



ISSN (E): 2277-7695
ISSN (P): 2349-8242
NAAS Rating: 5.23
TPI 2022; 11(12): 4501-4502
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www.thepharmajournal.com

Received: 12-10-2022
Accepted: 15-11-2022

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Delivery of dead foetus by episiotomy in an indigenous cow: A case study

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Abstract

Parturition is triggered by the fetus. Difficulty in normal parturition is called dystocia. The presented case of dystocia with a history of protrusion of the ear of the fetus outside the vulva of the cow was diagnosed by physical examination and successful removal of the dead fetus was done per-vaginally by episiotomy operation. Fetal membranes were expelled two hours after removal of the dead fetus and postoperative management was done by antibiotic, analgesic, vitamin B complex, dextrose saline injection, and intrauterine ecbolic administration for 05 days. The animal recovered eventually and the suture was removed 14 days post conduction of episiotomy operation.

Keywords: Dystocia, episiotomy, maternal causes

1. Introduction

Dystocia is many forms of interference with the physiology of birth. These immediate interferences are broadly categorized into fetal and maternal causes. Fetal causes of dystocia are more numerous and are due to abnormal Presentation (P1), Position (P2), and Posture (P3) of the fetus. Maternal causes comprise narrowing or stenosis of the birth canal - fracture and exostosis of the pelvis, the small size of the pelvic cavity due to early breeding or it may genetic predisposition. The present case study highlights the relieving of dystocia due to one of the maternal causes of dystocia i.e narrowing or stenosis of the birth canal by Episiotomy technique.

2. Case History

A cow of 4 years of age with 6 months pregnant was presented at VCC, Bhubaneswar with a history of protrusion of the ear of the fetus out of the vulval lips (Fig 01). On physical and gynecological examination, it was found that both vulval lips adhere tightly. Only 2-3 fingers were able to pass through the vulval lips, because of tight adherence or narrowing of both vulval lips. The feed and water intake were also compromised for the last 3 days. It was decided to go for an episiotomy to deliver the fetus because in the past 3 days this condition was persisting as per the owner's complaint.

3. Treatment

Initially animal was restrained properly. Body temperature was normal, so the animal was stabilized with i/v administration of DNS. The perineum was cleaned with 1% KMNO₄ solution to sterilize the vulvar lips. The operative site was prepared for aseptic surgery and the animal was administered with 5 ml of 2% lignocaine hydrochloride (2%) in 1st intercocygeal space as epidural anesthesia. Under the standard surgical procedure, an incision of 4" at 1 o'clock on the right dorsolateral side of the vulva was made and it was extended by using a scissor. The adequate lubrication of the birth canal with 2% sodium carboxymethylcellulose was carried out. Per-vaginal examination revealed a dead fetus in anterior longitudinal presentation, dorso-sacral position. With help of an obstetrical snare by using simple traction fetus was delivered (Fig 02). To prevent further infection vaginal mucosa and perineal muscles were sutured through simple continuous with catgut no 2. The skin was sutured using silk no. 3 through cross-mattress fashion (Fig. 03). The placenta was expelled by the cow 2 hrs after fetal delivery. Postoperative treatment for five days was given with Inj. Meloxicam @ 0.5 mg/kg I/M, Ceftriaxone + Tazobactam @ 3,375 mg I/M and Inj. Vitamin B-complex 10 ml I/M.

Intrauterine treatment with Levofloxacin 100mg + Ornidazole 200mg + Vitamin E 25 mg/5 ml @ 60 ml was done for five days. Skin sutures were removed by day 14 post surgery and the animal recovered uneventfully.



Fig 1: Protrusion of ear from vulvar lips of cow



Fig 2: Dead fetus after vaginal delivery



Fig 3: Suturing after episiotomy operation

4. Discussion and Conclusion

Episiotomy is a technique originally designed to reduce the incidence of severe perineal tears (third and fourth-degree) during labor (mostly in 2nd stage of parturition). The general idea is to make a controlled incision in the perineum for enlargement of the vaginal orifice, to facilitate difficult deliveries. Ideally, an episiotomy would relieve pressure on the perineum resulting in an easily repairable incision when compared to uncontrolled vaginal trauma. Congenital stenosis of the vulva resulting in dystocia and its successful management through episiotomy was also recorded in heifers (George et al., 1997; Bhatt et al., 2012 Kumar et al., 2014) [2, 1, 4]. In brief, an episiotomy can be a treatment of choice in case of vulvar stenosis leading to dystocia.

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