Short communication

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Fetal Ascites in a Non-Descript Cow

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ABSTRACT

A case with fetal ascites in cow was treated by obstetrical manoeuvres and the fetus was removed per vaginally.
A pluriparous cow was presented with the history of dystocia in the Obstetrical ward, College of Veterinary and Animal Sciences, Udgir. The case was handled by a local quack for 8 hours but failed to relieve the dystocia. Per vaginum revealed no placental fluid in the uterus and complete genital passage was dried. The case was diagnosed as fetal ascites and by applying Obstetrical manoeuvres, the fetus was removed per vaginally which depicted an ample amount of fluid in the abdominal cavity.

Key words: Cattle, Dystocia, Fetal ascites.
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INTRODUCTION

Robert (2004) reported different conditions in relation with fetal ascites in various species but the author noted commonly condition has occurred in cows. Predominant etiology behind fetal ascites is either over production or insufficient drainage of the peritoneal fluid. Obstruction of the lymphatics could also be one of the probable reasons which prevent the disposal of peritoneal fluid (Sloss and Duffy, 1980). Purohit *et al.* (2012) stated that fetal dropsical condition might be due to abnormal functioning of the fetal kidney.

CASE HISTORY AND OBSERVATIONS

Six year old cow in 3rd parity completing normal gestation was presented to the Teaching Veterinary Clinical Complex, College of Veterinary & Animal Sciences, Udgir with a history of parturient symptoms since 7-8 hours but failed to parturate. Local quack was attempted to pull out fetal limbs but failed to relieve. Per-vaginal examination revealed the fetus in anterior longitudinal presentation with forelimbs appeared in the birth canal and head was resting on metacarpal. Further fetal palpation was felt as an extensive enlargement of the fetal abdomen. Based on per vaginal examination, it was tentatively diagnosed as fetal ascites.

TREATMENT AND DISCUSSION

Epidural anaesthesia inj. 2% lignocaine hydrochloride was used to restrain the straining. With the help of guarded fetotomy knife, abdomen of the fetus was punctured, which leads to reduction in the size of fetal abdomen. Around 20 liters of abdominal fluid was drained out. Dead fetus was removed by gentle traction (Fig. 1) along with the placenta.

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Fig. 1: Fetal ascites in a cow

To avoid dehydration and shock, cow was administered fluid therapy (Inj. 5% Dextrose 4 L I/V) alongwith an antibacterial cover using antibiotic (Inj. Enrofloxacin @ 5mg/Kg I/M for 5 days) and Inj. Oxytocin (50 IU I/M). Additional intra uterine boluses were also placed inside the gravid and non gravid uterine horn for an early involution and to provide a local antibacterial umbrella. The cow recovered uneventfully.

Post mortem of fetus was performed which revealed ascetic fetus with some degenerative changes in liver and polycystic degenerative large kidney. Placenta was thickened. Lungs and heart were normal. Radiological examinations revealed narrowing of pelvic outlet, distraction fracture between L2 & L3, excessive fluid in abdomen indicative of ascitis, an increased radio density at umblicus and urinary tract which connected to umbilicus and bladder indicative of urachus (Fig.1).

Dropsical fetal conditions have been reported by different authors in cows (Kumaresan *et. al.*, 2013; Ravikumar *et. al.*, 2013 and Yadav *et. al.* 2019) and in buffaloes (Palanisamy *et. al.*, 2007). After scanning of literatures, it has been observed that, various authors reported per-vaginal delivery of fetal ascites where fetus has been presented in posterior presentation (Selvaraju *et al.*, 2009 and Kumaresan *et al.*, 2013) whereas in the present case it was anterior presentation. 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.

In cases of fetal ascites, fetal abdomen was found to be increased and due to increased diameter of fetal abdomen resulted into dystocia. To relieve such conditions needs to be approach the similar cases treated by Roberts, (1971) and Selvaraju *et al.* (2009).

CONCLUSION

It can be concluded that after confirmative diagnosis of ascetic fetus, it can be delivered non surgically by puncture of fetal abdominal.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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