

## **Management of Post Partum Cevico-Vaginal Prolapse in a Non-Descript Cow: A Case Report**

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### **ABSTRACT**

The present case study reports successful management of post partum cevico-vaginal prolapse in a cow without any complications

**Keywords:** Cevico-vaginal prolapse, repositioning, recent calving, hypocalcaemia, calcium borogluconate

*Prolapse of vagina and cervix (CVP) is a disorder of ruminant normally in late gestation (Raidurg, 2014). Ocassionally, it is observed after parturition and rarely does it occur unconnected with pregnancy and parturition (Noakes, 2009). Cervico-vaginal prolapse is most commonly observed in large ruminants like cows, buffaloes and sheep. The incidence and symptoms have been extensively elaborated in cows (Arthur *et al.*, 1989 and Roberts, 1971). Incidence of reproductive tract prolapse in cattle ranges between 1-2% (Patterson *et al.*, 1981). Protrusion of all or part of the everted vagina through the vulva is a common condition in certain pluriparous cows (Roberts, 1971). The present comminque documents a case of cervicovaginal prolapse and its successful management in a non-descript cow.*

### **CASE HISTORY AND CLINICAL EXAMINATION**

A Non-descript cow (5 years) was attended at the farmer's doorstep for treatment of cervico-vaginal prolapse which was noticed by the farmer after 6 hrs of parturition. On clinical

examination, it was noticed that the cow was in standing position and prolapsed mass was found to be hanging with exposed vaginal wall. The prolapsed mass was swollen and edematous (Fig. 1). Animal was showing signs of discomfort, restlessness, continuous straining, off feed and water intake, whitish mucoid cervico-vaginal discharge and intermittent prolapse of cervix was evident. Clinical examination revealed normal rectal temperature with slightly elevated heart rate.

### **TREATMENT**

The cow was restrained in standing position and epidural analgesia was performed at intercocygeal space with 2% lignocaine (5ml). The prolapsed mass was lifted upward above the level of ischial arch to release the retained urine and then washed with potassium permanganate solution (1:1000 dilution) and ice pack was applied to reduce the oedema and volume of the prolapsed mass. The repositioning of the prolapsed mass was done by intially pushing the lateral walls and middle portion followed by

roof of cervix and vagina (Fig. 2). Two liters of normal saline was infused into the uterus so that the prolapsed mass remains in its normal anatomical position owing to gravity. Cow was administered with antibiotic (Inj. Enrofloxacin 1500 mg I/M) and anti-inflammatory agents (Inj. Meloxicam 50 mg I/M) for 3 consecutive days to combat bacterial infection. Mineral mixture (chelated Agrimin forte; Virbac India) was recommended @ 50 g/day in concentrate ration.



**Fig. 1:** Post-partum cervico-vaginal prolapse in a Non-descript cow



**Fig. 2:** Replaced cervix and vagina

## DISCUSSION

Genital prolapse, including vaginal prolapse in ruminants, is considered as an emergency maternal disorder that needs immediate attention before any further complication that can lead to a poor prognosis (Yimer *et al.*, 2016). Cervico-vaginal prolapse should be treated as early as possible, delay of which might lead to necrosis and lacerations of the prolapsed mass. Incidence of vaginal prolapse was reported to be rare after 48 to 72 h of parturition (Roberts *et al.*, 1986; Yotov *et al.*, 2013). The present case of cervico-vaginal prolapse could be attributed to recent calving.

Hypocalcaemia results in myometrial fatigue and delays cervical involution (Murphy and Dobson, 2002). The cow was treated with slow intravenous infusion of calcium borogluconate injection. The decreased intensity of straining and expelled fetal membranes upon treatment with calcium borogluconate indicated that the prolapse might have occurred due to hypocalcaemia. Fetal membranes were expelled completely within 48 hrs of treatment. Tyagi *et al.* (2002) reported mineral imbalance as one of the cause of prolapse. So, mineral mixture was given to eliminate any nutritional deficiencies associated with the prolapse. One of the objectives of treatment of vaginal prolapse it to prevent recurrence (Yimer *et al.*, 2016). Retention sutures were not applied in the present case as it was a minor degree of recurrent prolapse without much complication. The present communique might the cow recovered successfully without any recurrence of prolapse.

## CONFLICT OF INTEREST

We declare that we have no conflict of interest.

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