

Case Study

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## Wasp Sting in a Jersey Calf and its Successful Therapeutic Management

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### ABSTRACT

#### Keywords

Wasp sting, Vulval swelling, Jersey calf, Therapeutic management

#### Article Info

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A female Jersey calf around nine months was brought to veterinary dispensary, with a history of severe bilateral swelling at the vulva after coming from the grazing. On observation, found it was a wasp sting at multiple sites by the presence of erythematous spots on the vulval area. The animal was treated with NSAID, Antihistaminics, topical corticosteroids ointment and advised for cold fomentation. The animal was recovered from the initial anaphylactic reaction. After three days of therapeutic management, the animal showed uneventful recovery from the wasp bite injury.

### Introduction

Honeybee stings or Wasp stings are common in rural parts of India. Wasp bites are painful and cause local inflammatory response. Local reactions are limited to pain and swelling at the stung site, whereas systemic allergic reactions can cause death. The medically important groups of Hymenoptera are the Apoidea (bees), Vespoidea (wasps, hornets, and yellow jackets), and Formicidae (ants). These insects deliver their venom by stinging their victims. Bees lose their barbed stinger after stinging and die (Fitzgerald, 2006). Wasps, hornets, and yellow jackets can sting

multiple times. Cattle, buffaloes, equines, dogs, etc., tethered under the shady trees harbouring honey bees hives may receive a fatal assault by these flies.

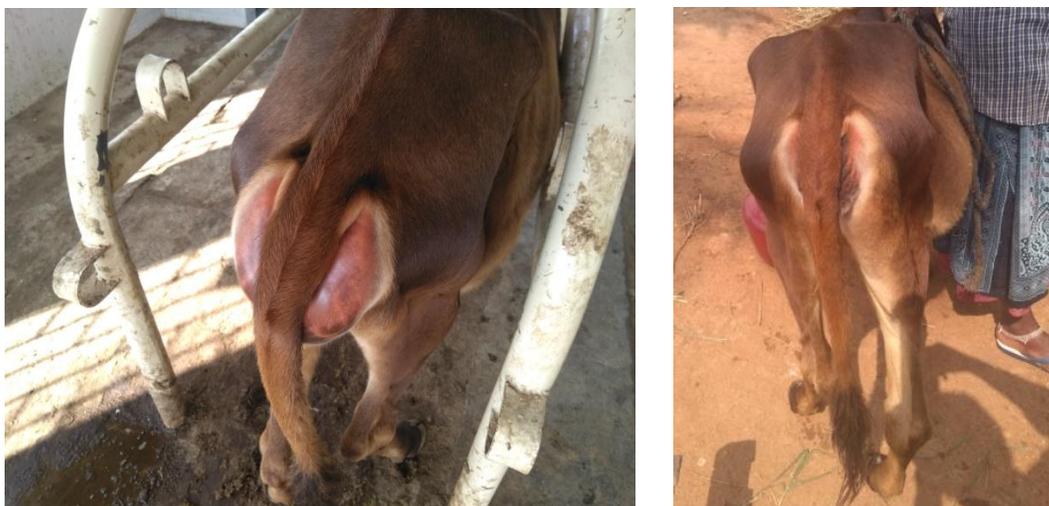
Attack may be provoked by children hurling stones at the hives or when noisy equipments such as tractors, thrashers, lawn movers etc., are operated in areas too close to honey bee hives. In addition, bees when en-route to new colonies may invade stables or yards where in horses, cattle, buffaloes or other animals are housed (Savaliya *et al.*, 2015). The present case aimed to give a therapeutic management to a wasp sting in a Jersey calf.

### Case history and clinical observation

A Jersey female calf around nine months was brought to Veterinary Dispensary, Ayyanaroothu, Thoothukudi district, TamilNadu with the history of severe bilateral swelling at the vulval region after coming from grazing. On clinical examination, the animal had increased rectal temperature (39.7°C), heart rate (95/min), respiration rate

(65/min) and reluctant to walk due to the pain at stung site. The swollen vulva revealed multiple small foci of petechiae with diffuse redness on the both sides. The vulva enlarged 3-4 times the normal size (Fig. 1). At the edematous vulva the stringer of the bees was not found on thorough examination. Based on the history, clinical symptoms, the lesion found and the absence of stringer, the case was diagnosed as wasp sting.

**Fig.1&2** Wasp sting - Calf - Erythematous vulval edema & Wasp sting - Calf – Reduction in vulval edema after the treatment



### Treatment and Discussion

After the thorough clinical examination, the calf was treated with meloxicam @ 5mg/Kg B.Wt, Chlorpheniraminemaleate @ 7ml intramuscularly was repeated for the three consecutive days. The owner was advised for the topical application of corticosteroid ointments, the ice cold fomentation to the swollen site and advised to keep under the closed environment to avoid pecking by birds. On the first day of treatment, the animal relieved from the anaphylactic reactions. After that, there was a gradual reduction noticed in size (Fig. 2) of the edematous vulva on the consecutive days of treatment. Stings by bees, wasps, hornets, and ants usually cause pain, severe redness, massive swelling

and itching. Horses develop hypersensitivity and anaphylactic reactions immediately when compared to other farm animals (Mueller *et al.*, 2016). The clinical signs associated with their sting may vary from mild to severe depending upon some factors including type and quantity of venom, stinging site and number of stings along with sensitivity of the victim (Almeida *et al.*, 2011).

In the present study the clinical signs and lesions were in correlation with previous work of Savaliya and Parikh (2015). The calf started to walk normally and take the feed due to the reduction in pain and swelling due to the wasp sting after the initial treatment. The animal recovered completely after the three days of treatment.

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