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SUCCESSFUL MANAGEMENT OF A TYPICAL CASE OF HYDROALLANTOIS IN MURRAH BUFFALO

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Abstract: The present communication documents the successful management of a typical case of hydroallantois in a Murrah buffalo.
Keywords: Hydroallantois, Murrah Buffalo, Fluid therapy, Allantoic fluid.

Introduction

Hydroallantois is one of the gestational disorders in which sudden increase in allantoic fluid occurs in allantoic cavity leading to bilateral enlargement of abdomen and occurring more commonly during last phase of third trimester in cattle and buffalo (Kumar et al., 2012).The physiopathology of hydrallantois is related to the reduction of placental vascularization resulting in metabolic changes in the placental tissue and fetal membranes thereby accumulating fetal fluids. Additionally, fetal malformation, fetal hepatic or renal disorders and umbilical cord torsion also cause hydrollantois (Landim-Alvarenga, 2006; Jackson, 2006). The present paper reports about a rare case of hydroallantois and its successful therapeutic management in a buffalo.

Case history and clinical observation

A ten years aged Murrah buffalo in its 6th parity with the complaint of sudden bilateral abdominal enlargement within last 20 days. According to the owner, gestation period was complete. Animal was anorexic since 8 days. Although water intake was normal. On physical examination, there was extensive typical abdominal enlargement (figure 1). Along with this, animal was feeling respiratory difficulty and respiratory grunts were audible. There was no loosening of sacro-sciatic ligament. There was no udder enlargement. Per-vaginal examination revealed that the texture of cervix was soft. Vagina and vulva were adequately dilated but the cervix was only 2 finger dilated and fetus was palpable. Therefore it was decided to go for treatment of incomplete cervical dilation.

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Treatment

Firstly fluid therapy was given to save the animal from hypovolumic shock. Inj ringer lactate @ 8 litre and Inj. Intalyte @ 10 litre were given intravenously. Thereafter for the treatment of incomplete cervical dilation, Inj. betamethasone @ 40mg, Inj. cloprostinol @ 500 µg, Inj. valethamate bromide @ 48 mg, Inj. diethylstilbestrol @ 30 mg were administered intramuscularly. After six hours of therapy, cervix was sufficient dilated then water bag was punctured with a thin needle. Approximate 150 litre of yellowish colored fluid was escaped out (Figure 2). Remaining dilation of cervix was done manually. Fetus was in posterior presentation. During the expulsion of fetus, fetal parts were broken on traction. Fetus was small sized and whole of the skin of fetus was hairless. Placenta came out along with fetus (Figure 3). There was drastic reduction in the size of abdomen after expulsion of fetus and large amount of allantoic fluid (Figure 4). Post obstetrical procedure, antibiotic, antihistaminic, NSAID were administered. Animal recovered uneventfully within 7 days of follow up treatment and advice.

Discussion

The present communication reports the typical case of hydroallantois in a Murrah buffalo. The condition is characterised by rapid accumulation of clear, watery and amber coloured allantoic fluid over a period of 5 to 20 days in last gestation and is always giving suspicion for twin/triplet pregnancy (Morrow, 1986). Excessive fluid accumulation in hydroallantois condition results in abdominal distension and sometimes loss of condition and recumbency with consequences of fatality to dam (Noakes, 2009). The septic metritis and retention of fetal membranes are common sequelae of hydroallantois (Roberts, 1971). In the present case, size of the abdomen was extensively distended. If the case is not diagnosed and treated early, in advanced conditions the animal is unable to rise and the prognosis is grave. This condition is seen sporadically in dairy animals and usually affects both foetus and foetal membranes (Napolean, 2012). In the present case, combination of different drugs was administered for the induction of parturition and supportive fluid therapy was given to avoid hypovolemic shock due to sudden expulsion of allantoic fluid. The treatment protocol of hydroallantois depends on the degree of severity of the condition and prognosis. In the present case, prognosis of the case was good and animal regained the normal health within next ten days.

Conclusion

It was concluded that early diagnosis, correct decision fluid therapy, and proper management followed by strategic medication are important to avoid hypovolemic shock and to save the life of the animal.

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Figure 1: Bilateral abdominal enlargement

Figure 2: Expulsion of large amount of allantoic fluid

Figure 3: Delivered fetus along with placenta

Figure 4: Drastic reduction in size of abdomen after expulsion of fetus and allantoic fluid