ACUTE RENAL FAILURE DUE TO SUPPURATIVE PYELONEPHRITIS IN A COW: CASE REPORT

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Introduction: In domestic animals, infection in the bladder and urethra are more common and important than renal diseases. Sometimes, the renal insufficiency develops as a consequence of others diseases, like pyelonephritis and embolic nephritis.

Objective: The present article aims to describe the clinical and pathological alterations of a case of suppurative pyelonephritis in a cow diagnosed in the State of Goiás, Brazil.

Material and methods: Was examined on 09/20/2009 an adult cow, breed Tabapuã, with weight loss and anorexia. The cow was as donor of embryo. When examined the cow had fever with temperature always above of 39.9°C, anorexia, dehydration, purulent discharge coming out of the vagina and in the rectal palpation the animal felt much pain, especially when the left kidney was touched. The treatment against metritis was established using oxitetraciclin (20 mg/kg q 24h) and dipyrone (20 mg/kg), but during five days the animal worsened. The animal received fluid therapy as a support. The blood was collected from jugular veins. On the sixth day the cow died and necropsy was done. As the cow had life insurance, organs samples were collected for histopathological examination.

Results and discussion: The cow always had physiological parameters of frequencies cardiac and respiratory, but the increase of temperature was constant, except after receiving the dipyrone. The cow lost much weight in six days because of the anorexia. The dysuria was often associated with mild groan. The results of biochemical tests for urea and creatinine were 199 mg/dl and 9,02 mg/dl, respectively. The macroscopic examinations showed blackened and flaccid uterus with severe metritis, urethritis, bladder infection, ureteritis, severe pielonephritis of the left kidney and slight increase of the right kidney. The left kidney (40 X 15 cm) in the necropsy examination was threefold of the size when compare with the right kidney. As the cow was used for embryo donor, then it is believed that the infection was upward from the genital tract. One dirty equipment could have started the disease, mainly because is common to use the same device for multiple animals of the same property.

Conclusion: Not being a common disease in cattle, the diagnosis is not easily established by the clinical field. This disease had rapid evolution, even the animal been treated. Care in performing certain procedures are essential to avoid these types of disease.

Keywords: Kidney, cow and metritis