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OBSTETRICAL MANAGEMENT OF DYSTOCIA DUE TO FETAL ASCITES IN MURRAH BUFFALO

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ABSTRACT

The present study reports a rare case of dystocia in a 12-year-old pluriparous Murrah buffalo due to fetal ascites in the posterior longitudinal presentation which was relieved by rupture of the abdomen using a scalpel blade followed by traction at the veterinary clinical complex of the International Institute of Veterinary Education and Research, Rohtak, Haryana, India.

Keywords: *Bubalus bubalis*, buffaloes, abdomen, dystocia, fetal ascites, scalpel blade

INTRODUCTION

Fetal ascites causing dystocia are reported very rarely in buffalo (Sathya *et al*., 2018). The causes of fetal ascites may be due to several factors which include overproduction or insufficient drainage of peritoneal fluid and placental dysfunction (Sheetal *et al*., 2017), obstruction of lymphatics may prevent disposal of peritoneal liquid (Sloss and Dufty, 1980) or diminished urinary water excretion (Jubb and Kennedy, 1970). The incidence of buffalo dystocia due to fetal ascites is 6.9% out of an overall incidence of 22.41% due to fetal oversize (Srinivas, 2007). Thus, obstetrical management of dystocia due to fetal ascites in Murrah buffalo is reported.

HISTORY AND CLINICAL OBSERVATION

A 12-year-old pluriparous buffalo in its 10th parity was referred to the Veterinary clinical complex of International Institute of Veterinary Education and Research, Rohtak, Haryana, India with a history of dystocia. The history further revealed that the buffalo was 20 days left of parturition. The case was referred to after unsuccessful fetal delivery attempted by local veterinarians. The buffalo was active and the rectal temperature is recorded as 101.5^{o}F. Per vaginal examination revealed full dilated cervix and dead fetus in posterior longitudinal presentation, dorso public position, fluid-filled distended abdomen and hind limbs extended through the birth canal. The

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case was diagnosed as fetal ascites.

TREATMENT AND DISCUSSION

The buffalo was restrained with 2% lignocaine injected epidurally. Per vaginally, the lower abdomen of the fetus was incised in different parts using scalpel blade carefully and 8 liters of straw-colored fluid with blood was expelled out by the buffalo on its own. This was followed by proper lubrication using liquid paraffin inside the birth canal. Manual traction was further applied using obstetrical ropes tighten above the hock joint of the two hind limbs separately and a dead male fetus was delivered per vaginum successfully (Figure 1). Post-delivery, 6 furex boli was deposited inside the uterus and the buffalo was administered with intravenous infusion of 2 liters DNS, 2 liters RL, 450 ml calcium borogluconate and intramuscular injections of 30 ml enrofloxacin, 15 ml avil, 15 ml tribivet, 15 ml meloxicam and 15 ml ascorbic acid for three days consecutively. The buffalo had an uneventful recovery.

Fetal ascites has commonly occurred in cows when compared to buffalo (Luthra *et al*., 2001). Fetal ascites has been associated with hereditary, uterine dropsy, mesotheliomas of the fetal abdomen and brucellosis (Roberts, 2004). Fetal ascites in anterior (Sheetal *et al*., 2017) and posterior presentation (Singh *et al*., 2020) has been reported in buffalo which is in accordance with the present case where the fetus was in posterior presentation. Fetal delivery through per vaginum in the current case was done after rupturing of the abdomen with a scalpel blade. Similarly, several cases of fetal ascites have been reported through per vaginum delivery after rupture of the abdomen using embryotomy knife and scalpel blade, however, in occasional cases, a cesarean section may be required (Jackson, 2004). It is concluded that fetal ascites in the posterior presentation can be delivered per vaginum after rupturing of the abdomen with a scalpel blade.

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Figure 1. Photograph showing fetal ascites in buffalo.

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