

DYSTOCIA DUE TO FOETAL ASCITES IN A MURRAH BUFFALO

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ABSTRACT

The present communication reports a rare case of dystocia due to ascitic fetus with anterior presentation was relieved by cephalotomy, diaphragmatic incision in a pluriparous Murrah buffalo and its successful delivery per vaginally by forced extraction at veterinary college hospital, Pantnagar.

Keywords: dystocia, foetal ascitis, anterior presentation, cephalotomy, buffalo, *Bubalus bubalis*

INTRODUCTION

Foetal ascites is seen as an occasional cause of dystocia in many species but occurs most often in the cow (Roberts, 1971). It may be caused either by the overproduction or insufficient drainage of peritoneal fluid. Obstruction of the lymphatics, for various reasons may prevent the disposal of peritoneal fluid (Sloss and Duffy, 1980). Ascitic foetus in full term pregnancy may cause dystocia in cows (Arthur *et al.*, 1986; Rajasundaram *et al.*, 1998). The incidence of this condition in buffaloes is rarely reported. A case of dystocia due to foetal

ascites in a Murrah buffalo is reported in this paper.

HISTORY AND CLINICAL OBSERVATIONS

A pluriparous full term pregnant Murrah buffalo aged 8 years was brought to the Veterinary College hospital, Pantnagar with the history of active labour since last eight hours.

The animal was active, history revealed that the amniotic bag already ruptured with foetal part i.e. both forelimbs and head projecting outside. The foetal presentation, position and posture were anterior longitudinal, dorso-sacral and extended forelimbs limbs respectively. Traction on both the fore limbs and head did not help to deliver the foetus by the local veterinarians. Thorough per-vaginal examination of the foetus revealed that the foetal abdomen was filled with fluid. The case was diagnosed as foetal ascites.

TREATMENT AND DISCUSSION

Epidural anaesthesia was administered using two percent lignocaine hydrochloride. The foetus was in anterior presentation with both fore

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limbs and head outside the birth canal, it was decided to amputate head at atlanto-occipital joint (Cephalotomy), and then cut the first and second ribs so that hands easily go through the thoracic cavity and thereafter to abdominal cavity. After amputation of head about 5 litres of peritoneal fluids removed, then the guarded embryotomy knife was taken inside the thoracic cavity to cut the diaphragm. About 25 to 35 litres of yellowish watery fluid escaped from the foetal abdomen through the diaphragmatic incision.

Thereafter the dead male enlarged ascitic foetus (Figure 1) was delivered per vaginam by simple traction. The foetus was comparatively small with distended abdomen and there is also prolapsed of blind ended rectum (Figure 2). After that the foetal abdomen was incised and internal organs were examined. Left kidney was cystic and enlarged (Figure 3) which could be the reason for the occurrence of ascites in the foetus. The liver and lungs were normal. The rumen was distended with syrupy clear fluid.

Dystocia due to fetal ascites is an occasional dropsical condition in any species but most often in cows (Hoparkhe *et al.*, 2003). The foetal ascites is associated with the dropsical condition of the uterus, mesothelias of the foetal abdomen and brucellosis as reported by the Roberts, 1971. Arthur *et al.* (1986) stated that ascites may be due to hepatic lesions, general venous congestion or urinary obstruction with or without rupture of bladder. Fetal ascites with anterior presentation (Palanisamy *et al.*, 2007) and posterior presentation (Selvaraju *et al.*, 2009; Prasad *et al.*, 2011) was reported in a buffalo and posterior presentation in a Holstein Frisean cow (Kumaresan *et al.*, 2013). Multiple congenital abnormalities which include foetal ascitis, wry neck and arthrogryposis were the cause for dystocia in a graded Murrah buffalo

(Vidya Sagar *et al.*, 2010). Placental dysfunction consequent to incompatibility of dam and foetus may predispose to foetal dropsical condition.

Post obstetrically the dam was administered with intravenous DNS 2 litres, NS 3 litres, RL 2 litres, calcium borogluconate 450 ml, oxytocin 30 IU and ceftriaxone 4.5 g and meloxicam 12 ml intramuscularly. The foetal membranes were removed immediately following the delivery of foetus and the dam recovered uneventfully. In the present case, following a correct diagnosis,



Figure 1. Ascitic buffalo foetus with enlarged abdomen.



Figure 2. Prolapsed rectum with blind end.



Figure 3. Enlarged left kidney.

dystocias due to fetal ascites were relieved which avoided economic loss to the farmers and stress and postoperative complications of cesarean section to the dams. In addition to that, this technique gives the dam's better chances of future fertility, which is questionable following cesarean section. The buffaloes were discharged from the clinic with necessary advice.

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