MANAGEMENT OF DYSTOCIA DUE TO FETAL ASCITES IN HOLSTEIN FRIESIAN CROSSBRED COW

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ABSTRACT

A six-year-old pluriparous HF crossbred cow presented with history of ruptured water bag and straining since 2 hrs. The cow was examined per vaginum under epidural anaesthesia (2% lignocaine hydrochloride) revealed that dead foetus with abdominal distension associated with fluid accumulation was palpable. Foetus in posterior presentation, dorso-sacral position. Small abdominal incision on foetal abdomen with foetotomy knife resulted in escape of yellowish serous exudates. Both hind limbs brought in birth canal and dead foetus was delivered by manual traction. The cow treated with antibiotics, NSAID and fluid therapy for two consecutive days.

Key words: HF crossbred cow, dead foetus, abdominal distension, manual traction

Introduction

Foetal ascites is seen as an occasional cause of dystocia in many species but occurs most often in the cow (Roberts, 1971). Ascites may be caused either by the over production 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 (Rajasundaram *et al*., 1998). Ascites is dropsy of the peritoneum probably due to diminished urinary excretion (Purohit *et al*., 2012). The incidence of this condition in buffaloes is rarely reported.

Case history and clinical observations

A six-year-old pluriparous Holstein Friesian cross breed cow in 3rd parity completing normal gestation was presented with history of ruptured water bag and straining since 2 hrs. On examination the Respiratory rate, temperature and pulse rate were normal. The cow was examined per vaginum under epidural anaesthesia (2% lignocaine hydrochloride) revealed that dead foetus with abdominal distension associated with fluid accumulation was palpable. Foetus in posterior presentation, dorso-sacral position. By all examination (history and clinical examination), the case was tentatively diagnosed as dystocia due to foetal ascites.

Treatment

Small abdominal incision on foetal abdomen (abdominocentosis) with foetotomy knife, allowing considerable fluid to escape and huge amount (about 25 litres) straw coloured fluid was drained out. Both hind limbs brought in birth canal and dead foetus was delivered by manual traction (Fig.1). Animal was administered fluid therapy (inj. 5% dextrose 1.5 lit. i.v. + inj. Ringer's lactate 1.5 lit. i/v), NSAID (inj. meloxicam @ 0.2 mg/kg of b.wt.), antibiotic (inj. enrofloxacin @ 2.5 mg/kg of BW), inj. oxytocin 50 IU i/m and intrauterine boluses were also administered. Cow recovered uneventfully.

Discussion

Foetal ascites have been reported by various authors in cattle (Rajasundaram *et al*., 1998; Kumaresan *et al*., 2013 and Ravikumar *et al*., 2013). Many authors have reported per-vaginal delivery of ascitic foetus where foetus has been presented in posterior presentation (Selvaraju *et al*., 2009 and Kumaresan *et al*., 2013). This case report is confirmation with Selvaraju *et al*. (2009) and Kumaresan *et al*. (2013). Arthur *et al*. (1996) stated that ascites may be due to hepatic lesions, general venous congestion or urinary obstruction with or without rupture of bladder. Placental dysfunction consequent to incompatibility of dam and foetus may predispose to foetal dropsy. Ascetic condition in this case may be due to cystic condition of kidney and rupture of urinary bladder or the over production or insufficient drainage of peritoneal fluid. The foetal ascites resulted into dystocia as a result of increase in abdominal diameter. Approaches similar to the present case for vaginal foetal delivery has been recorded in many previous studies (Roberts, 1971; Selvaraju *et al*., 2009; Ravikumar *et al*., 2013). It was concluded that ascetic foetus can be delivered by abdominal puncture.

Fig.1: Foetal ascites removed by abdominal puncture and traction

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