

A CLINICAL CASE OF HYDROALLONTOIS IN A PLEURIPAROUS NON-DESCRIPTIVE BUFFALO.

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ABSTRACT

A 2nd parity, non-descriptive 8th month pregnant buffalo was presented to DVCC with the history of bilateral abdominal enlargement since 7-10 days. Had treatment history of dexamethasone, oxytetracycline. Had vaginal watery discharge since two days. Animal had anorexia and not taking water since two days. General clinical examination revealed dull and depressed, all the vital parameters were not within the normal range. Hence it is diagnosed as hydroallantois. Animal was stabilized with fluid therapy. On per-rectal examination revealed tough fluid filled uterus. On per-vaginal examination revealed cervix was dilated three fingers. Cervix was dilated through fanning and fathering. A dead male calf was relieved through mutational operations. Fetal fluids were drained slowly. After draining the fluids animal is administered with fluids and advised for antibiotic therapy for 3 days. Animal had uneventful recovery.

Key words: Hydroallantois, Buffalo, Dexamethasone, Vaginal discharge, Fetal fluids

INTRODUCTION

Hydroallantois is a pathological condition in which there is an excessive sudden accumulation of fluids in the allantoic cavity. It is one of the sporadic gestational disorders of dairy animals. This condition is usually associated with pathology of foetal membrane and foetal kidney. During the late gestation period this condition is more commonly reported (Roberts, 1971). It accounts for about 80-90% among dropsical conditions affecting the bovine fetus and fetal membrane (Peek, 1997). This condition is sporadically noticed in dairy, beef cattle and less common in buffaloes. It is also associated with a diseased uterus in which most of the caruncles in one horn are not functional and remaining placentomes becomes hyperdropped followed by possibly diseased (Roberts, 1971). The present report described a case of hydrallantois concurrent with uterine rupture and its management in 5 years old at 7 month of pregnancy.

CASE HISTORY AND CLINICAL OBSERVATIONS

A pluriparous non-descriptive buffalo was brought to Department of Veterinary Clinical Complex Proddatur with the history of pregnant about eight months and had bilateral abdominal enlargement since 7 to 10 days. Animal was treated with dexamethasone, oxytetracycline two days back (Fig. 1). On general examination, bilaterally distended abdomen and bloated bull frog appearance was noticed. On per rectal examination revealed No fremitus was felt, uterus was fully distended into the abdominal cavity, fetus and placentomes were not palpable. On per vaginal examination revealed external os of cervix had three fingers dilatation. Watery discharge was also observed through the vagina. Ultrasonographic

examination were revealed presence of more volume of anechoic foetal fluids with echogenic placentomes. With the history and clinical observations, per rectal, per vaginal and Ultrasonographic examinations the condition was conformed as hydroallantois.

TREATMENT AND DISCUSSION

Initially animal was stabilized with normal saline four litres intravenous and 5% Dextrose three litres intravenous. Cervix was dilated manually through fanning and fathering method. A part of protruded allantoic sac was ruptured manually by inserting the finger through the cervix. Around 35 litres of allantoic fluid was slowly drained out. The color and consistency of the drained allantoic fluid was amber, watery. A dead male calf was relieved through the mutational operations. Placenta was also removed manually. It was heavy, necrosed and edematous. Animal was treated with normal saline five litres intravenous, 5% Dextrose five litres intravenous and injection enrofloxacin @ 5mg/kg bwt intramuscular. Advised to continue the antibiotic therapy for three days. The animal recovered uneventfully. Necropsy finding of foetus showed hydronephrosis and incision of fetal kidneys showed fluid filled pockets in the cortex and medulla and urinary bladder contained about 500 ml of urine.

Hydrallantois is one of the gestational disorders that accounts for 85-90 % of the dropsical condition affecting bovine foetus and its membrane (Youngquist and Threlfall, 2007). Hydroallantois is seen mostly in 8-9 months of pregnancy (Roberts, 1971) as was seen in the present case and could be due to necrosis, oedema of placenta and possibly diseased which led to formation of adventitious placenta (Drost, 2007). This condition causes serious straining on the animal which eventually

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causes loss of condition and recumbency. In case of affected but standing animals, the strain on the animal can be relieved through terminating the pregnancy or by cesarean section (Noakes et al., 2009). Rangasamy et al. (2013) reported that in hydroallantois, the parturition was abnormal because of incomplete cervical dilatation with primary uterine inertia and lack of strong abdominal contractions. The foetal death and failure of cervix to dilate in this case was in agreement with the above author.

Hydroallantois must be differentiated following conditions such as hydroamnios, intestinal obstruction, ascites, rupture of bladder, abdominal masses like tumour, abscess or fat necrosis, rumen tympany, extensive ventral edema, hydrometra and multiple fetuses (Morin et al., 1994). Induction of parturition in buffaloes suffered with hydroallantois includes administration of natural or synthetic PGF_{2a} (Manokaran et al., 2011) and estrogen preparations (Peiro et al., 2007). Large volume of fluid replacement is essential in hydroallantois cases in order to overcome the hypovolaemic shock.

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Fig. 1 : Pluriparous non-descriptive buffalo with Hydro allantois



Fig. 2: Fetus delivered in Hydro allantois condition