

## Case Report

# Per-vaginal Management of a Fetal Ascites Intended Dystocia in a Cross Breed Cow: A Case Study

Sk Md Sadique Anwar<sup>1\*</sup> and Souvik Dhara<sup>2</sup>

<sup>1</sup>VO, Mobile Veterinary Clinic, Gosaba Block, South 24 paraganas, West Bengal, India

<sup>2</sup>Ph.D. Scholar, Assam Agricultural University, Khanapara, Guwahati, Assam, India

\*Corresponding author: anwarsadique322@gmail.com

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## ABSTRACT

This article discussed about a case of per-vaginal management of dystocia in a cross breed cow due to fetal ascites cause. A 3.5 years old cross breed cow was presented at Mobile Veterinary Clinic, Gosaba Block, South 24 Paragans, West Bengal with a history of prolonged labor. The water bag was ruptured but there was no progression of parturition. Per-vaginal examination revealed that the cervix was completely dilated and the fetus was in anterior longitudinal presentation with an extremely distended abdomen. The case was diagnosed as dystocia due to fetal ascites. After epidural anesthesia, the abdominal wall of fetus was punctured with a fetotomy knife and about 5-7 liters of clear straw colored ascitic fluid was evacuated. Finally fetus was removed by gentle traction. Post operative therapy with antibiotics, analgesic, intravenous fluid and multivitamin successfully cured the animal.

**Keywords:** Per-vaginal, dystocia, fetal ascites and distended abdomen

Ascites is the dropsy of the peritoneum probably either by over production or insufficient drainage of peritoneal fluid and blockage of lymphatics (Vidyasagar *et al.* 2010) or due to diminished urinary excretion (Purohit *et al.* 2012). Foetal ascites is seen as an occasional cause of dystocia in many species but occurs most often in the cow (Roberts, 2004). At the end of gestation, an ascitic foetus may cause dystocia in cows (Krishnakumar *et al.* 2012) as foetal skin and subcutaneous tissue gets accumulated with a lot of fluid which may cause serious birth problem. The present case study is over light elaborately on dystocia due to fetal ascites in a cross breed cow.

## Case History and Findings

A 3.5 years old primiparous cross breed cow in full term was presented at Mobile Veterinary Clinic, Gosaba Block, South 24 Paragans, West Bengal with a history of prolonged labor. The water bag was ruptured and the both fore limbs were protruded from the birth canal. The cow was failed to deliver the fetus even after a continuous straining.

On per-vaginal examination it was assessed that the fetus was in anterior longitudinal presentation but the abdomen of the fetus was very extended which struck the pelvic girth of the dam. The cervix was completely dilated. On the basis of history and clinical findings the case was diagnosed as dystocia due to fetal ascites.

## Obstetrical Management and Discussion

To perform the obstetrical operation (Mutation) the epidural anesthesia was done with 4 ml of 2% Lignocaine injection. The birth canal of the dam was extensively lubricated with liquid paraffin. Before performing the mutation operation the instrument used were sterilized with hot steam and potassium permanganate solution to prevent the post operative complications. Then with gentle

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handling the abdomen of the fetus was punctured with a fetotomy knife and around 5-7 lit of yellow straw color ascetic fluid drained. After removal of the fluid the abdomen became compressed and the dead male calf was taken out (Fig. 1) by applying simple traction. At post operative management the cow was treated with antibiotic (Inj. Intamox® 4.5 Gm, OD) intramuscularly for 5 days, Inj. Meloxicam (0.5 mg/kg, BID) intramuscularly for 2 days, intravenous fluid (1 lit NS + 1 lit DNS + 1 lit RL) for 2 days and Vitamin B complex (Inj. Tribivet®, 10 ml, OD) intramuscularly for 3 days. To prevent retention of fetal membrane (RFM) liquid Uterotone (50 ml BID) was given orally for 3 days.



**Fig. 1**

Fetal ascites is one of the factor of fetal originated dystocia (Purohit *et al.* 2012). Previously the authors reported dystocia in cow due to fetal ascites and same approach was proved fruitful to manage this condition successfully (Honparkhe and Ajeetkumar, 2013; Selvaraju *et al.* 2009; Kumaresan *et al.* 2013; Katiyar *et al.* 2016; Das and Deka, 2018 and Kumar *et al.* 2019). The placental dysfunction consequent to the incompatibility of the dam and fetus may cause foetal dropsy (Arthur, 1996), hence herbal uterotonic was provided in present case to overcome the incidence RFM.

## CONCLUSION

This case study concluded that the dystocia due to fetal ascites is quite complicated to perform per-vaginal delivery without drainage of the ascetic fluid. But systemic drainage of fluid and obstetrical operation can successfully save the life of dam.

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