Management of wound myiasis in a lion (panthera leo)

Vijay Kumar¹ and Anshu Raj²

¹Veterinary Officer, Dhauladhar Nature Park, Gopalpur, Distt- Kangra, H.P. 176059, India.
²Veterinary Officer, Veterinary Hospital, Deol, Baijnath, Distt- Kangra, H.P. 176125, India.

*Corresponding Author’s e-mail address: vijay0220@gmail.com

Rec.Date: Oct 05, 2011 21:29
Accept Date: Dec 02, 2011 19:15

Abstract

A case of wound myiasis in a captive lion and it’s successful management.

Key words: Wound myiasis, Ivermectin, Lion.

Introduction

Wound myiasis results from the infestation of fly larvae which feed and develop in the cutaneous tissues of their hosts causing a more or less severe traumatizing injury¹,². There is a higher incidence infecting animals such as cattle and pigs, as well as house pets such as dogs and cats, leading to economic loss and health injuries of these animals but in wild animals it leads to loss of wild fauna in captive as well as in free range wild animals. Ivermectin has been used for Endo and ectoparasitic treatment in carnivorous³,⁴,⁵,⁶. Ivermectin is a highly effective antiparasitic drug in domestic animals but unfortunately regarding its efficacy and safety in the wild animals there is meager data available.

Case History and Clinical Observation

A 19 years old male lion kept in semi open area in the captivity was seen with signs of inappetance and not bearing weight on it’s left paw and was limping. The animal was anaesthesied with a combination of xylazine and ketamine for clinical examination. There was seen maggot wound on mid ventral area of the left paw.

Treatment and Discussion

The animal was immobilized by using Xylazine and Ketamine combination. Xylazine was given @ 2 mg/kg body weight and ketamine @ 5 mg/kg body weight. After achieving the anaesthesia there was seen a wound in it’s left fore paw with a heavy infestation of maggots in middle ventral area of the left paw. 5 ml of the blood was taken in the EDTA vial for the haematological examination. The maggots were removed manually from the wound by using forceps and the remaining deep seated maggots were killed and
extracted out by using gauze bandage soaked with chloroform and turpentine oil in the ratio of 1:1 was kept on the open wound for two hours. This procedure draws out and killed maggots perforated deeply into the wound, as well as on the surface. Forceps was used to remove dead and live maggots that came out of wound. The wound was dressed with Povidine-iodine. The animal was started with the antibiotic and anti-inflammatory treatment. The animal was given inj. Enrofloxacin @ 8 mg/kg body weight and inj Melonex @ 0.25mg.kg body weight by using blow pipe darts. The wound was observed for the maggots on 3rd day. But there was no relief to the animal and the maggots were coming out from the perforated area of wound. Then treatment of the animals was started with the inj. Ivermectin @200 µg/kg subcutaneously at weekly intervals for two times.

The heavy infestation of maggots (Fig.1) had sloughed surrounding tissues of the paw. The wound was observed routinely on every 3rd day for the intensity of wound maggots. The maggots were completely absent from the wound (Fig.2) on the 10th day of the ivermectin injection. There was seen significant clinical improvement after two weeks of treatment and no maggots were seen in the wound after ten days. Routinely dressing of the wound was done on every 3rd day. The results of the haematology showed increase in the leucocytes count showed the intensity of secondary bacterial infection. The broad spectrum antibiotic has taken control the secondary bacterial infection.

Traumatic myiasis is usually caused by larvae of blow flies in the animals. The necrotic tissues and secondary bacterial infections in the tissues can attract female flies, which lays eggs at the affected sit and moist environment in the wound as well as outer environment, faeces, urine, mud etc. favours the growth of the maggots. The animals living in the confinement are more prone to such infections as the surrounding environment limited to a confined place. To avoid secondary bacterial infection along the surrounding skin tissues was treated with antibiotics and anti-inflammatory. The present case reports an efficient treatment method of cutaneous myiasis in a lion.

References