

Case Study

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## Management of Mishandled Cases of Post-partum Vagino-cervical Prolapse by Recurrence Prevention with Foreign Body in Two Cows

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### ABSTRACT

#### Keywords

Cervico-vaginal prolapse, Cow, foreign body, Post-partum, Recurrence prevention

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Cervico-vaginal prolapse is a common complication in pluriparous cows and buffaloes due to relaxation of pelvic ligaments in mid to late gestation. Successful management of mishandled cases of Post-partum vagino-cervical prolapse by quacks using foreign body as recurrence prevention in two cows is recorded.

### Introduction

Cervico-vaginal prolapse usually involve protrusion of the portion of the floor, lateral walls and roof of vagina through vulva along with the cervix and uterus, moving caudally (Roberts 1971). Although it may be of multiple etiologies but placental estrogen production during second half of gestation in cattle causing relaxation of pelvic ligament, vulva and vulval sphincter muscle are most feasible proposition although hereditary predisposition may not be undermined (Purohit, 2012). Pessaries consist of a long narrow wine bottle or similar blunt round

object inserted into the vagina after replacement (Roberts 1971). The present study describes the management of mishandled cases of post-partum vagino-cervical prolapse in two dairy cattle by quacks using foreign bodies, one with glass bottle and another with a stainless steel vessel as a recurrence prevention strategy without proper repositioning.

### Case history and clinical observations

Two Jersey cross bred cows one on its first parity (Case 1) and other on its second parity (Case 2) were brought to the Veterinary

Clinical Complex (VCC), Veterinary College and Research Institute (VCRI), Namakkal with the history of both the animals calved recently, later showed continuous straining and prolapse of the vagina and cervix. Both the cases were treated by the local quacks, where they failed to reposition the mass to their normal position and prevented the recurrence by suturing the foreign body with the vulva. But due to the irregular reposition, both the animals exhibited continuous straining and brought to VCC, VCRI.

The clinical examination revealed both the animals were anorectic with all other vital parameters in the normal range. By opening the suture made on the vulva, a glass bottle (Fig. 3) tied on its neck attached to the vulval retention suture in one cow and in other a stainless steel vessel (Fig. 4). Both the sutures were made in the vulva not in the hair-line (Fig. 1 & 2) which caused irritation in turn continuous straining by the animals.

### **Clinical management**

For both the animals, caudal epidural anaesthesia was achieved by injecting 5 ml of 2% Lignocaine hydrochloride into sacro-coccygeal space. Before correction, the surrounding area of prolapsed masses was washed with soap and prolapsed masses was washed and cleaned with potassium permanganate solution (2%). Urine was relieved using urinary catheter.

The prolapsed mass was lubricated with Cetrimide cream and repositioned. Further, due to the foreign body, lot of soil and dirt were found in the vagina, which was cleared using Intra-vaginal douche with 2% KMnO<sub>4</sub> solution. The recurrence prevention was done by vulval retention suture using cross mattress suture pattern in the hair-line. Lacerative wound on the vulva (Fig. 5 & 6) was cleaned, dressed and Oint. Loraxene applied topically.

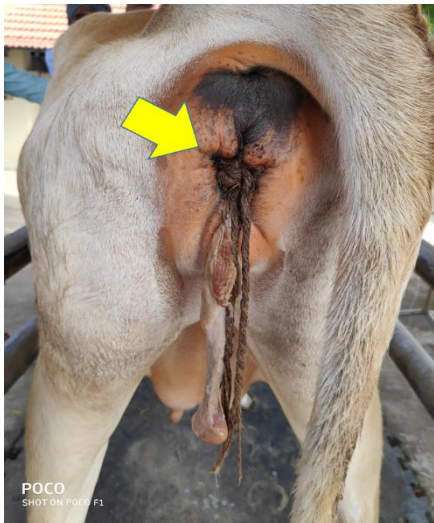
The cows were treated with Inj. Ceftriaxone @15mg/kg i/v for five days, Inj. Dextrose 25%two liters i/v on the first day, Meloxicam @ 0.2 mg/kg i/m for two days, Inj. Calcium Borogluconate 450 ml i/v on first day, and Inj. Chlorpheniramine maleate @ 0.5 mg/kg i/m for three days.

Careful observation for 5 days confirming non recurrence of prolapsed, sutures were removed and both the animals recovered uneventfully.

### **Results and Discussion**

The hormonal alterations or changes taking place at last trimester of pregnancy is believed to be primary cause for prolapse especially estrogen that cause for prolapse especially estrogen that causes relaxation of pelvic ligaments and surrounding soft structures (Wolfe, 2009).

Cervico-vaginal prolapse is a hereditary trait and due to nutritional imbalance contributing to prevalence of vaginal prolapse (Margaux, 2011). More specifically poor quality forage, high level of concentrate, high estrogenic content feeds and hypocalcemia have all been connected with pathology (Mienser and Anderson, 2008). Vaginal contusion at parturition, followed by *Fusobacterium necrophorum* infection exerts a high degree of irritation with frequent expulsive efforts (Arthur 2001). Lack of myometrial tone and increased intra-abdominal pressure may also lead to cervico-vaginal prolapse (Kapadiya *et al.*, 2015). In the reported two cases, the prolapse may be due to increased intra-abdominal pressure and improper feeding management. The cases were mishandled by the local quacks which further complicated the condition. Prompt and early corrective treatment by a veterinarian is suggested for this type of cases.



**Fig.1** Vulval retention suture on the vulva (Case 1)



**Fig.2** Vulval retention suture on the vulva (Case 2)



**Fig.3** A glass bottle used as a pessary to prevent the recurrence (Case 1)



**Fig.4** A stainless steel vessel used as a pessary to prevent the recurrence (Case 2)



**Fig.5** Laceration on the vulva (Case 1)



**Fig.6** Extensive laceration on the vulva (Case 2)

In the present study, it is concluded that the successful management of mishandled cases of Post-partum vagino-cervical prolapse by quacks using foreign body as recurrence prevention in two cows was recorded.

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