pinnae. The disease attributed to the hypothesis as an immune-mediated disorder linked with genetic factors (3). Even some dogs are affected with the non-dermatological signs such as lethargy, hyporexia, pyrexia and lameness (3). The disorder is responsive to high-dose corticosteroids along with antibiotics in order to control secondary bacterial infection (1). Prognosis will be good, if the therapy is given rapidly and also to reduce secondary bacterial infections. The pathogenesis of the juvenile cellulitis disorder is still not clear. Due to its responsiveness to corticosteroids therapy, it is thought to be some degree of immune dysfunction, likely in conjunction with hereditary components (4). Hence juvenile cellulitis is a systemic disorder primarily with lymphadenopathy that results in secondary skin lesions (4). The condition is recovered completely with the very low chance of relapse in affected canines.

References