

## Outbreak of black quarter in cattle and its management in Koshi Zone, Bihar

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### Abstract

Study was conducted on 85 cattle of different breeds and age at Sattarkatiya block under Saharsa district area sudden infested with *Clostridium chauvoei* in rainy season. The cattle with moderate to severe infection were clinical treatment of the cases was performed with administration of heavy dose of penicillin and non steroidal anti-inflammatory drugs. Clinical recoveries of the cases were good and cessation of outbreak of disease.

Black quarter is an acute infectious disease of cattle. *Clostridium* spp are the group of anaerobic bacteria that are of considerable medical and veterinary importance. The causative agent of black quarter in cattle is *Clostridium chauvoei* and also reported in other ruminants also. It is a rod shaped gram positive, motile, sporulating non capsule forming bacteria. The organism thrives in swampy grounds and persists indefinitely hot and humid climate is favorable for the occurrence after the onset of rains. In Koshi zone Bihar the animal affected, between the ages of 2½-3½ years are most affected it's per survey report. It is common for a number of animals to be affected within a small time frame.

**Case history:** The onset of monsoon in Bihar outbreak of disease was investigated during kishan choupal in cattle as well as other ruminants also. Most of the affected were of age 2½-3½ years and their 1<sup>st</sup> lactation. The investigated area of Sattarkatiya block of Saharsa district of Bihar the unit herd was having a population of cattle about 85 (eighty five) find cow at the time of monsoon.

**Clinical observation:** In the present outbreak animals had suffered from two categories of infection. Per acute from, where the animal have died suddenly without showing any clinical sign and acute form, where the animals showed clinical sign which were treated later and them recovered subsequently. On clinical examination the cow were found depressed, febrile, lame (on one lamb) with actual swelling of gluteal muscle (Fig. 1, 2, 3) anorectic with complete rumen stasis high fever (>105°F) respiration rate 40-60/ minute and pulse rate of above 115/minute, palpation of the swollen area emitted cracklings or crepitating sounds (the sensation of air under the skin) can be notice in many infections as the area seems to crackle under pressure and limb can feel hot to touch.



**Treatments given:** The antibiotic in the treatment of affected animals along with the antipyretic's antihistamine and B- complex injection the control measures under taken vaccination is the most common, cheapest, and efficacious preventive measure taken against black quarter. Creation of aerobic environment in the affected region by incising the part two or three places 1 – 2 inches and squeezing out the fluids that out of affected blood mostly in black colour and filled with potassium permanganate (antiseptic).

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