Case report

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Management of Vulvar Hypoplasia by Performing Episiotomy in Cow - A Case Report

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ABSTRACT

During an examination of a crossbred cow with dystocia, congenital vulvar stenosis was diagnosed as the cause of the distortion. Per vaginal examination of a crossbred heifer revealed vulvar stenosis and persistent hymen. Episiotomy followed by the excision of transverse band of persistent hymen lead to per vaginal delivery of the fetus.

Introduction

One of the maternal causes of dystocia comprises of constriction and obstruction of the birth canal followed by exhaustion of maternal expulsive forces (Noakes et al., 2009). Vulvar stenosis in heifers may be a congenital or developmental defect (Noakes et al., 2009). Dystocia may result if the caudal portion of the vagina is obliterated (Bhatt et al., 2012). Vulvar stenosis is a maternal cause for dystocia due to exhaustion of maternal expulsive forces during parturition (Srinivas et al., 2007). The stenosis of the vulva is an unusual cause of obliteration of the caudal portion of the vagina, occasionally seen in the heifers or mares and less commonly in other animals (Jackson, 1995). A case was reported of dystocia in a crossbred heifer due to vulvar stenosis and persistent hymen, followed by delivery of fetus through episiotomy is presented in this communication.

Case history and clinical observation

A crossbred cow heifer with complete gestation was presented to the Veterinary Clinical Complex in the Gynaecology department, College of Veterinary Science & A. H. Rewa (Madhya Pradesh) with the history that the animal was initially treated by field veterinarian. The feed and water intake was normal and there was no let down of milk. The animal was apparently healthy with all vital parameters in the normal range. On vaginal examination, it was difficult to pass hand in the birth canal due to vulvar stenosis and the presence of transverse band of persistent hymen. Per-rectal examination revealed fetus was positioned in the pelvic cavity and having a reflex. Based on the clinical, vaginal and rectal examination, it was confirmed that the animal was having stenosis of vulva and it was a delayed case of dystocia. Since it was unable to pass the hand per vaginum, it was decided to perform an episiotomy to deliver the fetus.

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Treatment and discussion

The operative site was prepared for aseptic surgery and epidural anesthesia was administered (5 ml 2% lignocaine HCl). After properly restraining the cow and under the standard surgical procedure, an incision of 4" at 1 o'clock on right dose-lateral side of the vulva was made to avoid incising or tearing into the rectal sphincter. The transverse band of persistent hymen was excised aseptically with scissors (Fig.1). Vaginal examination revealed a live fetus in anterior longitudinal presentation. Obstetrical rope was applied on both the forelimbs and the fetus was delivered following mild traction (Fig.2). Following the delivery of the live calf (Fig.3), vaginal mucosa and perineal muscles were sutured through simple continuous suture using catgut no. 2. Skin was sutured with silk no. 3 through simple interrupted suture (Fig.4). Post operatively, the animal was treated with Inj. DNS (5 litres, I/V), Inj. Calcium borogluconate (450 ml, slow I/V), Inj. Intacef-Tazo (3375mg, I/M), Inj. Meloxicam (0.5mg/kg, I/M), Inj. Chlorpheniramine maleate (100 mg, I/M), Inj. Belamyl 10 ml I/M and Inj. Oxytocin (30 IU, I/V). Four boluses of Cleanex intrauterine are administered once during the gynecological intervention. Following routine post-operative cares, animal recovered uneventfully. Vulvar hypoplasia was treated with episiotomy and traction successfully.

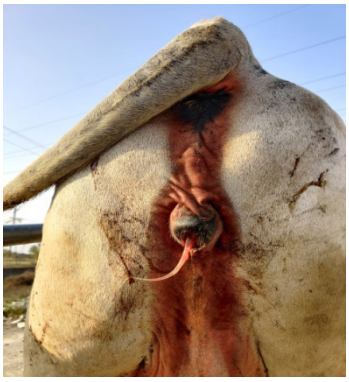

Fig. 1. Vulvar stenosis and persistent hymen

Fig. 2. After an episiotomy tried to create space for vaginal delivery

Fig. 3. Delivered live fetus

Fig. 4. Suturing of vulva

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