

## SUCCESSFUL MANAGEMENT OF DYSTOCIA DUE TO FETAL ASCITIS IN A GRADED MURRAH BUFFALO

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### ABSTRACT

A case of successful pervaginal delivery of ascitic calf leading to dystocia in she buffalo has been reported.

**Keywords:** *Bubalis bubalis*, buffaloes, ascitis, calf, placental dysfunction

### INTRODUCTION

Ascitis is a pathological condition characterized by accumulation of fluid in peritoneal cavity. Foetal ascitic is seen as an occasional cause of dystocia in many species but occurs most often in the cow. It is occasionally associated with a dropsical condition of uterus, mesotheliomas of the fetal abdomen and has also been observed associated with brucellosis (Roberts, 1971). When fetus is of full term, ascitic may cause dystocia (Noake *et al.*, 2009) Etiology of Ascitis may be either the overproduction or insufficient drainage of peritoneal fluid. Obstruction of the lymphatics for various reasons may prevent the disposal of

peritoneal fluid (Sloss and Dufty, 1980).

### CASE HISTORY AND MANAGEMENT

A graded Murrah buffalo at full term in its fourth parity after completion of first stage of labour was presented to Department of Veterinary Gynaecology and Obstetrics, College of Veterinary Science, DUVASU, Mathura (U.P). History revealed that the first water bag ruptured 4 h before being brought to clinic. Animal was straining forcefully, however, no progress was observed in delivery of the fetus. The case was handled by local veterinarians, however, the attempt was unsuccessful. During examination clinical parameters i.e. Temperature, Pulse, Heart rate were found to be within normal range. The conjunctival mucous membrane was pink but animal was recumbent and appears to be exhausted. Pervaginal examination revealed presence of two limbs; confirmation of limbs was difficult as the joints were found ankylosed. Further examination revealed presence of tail, anus and scrotum which helps in confirming the presenting limbs

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as hind limbs and fetus presented in posterior longitudinal presentation. Approaching to uterus further revealed an oversize fetus with distension of abdomen due to fluid completely impacting the uterus, making further examination difficult. These detailed examinations confirm the cause of dystocia as oversize fetus due to fetal ascitis.

### TRETMENT AND DISCUSSION

Following epidural anesthesia by Lignocaine (5 ml, 2% Lignocaine HCl) and after providing ample lubrication with liquid paraffin on birth canal, an attempt was made to reduce the size of fetus by making blunt incision on fetal abdomen through fetotome knife which resulted in escape of approximately 45 to 60 liters of fluid. Following escape of fluid, an examination was made to access the size of the fetus. Upon confirmation of the reduced size of fetus, traction was applied on both the limbs. This yielded into delivery of fetus. The

case was diagnosed as ascitis with abnormalities in the limbs and enlarged scrotum (Figure 1 and 2). The entire placenta came out following the delivery. Examination of the cotyledons revealed certain deviation from the normal cotyledons (Figure 2). Animal was treated with intravenous fluid i.e. Ringer's Lactate, Dextrose normal saline two liters each and 40mg Dexamethasone along with symptomatic treatment. The buffalo was discharged after couple of hours with the routine prescription of antibiotics and supportive therapy. The animal had an uneventful recovery.

Noake *et al.* (2009) reported that ascitis may arise due to rupture of urinary bladder because of urinary obstruction. Ahuja *et al.* (2017) reported that placental dysfunction due to malformation of cotyledon (Figure 1) may also acts as predisposing factor of fetal dropsy which was evident in our case too.

Fetal ascitis act as cause of dystocia in buffaloes due to increased abdominal diameter of fetus was reported by several authors (Palanisamy



Figure 1. Ascitic fetus with partially distended abdomen following release of fluid through blunt incision in the abdomen.



Figure 2. Ascitic fetus with ankylosed limbs.



Figure 3. Placenta showing deformed cotyledon.

*et al.*, 2007; Selvaraju *et al.*, 2009; Vidya sagar *et al.*, 2010; Prasad *et al.*, 2011). Per vaginal delivery by reducing size of fetus by incising fetal abdomen with a fetotome knife were reported by many authors (Roberts, 1971; Selvaraju *et al.*, 2009; Noakes *et al.*, 1996; Ravikumar *et al.*, 2013). However per vaginal delivery of ascitic fetus in posterior presentation is reported by some workers (Selvaraju *et al.*, 2009; Kumaresan *et al.*, 2013). This case report is in agreement with the findings of aforesaid authors.

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