## Short Communication

#### DOI: https://doi.org/10.62418/ijvph.9.3.2023.73-75

# Clinical management of pox like lesions in Black Bengal goats Sanjib Datta <sup>(1)</sup>, Indranil Samanta <sup>(2)</sup>\*

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(Received: 27<sup>th</sup> November 2023 | Accepted: 17<sup>th</sup> December 2023)

## Abstract

The present case study observed the occurrence of pox like lesions, with fever, anorexia, dyspnoea and infrequent abortion followed by death in Black Bengal goats (n=50) in North 24 Parganas district of West Bengal. None of the animals were vaccinated against goat pox. The treatment started after collecting the case history from the farmers with Injection Chlorpheneramine maleate, Injection Ceftriaxone-Tazobactam, Injection Paracetamol, Injection Meloxicam, Injection Vitamin A D<sub>3</sub> E, Topicure® spray (Natural Remedies, India) on the pock lesions, followed by eye drop containing Ciprofloxacin. The therapy successfully prevented the secondary bacterial infection and recovery of the animals occurred 10-15 days after onset of the treatment.

### Keywords: Black Bengal goats, Pox, Treatment

Rearing of goats act as sustainable source of income for the farmers and it also helps in women empowerment as most of the female members of the farmer family take care of the animals. Different infectious or non-infectious health hazards create the major obstacles in the profit making process through goat rearing. The Black Bengal goat is considered as the most compliant, early maturing, prolific, and productive breed of the world which is commonly found in West Bengal and Bangladesh (Hossain, 2021). The meat and skin of the breed belong to the superior quality and are popular among the consumers. The breed is also popular for rearing due to its scavenging nature which helps in collection of the nutrients from uncultivable land, river bank, residence, and even from the hilly area. Although the breed is resistant to the most of the tropical animal diseases, the occurrence of skin infection, PPR and pneumonia are still reported (Nooruddin et al., 1987; Kashem et al., 2011). The present case study reported the occurrence of pox like lesions in Black Bengal goats with clinical signs of systematic involvement and successful therapeutic management.

The Black Bengal goats (n=50) irrespective of sex and age in few Gram Panchayet of Barasat-I block (North 24 Parganas, West Bengal) suffered from fever (104.6°F-107°F), anorexia, dyspnoea, hypersensitivity to touch, typical pock lesions in the eyes, hooves, under the abdomen / tail, udder, vagina, testicular area and infrequent abortion (Figure 1,2,3,4). Few adult goats (n=5) died before the onset of treatment. None of the animals were vaccinated against goat pox.



Figure 1: Typical pock-like lesion in the mouth of a Black Bengal goat



Figure 2: Typical pock-like lesion of a Black Bengal goat



Figure 3: Typical pock-like lesion in the udder and hooves of a Black Bengal goat



Figure 4: Typical pock-like lesion in the eye of a Black Bengal goat

The treatment started after collecting the case history from the farmers at Block Animal Health Center, Barasat-I Block with Injection Chlorpheneramine maleate, Injection Ceftriaxone-Tazobactam, Injection Paracetamol, Injection Meloxicam, Injection Vitamin A  $D_3$  E, Topicure® spray (Natural Remedies, India) on the pock lesions and eye drop containing Ciprofloxacin. The therapy successfully prevented the secondary bacterial infection and recovery of the animals occurred 10-15 days after onset of the treatment (Figure 5).



Figure 5: Recovered goat (early phase)from typical pock-like lesion

The present case study observed the occurrence of pox like lesions, with fever, anorexia, dyspnoea and infrequent abortion followed by death before the onset of treatment in Black Bengal goats. Similar kind of pock lesions with pustules and dry scab was observed in eye, nostril, mouth, vagina and base of tail in Vembur sheep in Tamilnadu (Malmarugan et al., 2015). The respiratory distress and fever was reported from Tellicherry goats suffering with goat pox virus infection (Pothiappan et al., 2015). In the present study, the fever was followed by development of flat and discoloured lesion on unpigmented skin. Later the lesions ulcerate and purulent discharge was observed. The respiratory distress was observed due to development of lung lesions and swelling of retropharyngeal lymph nodes which generates pressure onupper respiratory tract. The open skin lesions attract flies and secondary pneumonia is common due to bacterial co-infection (Mondal et al., 2004). Treatment with the antibiotics and topical spray successfully prevented the secondary bacterial infection and fly attacks.

## **Conflict of interest:**

The authors declare that there is no conflict of interest regarding the present research work.

#### **Ethical statement:**

Not applicable

### Author's contribution:

SD conducted the study, IS interpreted and wrote the manuscript.

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**Citation:** Datta S, Samanta I. Clinical Management of Pox Like Llesions in Black Bengal Goats. Indian Journal of Veterinary Public Health. 2023; 9(3): 73-75. DOI: https://doi.org/10.62418/ijvph.9.3.2023.73-75