CASE REPORT
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MANAGEMENT OF DYSTOCIA DUE TO FOETAL ASCITES IN MURRAH BUFFALO

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ABSTRACT

Foetal ascites is the accumulation of fluid in the peritoneal cavity of foetus which leads to dystocia during parturition in bovines. A Murrah buffalo suffering from dystocia due to foetal ascites was presented to teaching clinics of HPVK, LUVAS, Karnal. A stab incision was made in the foetal abdomen, ascitic fluid was drained out and dead foetus was delivered by traction. Drainage of peritoneal fluid by stab incision at foetal abdomen is the most common approach adopted for per-vaginal delivery of ascitic foetus.

Keywords: Buffalo, Dystocia, Foetal Ascites

INTRODUCTION

Most common conditions of foetal malformation causing dystocia in farm animals are hydrocephalus, ascites, hydrothorax and anasarca (Purohit *et al.,* 2006; Purohit *et al.,* 2012) and rarely cyclopia. However, underlying etiology of the foetal ascites leads to foetal causes of dystocia. Ascites *in-utero* is one of the causes of dystocia in farm animals and is more common in cattle than buffalo (Luthra *et al*., 2001), as buffaloes have more voluminous pelvis than cattle (Ahuja *et al.,* 2017). It is a monstrous condition caused by blockage of lymphatics, overproduction or insufficient drainage of the peritoneal fluid (Sloss and Duffy, 1980) and reduced urinary excretion (Purohit *et al.,* 2012). Defects in foetal development like acyclopia, foetal ascites along with hydrallantois have also been reported in compromised pregnancies in a buffaloes (Singh *et al*., 2003; 2013). The present case recorded successful management of dystocia in a buffalo by drainage of ascetic fluid from foetus.

CASE HISTORY AND OBSERVATION

A five year old Murrah graded buffalo in her second parity was presented to the teaching clinics of HPVK, LUVAS, Karnal with a history of dystocia from about 10 h and chorio-allantoic sacs were already ruptured. However, the foetus was not able to pass through the vagina, even after the application of moderate traction at field level. Epidural anaesthesia was induced by injecting 6.0 ml of 2 % lignocaine in

sacro-coccygeal inter-vertebral space to prevent excessive straining. Per-vaginal examination revealed the presence of foetus in the anterior presentation and fremitus was absent. Detailed per-vaginal examination after proper lubrication revealed a dead foetus in anterior presentation, lumbo-sacral position with head and fore limbs lodged in the birth canal, without any foetal reflexes. Further, exploration revealed that foetal abdomen was enlarged with fluctuating fluid in it (without any other foetal abnormality), which caused the obstruction in delivery of the foetus. From the observations, dystocia was confirmed as foetal ascites.

TREATMENT AND DISCUSSION

After the proper lubrication, foetus was approached per-vaginal and a stab incision was applied on ventral side of the foetal abdomen with the help of bared parker blade to drain the ascitic fluid. The size of foetal abdomen was reduced after excessive amount of fluid oozed out (about 8 litres) from foetal abdomen through the vagina for about 10 minutes. Then the remaining fluid was drained out by abdominal manipulation of foetus. Thereafter, lubrication was done by infusing 3 litres of sterile liquid paraffin into the uterus and the foetus was delivered by traction (Fig. 1). Retained foetal membranes were also removed manually. Post-operatively animal was treated with Inj. calcium-boro-gluconate (450 ml slow OD, I.V., 2 days), Inj. ceftiofur (1.0 gm, OD, I.M for 5 days), Inj. chlorpheniramine maleate (10 ml OD, I.M., 3 days), Inj. flunixin meglumine (1000 mg OD, I.V. for 5 days), Inj. Intalyte® (5 litres OD, I.V. for 3 days) and Ropitas® boli (four OD, intra-uterine for 3 days). The buffalo recovered uneventfully and expressed overt estrus signs on day 67 postpartum.

Fig 1: Dead ascitic foetus delivered by drainage of abdominal fluid.

Ascites may occur due to foetal hepatic lesions, general venous congestion or urinary obstruction with or without rupture of bladder in the foetus (Arthur *et al*. 1996). Foetal ascites with anterior presentation (Palanisamy *et al.,* 2007; Ahuja *et al*., 2017) and posterior presentation (Selvaraju *et al.,* 2009; Prasad *et al.,* 2011) have been reported earlier in buffaloes. Ascitic condition in this case may be due to cystic condition of kidney and rupture of urinary bladder or the overproduction or insufficient drainage of peritoneal fluid. The foetal ascites results into dystocia as a result of increase in abdominal diameter. Earlier partial fetotomy approach to relieve dystocia caused by ascetic foetus in buffalo has been reported (Singhal *et al*., 2018). However, dystocia due to foetal ascites could be relieved successfully by puncturing the foetal abdomen to drain the

accumulated fluid, thereby reducing the diameter of foetal abdomen to facilitate its per-vaginal delivery (Singh *et al*., 2018). The early diagnosis of such dystocia cases and proper intervention saves the pain, stress, health, future reproduction and production of the dam.

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