HYDRALLANTOIS COMPLICATED WITH FETAL ASCITES IN A PRIMIPAROUS GRADED MURRAH BUFFALO

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ABSTRACT

Successful per-vaginal delivery of a live ascitic fetus rarely associated with the dropsy of allantoic membrane in a graded Murrah primiparous buffalo and its successful management is described.

Keywords: *Bubalus bubalis*, buffaloes, buffalo heifer, hydrallantois, fetal ascities

INTRODUCTION

Hydrallantois or dropsy of allantois is a sporadic pathological condition of dairy cattle and buffaloes affecting late gestation. It accounts for about 80 to 90% of uterine hydrops and is characterized by a rapid and excessive accumulation of watery, amber colored fluid inside the allantoic cavity over a period of 5 to 20 days giving suspicion for twin or multiple pregnancy. Perusal of literature revealed that the reports on hydrallantois in buffalo heifer and its timely management are meager (Selvaraju *et al*., 2012). Hence this report place a record on a rare case of hydrallantois associated with fetal ascities in a primiparous graded Murrah buffalo with authors' serious concern about timely management ofsuch cases to sustain at least the life of the affected dam.

CASE HISTORY AND OBSERVATION

A 9 month pregnant graded Murrah primiparous buffalo was referred to the Teaching Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal with the history of having sudden bilateral distension of abdomen (Figure 1) within a week and a progressing anorexia and constipation since that time. The physiological parameters like pulse

rate, respiratory rate and rectal temperature were 95 per minute, 34 per minute and 101.9^{o}F, respectively. Rectal examination revealed a highly distended uterus filling most of the pelvic cavity and unable to palpate the fetus and placentomes. Vaginal examination revealed completely dilated cervix with protrudingallantoic sacin the vaginal passage. Based on history, symptoms and observations, the case was diagnosed as hydrallantois.

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TREATMENT AND DISCUSSION

The allantoic sac was broken by forced and about 60 to 70 litres of allantoic fluid was drained over a period of 20 to 25 minutes through the small prick made over the allantoic sac. Distension of abdomen was then greatly reduced and palpation of a live fetus was possible in the collapsed, thickened and lathery allantoic sac. Vaginal examination revealed the fetus was in posterior longitudinal presentation, dorso-sacral position with both the hind limbs were located near the internal os of cervix. By using obstetrical snare, traction was applied on both posterior limbs failed to deliver the fetus. Examination of fetal abdomen revealed the presence of distended abdomen with huge fluid` filling. Hence, this case was diagnosed as fetal ascites associated with hydrallantois. Then obstetrical snares were applied on both the hind limbs andtraction was applied after lubricating the birth canal with obstetrical gel mean while the fetal abdomen was incised by applying the long obstetrical hook behind the costal arch. Around 15 to 20 litres of clear, watery and straw colored fluid was drained out and finally a live female ascitic fetus (Figure 2) was delivered by gentle traction. The fetus was small, hairless and live however, it died after 5 minutes of delivery.

Hydrallantois 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 led to formation of adventitious placenta (Selvaraju *et al*., 2012). Similar findings were observed in the present case. Dystocia due to accumulation of fluid in peritoneal cavity have been reported in crossbred cattle (Honparkhe *et al*., 2003) and buffalo (Srinivas and Sreenu, 2006). In this present report the fetus was comparatively small with distended abdomen and incision of fetal abdomen revealed both the kidneys were surrounded by large amount of fat and fully degenerated and hypertrophied (Figure 3) which could be the reason for the occurrence of ascites in the fetus in the present case. Other internal organs were normal. Drainage of allantoic fulid or cesearean would be the only treatment option (Arthur *et al*., 1989). In present case, fetus was

Figure 1. Bilaterally distended abdomenremind.

delivered successfully after drainage of allantoic fluid per vaginum as thecervix was dilated at the time of examination andthe placenta and fetus was within the reach of hand. Perusal of literature revealed that the occurrence of hydrallantois was common in pluriparous buffaloes. But in the present case, it was a heifer affected with hydrallantois and it was a rare incidence.

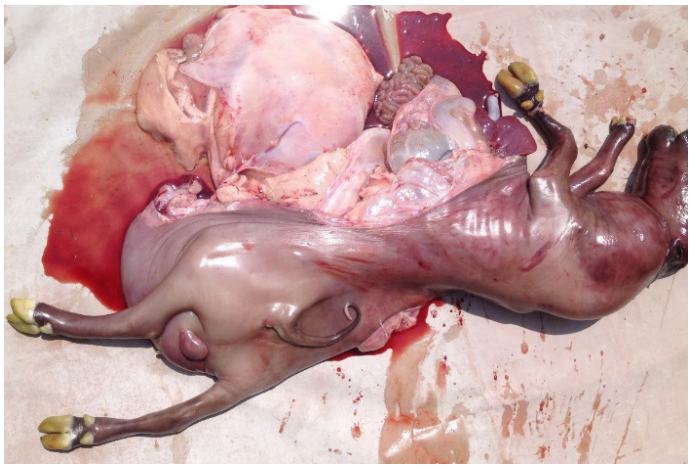

Figure 2. Ascitic female fetus delivered by traction.

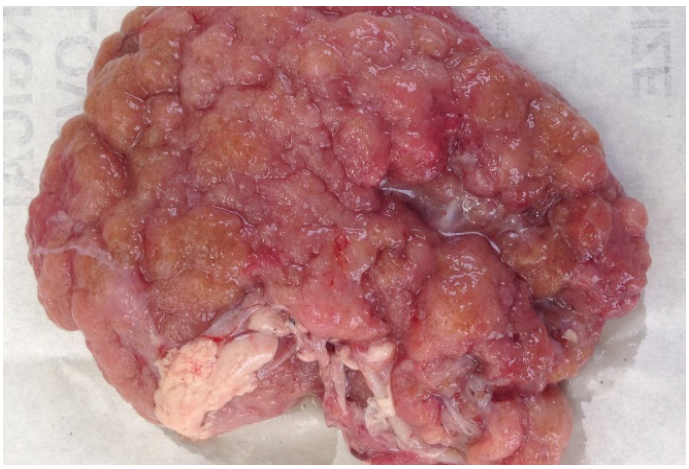

Figure 3. Completely degenerated and Hypertropied kidney.

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