



Successful Management of Foot-and-Mouth Disease (FMD) in Pregnant Cattle

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Abstract

Foot-and-Mouth Disease (FMD) is a highly contagious, worldwide-distributed significant epidemic viral disease of domestic animals mainly cloven-footed animals including cattle, buffalo, sheep, goat, swine and many species of wild ungulates. The present study discuss about the clinical management of Foot-and-Mouth Disease (FMD). An eight months pregnant cattle having approximately 350 kg body weight was presented to a Animal Health Camp held at Purbasthali-II block of Purba Burdhaman district (West Bengal) with a history of reduced appetite, lesion on the foot and within the mouth, roapy salivation from mouth and lameness. Clinical examination revealed that there was high body temperature (104°F). On the basis of clinical and physical examination the case was diagnosed as Foot-and-Mouth Disease (FMD) and accordingly therapy is given. For medical invention Amoxicium forte® @ 7 mg/kg b.wt. Intramuscularly and antiseptic dressing for lesion were given. After 10 days of treatment the owner informed the wound is almost healed and the cattle was recovered and started eating.

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Introduction

Foot-and-Mouth Disease (FMD) is a epitheliotropic, trans-boundary, highly contagious, worldwide distributed significant epidemic viral disease of domestic animals mainly cloven-footed animals including cattle, buffalo, sheep, goat, swine and many species of wild ungulates [1-3] caused by Foot-and-Mouth Disease Virus (FMDV) within the genus *Aphthovirus* in the family *Picornaviridae* [4]. FMD generally involves less than 5% of mortality but it is considered as most important disease of farm animals because of huge economic loss by reducing the livestock productivity as well as high mortality in calves due to severe lesion in myocardium. The disease is characterized by high fever (104-106°F), epithelial erosions on the tongue and in the inner mouth that lead to excessive salivation, and lesions

on the foot that causes lameness. No specific treatment is available for FMD affected animals. Supportive care such as the use of antimicrobial therapy and antiseptics, including potassium permanganate and glycerin, has been suggested to improve the healing of lesions [5].

History and clinical symptoms

An eight months pregnant cattle having approximately 350 kg b.wt was presented to an Animal Health Camp held at Purbasthali-II block of Purba Burdhaman district (West Bengal) with a history of reduced appetite, lesion within mouth and on the foot, roapy salivation from mouth and lameness (Figure 1). Clinical examination revealed that there was high body temperature (104°F).

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Figure 1: Clinical signs including roapy salivation and lesions on foot.

Diagnosis and treatment

On the basis of clinical history after interviewing of cattle owner, clinical symptoms and physical examination the case was diagnosed as Foot-and-Mouth Disease (FMD). As there is no specific treatment, after diagnosis symptomatic treatment was started immediately.

The cattle was treated with supportive therapy to prevent the secondary bacterial infections with antibiotics and antiseptic therapy for healing the lesions present on foot and inner mouth. For medical invention Amoxicillin with salbactum (Amoxirum forte® @ 7 mg/kg b.wt.) was given intramuscularly once daily for consecutive 3 days and Potassium permanganate was given for washing the mouth and foot. Loraxane spray was prescribed for topical application. To heal the wound of the mouth, sowaga powder with honey was suggested for topical application. After 10 days of treatment the owner informed the wound is almost healed and the cattle was recovered and started eating (Figure 2).



Figure 2: Recovered Cattle.

Discussion

This epitheliotropic, transboundary, highly contagious viral disease causes severe economic loss due to reduced productivity of the affected animals as well as increased mortality in calves and kids. The principle manifestation of FMD is lesion on foot and inner mouth. Therefore antiseptic therapy is given to heal the lesions. Potassium permanganate was given for washing the mouth and foot. For topical application Loraxane spray was prescribed for foot and for the wound of the mouth, sowaga powder with honey was suggested. Amoxicillin with salbactum was given to prevent the secondary bacterial infection. Within the 10 days of treatment the lesions are almost healed and the cattle recovered and started eating.

Conclusion

Foot-and-Mouth Disease (FMD) is a economically important highly contagious viral disease of cloven-footed domestic animals characterized by lesion present on foot and inner mouth. The disease is important in aspect of severe economic loss due to reduced productivity of the affected animals and high mortality in calves and kids. As it is a viral disease, there is no particular curative drug, but supportive therapy with antibiotics, and antiseptic dressing of lesion can give to prevent the further complication.

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