

## A CASE REPORT OF BOVINE HYPODERMOSIS

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**Abstract:** Crossbreed cow aged around four years having more than 30-35 soft nodules with average diameter of 2-3 cm on dorsolateral part of back region was brought to hospital. On squeezing the nodules, larvae came out which was tentatively diagnosed as larva of hypoderma bovis and treated successfully with Neomac, Fentas bolus and fluid therapy.

**Keywords:** Hypoderma bovis, Myiases, Parasitic infestation.

### Introduction

Parasitic infestation is a common serious problem for cattle among which Cattle grubs caused by Warble flies belong to the fly family of the *Oestridae* is most common. They are also called bomb flies, heel flies, gad flies, etc. They infest mainly cattle and can occasionally infest sheep, goats, horses and humans as well. Warble flies are obligate parasites, i.e. they cannot complete their life cycle without parasitizing their hosts. Warble flies cause so-called parasitic myiases, i.e. not the adult flies but the larvae are parasitic. There are two major species of warble fly that infest cattle-*Hypoderma bovis*, the northern cattle grub., *Hypoderma lineatum*, the common cattle grub, attacks also horses. The adult flies are not directly harmful for cattle because they neither bite, nor sting, nor cause any immediate harm. But they deposit their eggs on cattle. The larvae get inside the host and accomplish a remarkable migration eating themselves through the host tissues. Hypodermosis, classified as 'internal myiasis' (Hall & Wall, 1995), affects livestock production and wild ruminant welfare, not only by inducing pathology in internal organs and skin but also by impairing the host's immune system. Warble fly infestation has been considered to be responsible for substantial economic losses to the livestock industry worldwide (Tarry, 1986)

### History and Clinical Observations

Crossbreed cow aged around four years was brought with history of itching on back region, restlessness, high temperature, dull and decreased appetite. Owner said that animal is

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Received April 20, 2015 \* Published June 2, 2015 \* [www.ijset.net](http://www.ijset.net)

scratching his body with wall and other objects due to itching. On clinical examination of animals, there were more than 30-35 soft nodules with average diameter of 2-3 cm on dorsolateral part of back region. On squeezing the nodules, larva came out which was tentatively diagnosed as larva of hypoderma bovis.

### **Diagnosis**

Based on the history, spot observation, nature of clinical symptoms, it was diagnosed as hypoderma infestation.

### **Treatment**

First of all, hair was clipped around the soft swelling and larva was removed by injecting 0.5 ml of 5% H<sub>2</sub>O<sub>2</sub> solution in to the nodules. Most grubs emerged within 15-30 seconds due to foaming action of H<sub>2</sub>O<sub>2</sub> solution and leaving cavity behind (Scholl and Barrett, 1986). After removal of larva, ivermectin 8 ml was given subcutaneously at the dose rate of 1 ml per 50 kg body weight. 1 litre DNS and 1 litre ringer lactate was also given and Fentas bolus 3 gm orally given. Animal recovered successfully following treatment.

### **References**

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### **Photograph**



**Fig-1:** Cow infested with larvae of *Hypoderma bovis*