



## MANAGEMENT OF PRE-PARTUM CERVICO-VAGINAL PROLAPSE IN JERSEY CROSS COW UNDER FIELD CONDITIONS



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### INTRODUCTION

Pre-partum cervico-vaginal prolapse is the eversion of the vagina and cervix from the vulva. The condition may be a result of prolonged tenesmus or increased intra-abdominal pressure. Cervicovaginal prolapse is a common complication in pluriparous cows and buffaloes due to relaxation of pelvic ligaments in mid to late gestation. This is one of the major obstetrical complications which can adversely affect the reproductive performance of the animal. Early attention and treatment of cervico-vaginal prolapse leads to prompt recovery without much complication. In delayed or neglected cases, vaginal mucus membrane become contaminated and necrosed, inflammation and edema increases the size of the prolapsed mass. The exact cause of this disorder is not fully known as it can occur due to various factors. The most common causes are; increase in intra-abdominal pressure during pregnancy, hypocalcemia, hormonal imbalance and excess perivaginal fat. 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. While initial management of Cervico-vaginal prolapse involves manual repositioning of prolapsed tissues, several invasive techniques have been described for sustained retention. Cervico-vaginal prolapse could be efficiently managed by rope truss, horizontal mattress suture and Buhner's suture technique. These methods aim to keep the vagina positioned cranially to the vulva, often necessitating prolonged suturing to encourage fibrous adhesion formation. However, these invasive procedures commonly result in persistent straining and recurrent prolapse, occasionally leading to vulvar tears.

### History and Clinical observation

An eight months pregnant Jersey cross pluriparous cow was presented with the history of cervico-vaginal prolapse. On physical examination, cervico-vaginal mass was completely everted & external-os was exposed. Vaginal wall was edematous, swollen and thicker. Animal was off-fed, hypothermic (99oF) and exhibited continuous straining. There was maggot wound on the vulvar lip of this animal.

### Clinical Management

The success of treatment of cervico-vaginal prolapse depends on many factors including the duration, severity of damage due to traumatic laceration, bacterial contamination and involvement of other organs such as urinary bladder. Based on history, clinical signs and clinical examination, it was diagnosed as the case of prepartum cervicovaginal prolapse. Caudal epidural anaesthesia was achieved by injecting 5 ml of 2% Lignocaine hydrochloride into sacro-coccygeal space to reduce straining and for easy manipulation in standing position. Before correction, the surrounding area of prolapsed masses was washed with potassium permanganate lotion (1:1000) removing debris. Lignocaine gelly (Xylocaine 2%) was also applied on the prolapse mass for lubrication. Then it was manually replaced to normal position and Buhner's suture along with rope truss technique was then applied to avoid recurrence. Animal was treated with Inj. Ceftriaxone 3 gms I/M for 5 days, Inj. Spasmovent 12 ml I/M for 3 days, Inj. Calcium borogluconate (450 ml, I.V. on first day), Inj Avilin 15 ml I/M 2 days, Liq Ostovet 100ml daily orally, Bolus Ecotas 2 boli o.d. x 4 days and powder HB strong for three days. Antiseptic dressing of maggot wound on vulvar lip also done using liquid Betadine and Lorexane ointment. Careful observation for 5 days confirming non recurrence of prolapse and Buhner's suture were removed after 15 days.

## CONCLUSION

Cervico-vaginal prolapse is one of the reproductive disorders in cattle and buffalo causing great economic loss to farmer. Timely management of this condition will reduce complication, while delay results in increased edema, necrosis with poor prognosis. Repositioning of prolapsed mass followed by therapeutic management with calcium borogluconate, antibiotics, anti-inflammatory, antiallergic, multivitamin and minerals results in better recovery.

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*Fig. 1. Cow showing prolapsed mass and continuous straining*



*Fig. 4. Application of Buhner's suture and rope truss technique*



*Fig. 2. Washing of prolapsed mass and application of Lignocain gelly*



*Fig. 3. Manual replacement of prolapsed mass*