

**BURKHOLDERIA CEPACIA COMPLEX PNEUMONIA IN CALVES: A CASE REPORT**

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*Burkholderia cepacia* complex (*B. cepacia*), is group of Gram-negative aerobic closely related species of bacteria. Organisms from this complex are considered ubiquitous microorganism and opportunistic human pathogens. *B. cepacia* complex were described as a reason of cystic fibrosis, lung transplantation, and chronic granulomatous disease in humans. We present cases of pneumonia in 2 beef calf herds. *Burkholderia cepacia* was identified in lung and nasal swabs cultures.

Animals were diagnosed with use anatomopathological methods. Samples of lung, liver, spleen, and kidney tissue from the calf were collected for bacteriological culture. The samples were diagnosed with use RT-PCR and ELISA test.

A 7 young death calf were submitted for examination to the diagnostic laboratory. The calf came from two beef calf herds of 42 and 36 animals in which a high calf mobility and mortality rate had occurred. Postmortem examination of the calves revealed a lobular fibrio-necrotic pneumonia mainly involving the lung cranial lobes. Fibrinous pleurisy was also evident in pneumonic areas. The cut surface of the lung was red and airless with multiple necrotic foci ranging from about 2 to 5 mm in diameter. No pathological changes in other organs were observed.

Cultures of calf lung yielded several colonies of *Burkholderia cepacia* complex. *B. cepacia* complex were also isolated from the nasal swabs taken from calf with signs of pneumonia. Animals from infected farms were tested for BVDV. In both herds antibody — ELISA and real-time RT-PCR results were negative.

To our best knowledge this is first report of *B. cepacia* complex pneumonia in cattle. The disease was associated with severe pneumonia with 80–90 % mobility and up to 45 % mortality, not responding to standard therapy. Moreover, results of our study indicate, that *B. cepacia* complex can have infectious character in calves, with out influence of BVD virus as the most common immunosuppressive factor in both described outbreaks.

**Keywords:** CALVES, *BURKHOLDERIA CEPACIA*, PNEUMONIA