Successful Per Vaginal Delivery of Fetal Ascites in a Ramnad White Sheep: Case Report

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Abstract: This article reveals a successful management of dystocia due to foetal ascites in a Ramnad white sheep. A three year old Ramnad white sheep in her second kidding was presented to outpatient unit of Teaching Veterinary Clinical Complex, Veterinary College and Research Institute, Orathanadu with a history of full term pregnant, showing mild straining for the past 12 hours and unable to deliver the fetus. On per vaginal examination revealed a fetus head on the vaginal passage with distended abdomen, and the case was diagnosed as dystocia due to foetal ascites. Following epidural anaesthesia, abdominal wall of fetus was punctured with an small obstetrical hook and about 0.75 litres of clear straw coloured ascitic fluid was evacuated. After complete removal of ascite fluid, a dead female fetus was delivered pervaginally by gentle traction.

Keywords: Foetal ascites, Dystocia, Ramnad white sheep

1. Introduction

Foetal ascites is seen as an occasional cause of dystocia in many species but occurs most often in the cow (Roberts, 1971). Dystocia can also occur due to dropsical condition of fetus like hydrocephalus, ascites, hydrothorax and anasarca (Purohit et al., 2006; Purohit et al., 2012). Fetal ascitis is seen as an occasional cause of dystocia in many species but occurs more frequently in the cow and is associated with a dropsical condition of the uterus, mesotheliomas of the fetal abdomen and brucellosis. Ascites may be caused either by the overproduction or insufficient drainage of peritoneal fluid. Ascitic foetus in full term pregnancy may cause dystocia in cows (Arthur et al., 1986). Ascites can be caused by overproduction or insufficient drainage of peritoneal fluid and blockage of lymphatics (Sloss and Duffy, 1980). Ascites can also occur due to reduced urinary excretion (Purohit et al., 2012).

2. Case History and Observation

A three year old Ramnad white sheep in her second kidding was presented to outpatient unit of Teaching Veterinary Clinical Complex, Veterinary College and Research Institute, Orathanadu with a history of full term pregnant, showing mild straining for the past 12 hours and unable to deliver the fetus. On general examination, rectal temperature was 37.8°C and all other physiological parameters were within normal range. Per-vaginal examination revealed the foetus head is protruding through the vulval lips. Further the fetus was in anterior presentation with normal position and bilateral shoulder flexion, on further progression fetal abdomen, greatly distended above the brim and was tense with lot of fluid. Detailed examination of the foetus revealed that fetal abdomen was markedly distended with fluid. Hence it diagnosed as a case of fetal ascites.

3. Treatment

Epidural anesthesia was administered using 2% lignocaine hcl and fetal abdomen was incised by using a small size obstetrical hook. About 0.75 litres straw coloured fluid escaped from fetal abdomen. As soon as fluid escaped from the abdomen, dead female fetus was delivered applying gentle traction. The dam was administered with Inj. DNS 200ml, Inj. Oxytocin 15IU intravenously followed by Inj. Enroflaxin 1.5 ml i/m, Inj. Melonex 0.75 ml i/m, Inj. Cholerpheneramine melete 0.5 ml i/m and Inj. Tribivet 1 0.5ml i/m were administered for 3 days continuously.

4. Discussion

Fetal ascites may be due to hepatic lesions, general venous congestion or urinary obstruction with or without rupture of bladder or the overproduction of insufficient drainage of peritoneal fluid. Placental dysfunction consequent to incompatibility of dam and fetus may predispose to fetal dropsy (Arthur et al., 1986). Post-mortem examination of the fetus indicated that the fetus was normal however, both the kidneys showed cystic changes. The ascitic fluid was clear and amber colored. The fetal placenta had diseased cotyledons with adventitious placenta. Hence, fetal ascites in this case might be due to the vascular disturbances in the uterus (Nanda et al., 1991) and/or cystic kidneys with diminished urinary excretion (Jubb and Kennedy, 1970). Ascites of fetus may be caused by the overproduction or the inefficient removal of the peritoneal fluid (Mohri et al., 2007 and Ankit Kumar et al., 2017). Since the abdomen of the fetus remains distended with fluid, it becomes nearly impossible to deliver the fetus to deliver the fetus without puncturing the abdomen. In the present case, ascetic condition may be due to cystic condition of kidney or over production of peritoneal fluid or insufficient drainage of the same. Increase in the diameter of the foetal abdomen due to ascites was the cause of the dystocia. It was concluded that ascetic fetus can be delivered by abdominal puncture (Ankit Kumar et al., 2017).

Figure 1: Sheep with ascites fetus

Figure 2: Applying of obstetrical hook

Figure 3: Ascites fetus of sheep

References


