

HYDRALLANTOIS IN A GRADED MURRAH BUFFALO - A CASE REPORT

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ABSTRACT

A 8 years old graded Murrah buffalo during the eighth month of gestation was presented with the history of sudden, progressive and symmetrical distension of abdomen during the previous 10 to 12 days. The buffalo underwent a medical termination of pregnancy with Inj. Cloprostenol Sodium and Inj. Dexamethasone. At 96 h post-treatment, rupture of fetal membrane resulted in gushing out of more than 100 to 120 litres of amber coloured allantoic fluid from the uterus. A dead female fetus was delivered by gentle traction. The animal was treated with oral ecbolics and parenteral administration of fluids and antibiotics for 5 consecutive days. The buffalo had an uneventful recovery.

Keywords: *Bubalus bubalis*, buffaloes, hydrallantois, graded Murrah buffalo, medical termination of pregnancy

INTRODUCTION

Hydrallantois is one of the dropsical conditions of the fetal membranes. Being a

gestational accident, it accounts for 80 to 90% of the dropsical conditions affecting the bovine fetus and fetal membranes (Peek, 1997). It is characterized by rapid accumulation of clear, watery and amber coloured fluid and leads to rapid bilateral, symmetrical abdominal enlargement within 5 to 20 days of the late gestation and the condition was reported less frequently in heifers than in pluriparous animals (Roberts, 1971). The present communication reports a case of hydrallantois and its medical management in a 8 years old graded Murrah buffalo during the eighth month of gestation.

CASE HISTORY AND OBSERVATIONS

A 8 years old graded Murrah buffalo in eighth month of gestation was presented with a history of sudden bilateral enlargement of abdomen in the previous 10 to 12 days. On general examination, bilaterally distended abdomen (Figure 1), bloated bull frog appearance on sterna recumbency (Figure 2) with dyspnoea was noticed. All the vital parameters were within the normal reference range. Rectal examination revealed a heavily distended uterus filling most of the



Figure 1. Bilaterally distended abdomen.



Figure 2. Bloated bull frog appearance.



Figure 3. Decreased abdominal size and hanging of placental membrane.



Figure 4. Dead female foetus.

abdominal and pelvic region; fetus and placentomes were not palpable. Vaginal examination revealed a completely closed cervix. The condition was diagnosed as hydrallantois.

TREATMENT AND DISCUSSION

In order to save the life of the dam as it was having dyspnoea medical termination of pregnancy was opted in order to alleviate the signs. Hence, the animal was treated with synthetic prostaglandin analogue Inj. Cloprostenol 500 µg along with Inj. Dexamethasone 60 mg intra-muscularly. On the fourth day post-injection, animal voided 100 to 120 litres of amber coloured watery fluid. Obstetrical examination of the fetus revealed that it was in anterior longitudinal presentation, dorso-sacral position with bilateral carpal flexion. The dead female fetus (Figure 4) was delivered by manual traction after correction of the postural abnormality. Placental membranes were removed manually, which showed edematous appearance (Figure 3). The animal was administered with 5% Dextrose (9 litres, I/V), Ringer's Lactate (3 litres, I/V), Inj. Calcium borogluconate (300 ml, I/V) Inj. Streptopenicillin (5 gm, I/M), Inj. Flunixin meglumine (400 mg, I/M) and 4 boluses of Nitrofurazone were placed intra-uterine. The same treatment was continued for next 5 days, except for Inj. Calcium borogluconate.

Hydrallantois is mostly reported in 8 to 9 months of gestation (Roberts, 1972), In the present case, it was recorded during the eighth month of gestation. Hydrallantois should be differentiated from hydramnions, ascites, uroabdomen, recurrent tympany and twin fetuses (Morin *et al.*, 1994). In hydrallantois excessive accumulation allantoic fluid was rapid due to placental pathology which

may also interfere with sodium metabolism at the cellular level (Jackson, 1980). Distended uterus always gives a suspicion for twins or triplets (Morrow, 1986). In the present case out flow of more than 100 to 120 liters of allantoic fluid with delivery single dead fetus was reported. Roberts (1971) opined that retained fetal membrane and septic metritis are the common complications of hydrallantois, but in the present case no post operative complications were recorded. Various methods of medical termination of pregnancy in cattle suffering from hydroallantois were reported in the literature which includes the use of natural or synthetic analogues of prostaglandins (Manokaran *et al.*, 2011) and estrogen preparations (Peiro *et al.*, 2007). In the present communication Cloprostenol sodium (Synthetic prostaglandin) was used resulted in successful termination of pregnancy.

SUMMARY

Hydrallantois in a graded Murrah buffalo was successfully treated by using prostaglandins and corticosteroids. The fetus was delivered after 96 hours of medical termination of pregnancy. Post-operative treatment with antibiotics, ecbolic, and intravenous fluid therapy led to uneventful recovery.

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