HYDROALLANTOIS IN A JAFARABADI BUFFALO: A CASE REPORT

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Hydroallantois or dropsy of allantois is a sporadic pathological condition of dairy cattle and buffaloes affecting late gestation. It accounts for about 80-90 per cent of uterine hydrops and is characterized by a rapid and excessive accumulation of watery, amber coloured fluid inside the allantoic cavity over a period of 5 to 20 days giving suspicion for twin/multiple pregnancy (Sloss and Dufty, 1980; Morrow, 1986; Selvaraju *et al*., 2012). This condition invariably results in fetal gestational accident owing to placental dysfunction and fetal kidney failure (Arthur *et al*., 1996; Jana and Ghosh, 2012). Roberts (1986) stated that this dropsical condition usually affects both fetus and fetal membranes. Perusal of literature revealed that the reports on hydroallantois in buffaloes and its timely management are meager (Chandolia *et al.,* 1989; Chaudhary and Chaudhary, 2005; Manokaran *et al*., 2011; Selvaraju *et al*., 2012). Hence this report is placed on record of a rare case of hydroallantois in a Jafarabadi buffalo with authors' serious concern about timely management of such cases to sustain the life at least of the affected dam.

CASE HISTORY AND CLINICAL FINDINGS

A pluriparous Jafarabadi buffalo in its 4th gestation was reported to the authors during their home visit in Amreli district of Saurashtra at around 2.30 PM to have labour pain initiated since last 6-8 hours but without any progress. There was a history of sudden bilateral distension of abdomen over the past 8 to 10 days, anorexia and constipation progressing for the last one week, and recumbency since morning. The animal was about 9 months pregnant following natural service with a Jafari bull and was active till yesterday evening. The animal was in sternal recumbency when attended and did not show any straining bouts or labour. The udder was empty and shrunken. The animal appeared like a floated baby elephant weight around 900-950 kg. The general clinical examination of the animal reveled depression, anxiety, normal body temperature, shallow labored respiration, feeble pulse rate and congested mucous membranes and bilateral heavy distension of abdomen. The animal expressed anxiety and passed mucous coated scanty dung on attempting to get up, but could not get up. The per vaginal examination in recumbent position revealed patent vaginal passage and fully dilated cervix with very tense enlarged fluid filled intact allantoic sac having leathery feel obliterating the pelvic brim. It was not possible to palpate the fetal parts. Entire birth canal was empty even though the cervix was fully dilated probably due to uterine inertia and heavy distension of allantoic sac. Based on the history, clinical observations and vaginal examination, the case was diagnosed as of hydroallantois.

TREATMENT AND DISCUSSION

Since we had no medicine in hands, the required drugs, steroids and fluid therapy were prescribed for immediate purchase from Amreli city some 8.0 kms away from doorstep. Meanwhile, further per vaginal palpation and a forced prick with index finger on the tense allantoic sac resulted in puncturing of the membrane, with gushing of amber coloured fluid in the form of jet flow from the uterus. About 130 to 150 litres of fluid gushed out from the allantoic sac over a period of 20 to 25 minutes confirming our diagnosis. Distension of abdomen was then greatly reduced and palpation of a dead fetus was possible in the collapsed thickened lathery allantoic sac. However, before the drug arrived and the opening in the allantoic membrane could be enlarged and a dead fetus extracted, the buffalo collapsed probably due to sudden shock from heavy loss of allantoic fluid.

Hydroallantois could usually be associated with a diseased uterus in which most of the caruncles in one or both the horns were not functional and atrophied and rest of the placentomes were enlarged edematous and possibly diseased which lead to formation of adventitious placenta (Sloss and Dufty, 1980; Roberts, 1986; Selvaraju *et al*., 2012). Early diagnosis and successful medical management of hydroallantois using prostaglandins and/or dexamethasone and fluid therapy in buffaloes with similar clinical and placental features have been documented earlier (Chandolia *et al.,* 1989; Chaudhary and Chaudhary, 2005; Manokaran *et al*., 2011; Selvaraju *et al*., 2012). However, the placenta could not be examined for such changes in the present case as the animal collapsed before delivery of the fetus and placenta, and the owner denied to extract the fetus from collapsed buffalo. However, blind lathery palpation of allantoic sac *in utero* to some extent confirmed the observations of Roberts (1986) and Manokaran *et al*. (2011) about diseased placenta and/or abnormal fetus. Jana and Ghosh (2012), however, successfully handled a rare case of dystocia in a cow due to hydroallantois associated with congenital fetal ascites and renomegaly. The safe treatment of hydroallantois includes two stage therapy using medical management or cesarean section and gradual release of fluid over a few hours from the uterus to avoid shock (Morrow, 1986; Chandolia *et al.,* 1989). The death of animal in the present case for want of life saving medicines in hands and sudden loss of large quantity of allantoic fluid leading to shock, suggested that if the condition is diagnosed early, anti-shock drugs and fluid therapy are instituted timely and the allantoic fluid is gradually removed over a longer period of 2-3 hours, probably life of the dam could be saved.

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