Cellulitis in a Red Kandhari Bull : A Case Report

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Abstract

A case of cellulitis caused by mixed infection of *Staphylococcus* spp. and *Corynebacterium* spp in a Red Kandhari bull leading to death of animal was autopsied at the department. It is being a case of cellulitis in a Red Kandhari bull and placed on record.
Keywords: Cellulitis, Bull, Necropsy findings, Connective tissue, Inflammation.

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Cellulitis is diffusely spreading suppurative inflammation of connective tissue having red margins and caused by mixed infection of *Streptococci* spp, S*taphylococcus* spp. and *Corynebacterium* spp. (Shastry and Rao, 2006).

Cellulitis is common in poultry birds and not in other domestic animals. It is rarely reported in livestock.

Case History, Clinical Findings

A Red Kandhari bull was presented to the Teaching Veterinary Clinical Complex, College of Veterinary and Animal Sciences, Udgir, with the history of anorexia, tympany, and swelling on right side of neck.

Clinical Examination of particular bull revealed that there was a painful muscular swelling on neck making animal unable to keep the neck in straight position. There was high temperature (105°F), elevated pulse rate (82/min) and increased respiratory rate with tympany. The visible mucous membranes were congested; skin and hair coat was dry and rough. The calf was passing scanty semisolid faeces and pale yellow coloured urine.

Microbiological Findings: The material collected from the affected tissue of the carcass was subjected to the microbiological investigation. The isolation and identification of bacteria based on the microscopic examination, cultural and biochemical characteristics revealed the isolates as *Staphylococcus* spp. and *Corynebacterium* spp.

Treatment

The bull was treated with antibiotic Inj. QuinIntas (Enrofloxacin-100 mg) @ 15 ml I/M (Intas Pharmaceuticals Ltd. Ahmedabad) and supportive therapy in the form of Inj. Dextrose 5% @ 2 lit. /day I/M (Fresenius Kabi India pvt. Ltd. Pune) and Inj. RL (Compoud Sodium Lactate Injection) @ ml I/M (Fresenius Kabi India pvt. Ltd. Pune), alternatively along with Inj. Tribivet (Vit. B1-B6-B12) @ 5 ml I/M (Intas Pharmaceuticals Ltd. Ahmedabad), despite the treatment bull died on 6th day.

Necropsy Findings

The carcass of Red Kandhari bull died at Teaching Veterinary Clinical Complex was presented to the Department of Pathology for necropsy examination. The carcass was subjected to detailed necropsy examination and the findings were recorded as follows:

External Findings: On external examination the bull was emaciated and bloated with severe inflammation on right side of neck. Mass of muscle like swelling was present on the neck.

Internal Findings**:** After removal of hide, gangrenous myositis was observed at the place of swelling on the neck. The area was dark brown with fragile mass giving shaggy appearance and foul odour.

Lungs were emphysematous with patches of pneumonia. Pericardium was thickened and there were current jelly clots in the chambers of the heart. Liver was hypertrophied with foci of necrosis on it. Liver capsule was thickened and inflamed. Gall bladder was distended with yellowish discolouration of abdominal organs (bile imbibition). Kidneys were markedly lobulated; on section kidneys appeared pale with focal necrotic areas on them.

Result and Discussion

Considering clinical history, gross lesions, autopsy findings and microbiological isolations, the cause of death in this case appeared to be Cellulitis leading to septicaemia, toxaemia and septic shock.

Microbiological examinations have confirmed the cause as *Staphylococcus* spp. and *Corynebacterium* spp. mixed infection leading to cellulitis. Sonia, *et al.,* (2008) have reported generalized, severe cellulitis caused by *Streptococcus dysgalactiae* sub sp. *dysgalactiae* in an adult Brown Swiss cow, which died rapidly and another case of cellulitis in thorax and abdominal region in three cows reported by Braun *et al.,* (2005) supports the findings of present case.

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