Dystocia in a non-descript cow due to ascetic fetus- a case report

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Abstract

In this report, dystocia due to ascitic fetus in posterior presentation was relieved by obstetrical mutation, abdominocentosis and forced extraction in a non-descript cow.

Keywords: ascetic fetus; cow; abdominocentosis

Introduction

Fetal ascitis is seen as an occasional cause of dystocia in many species but occurs more frequently in cows and is associated with a dropsical condition of the uterus, mesotheliomas of the fetal abdomen and brucellosis (Roberts, 2004; Hoparkhe *et al.*, 2003). Ascites may be caused either by the over production or insufficient drainage of the peritoneal fluid. Obstruction of the lymphatics, and other is one probable reason which 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).

Case history and clinical observations

A six years old cow in 3rd parity completing normal gestation was presented to the teaching Veterinary Clinical Complex, CVAS, Bikaner with a history of delivery straining since previous night and appearance of two fetal limbs in birth canal. Owner had attempted just by pulling limbs, but failed to deliver fetus.

On examination the Respiratory rate, temperature and pulse rate were normal. The per-vaginal examination revealed the fetus in posterior presentation and both hind limbs were free in the pelvis, but the fetal abdomen was found greatly distended above the brim, and tense with lot of fluid. By all examination (history and clinical examination), the case was tentatively diagnosed as dystocia due to fetal ascites.

Treatment

First of all, epidural anaesthesia (inj. 2% lignocaine hydrochloride) was administered to check the straining. Abdomen of the dead fetus was punctured (abdominocentosis) twice with fetotomy knife, allowing considerable fluid to escape and huge amount (about 25 liters) straw coloured fluid was drained out. The fetal size was reduced and the ascites fetus was removed by gentle traction (Fig. 1). Animal was administered fluid therapy (inj. 5% dextrose 3 lit. i.v. + inj. Ringer's lactate 2 lit. i.v.), corticosteroid (inj. Dexamethasone 25mg i.m.) to avoid dehydration and shock with other supportive therapy. Subsequently the animal was administered antibiotic (Inj. Intacef 4.5 gm for 3 days, i.m.) to check secondary bacterial infection and inj. Oxytocin 50 IU i.m. and intrauterine boluses were also administered. Dam recovered uneventfully.

The delivered ascetic fetus revealed some degenerative changes in liver (Fig. 2) and polycystic degenerative large kidney (Fig. 3). Lungs and heart were normal. Urinary bladder was found ruptured.



Fig. 1 Ascites fetus removed by abdominal puncture traction



Fig. 2 Degerative changes in liver of ascetic fetus



Fig. 3 Enlarged polycystic kidney in the ascetic fetus

Discussion

Fetal ascites have been reported by various authors in cattle (Rajasundaram *et al.*, 1998; Kumaresan *et al.*, 2013 and Ravikumar *et al.*, 2013) and in buffaloes (Palanisamy *et al.*, 2007; Selvaraju *et al.*, 2009; Vidya sagar *et al.*, 2010 and Prasad *et al.*, 2011). Many authors have reported per-vaginal delivery of ascitic fetus where fetus 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). Fetal ascites with anterior presentation of fetus was reported in a buffalo (Palanisamy *et al.* 2007).

Ascetic 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 fetal ascites resulted into dystocia as a result of increase in abdominal diameter. Approaches similar to the present case for vaginal fetal delivery have been recorded in many previous studies (Roberts, 1971; Selvaraju *et al.*, 2009; Ravikumar *et al.*, 2013). It was concluded that ascetic fetus can be delivered by abdominal puncture.

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