

## **OBSTETRICAL MANAGEMENT OF SEVERE RECURRENT POST PARTUM CERVICO- VAGINAL PROLAPSE IN A NON-DESCRIPT BUFFALO**

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**Abstract:** A ten years old non-descript buffalo in fifth parity calved a day before was presented to the TVCC with a history of prolapse of vagina and cervix within two hours after an assisted delivery of a female calf. The owner sought veterinary aid on two occasions earlier during pregnancy for recurrent genitalia prolapse. The cervix was prolapsed along with the vagina which was highly edematous, red, moist and football sized. The obstetrical management of the post-partum cervico-vaginal prolapse was discussed here under.

**Keywords:** Buffalo, Cervico-Vaginal prolapse, Post-partum.

### **Introduction**

Cervico-vaginal prolapse was a multifactorial condition and an important maternal abnormality in bovines observed most frequently in the last 2 to 3 months of gestation (Arthur *et al.*, 1989). The prolapse of vagina including cervix involves the floor, the lateral wall and some portion of the roof of the vagina through the relaxed vulva with the cervix moving caudally due to a presence of a atonic genital tract. This condition was recorded in all species of animals but incidence was more frequent in bovines, generally occurring more during the antepartum than postpartum period.

### **Case History and Observations**

A ten years old non-descript buffalo in a fifth parity was presented to TVCC with a prolapsed cervix and vagina for veterinary assistance. The exposed mass was extremely edematous, swollen, red and inflamed which was about the size of a football (Fig 1). The prolapsed mass was contaminated with debris, dung and soil with absence of lacerations. The dam looked dull and the clinical parameters were within the normal physiological range.

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## Treatment and Discussion

The prolapsed mass was elevated to the level of the ischial arch to straighten the pelvic urethra in order to facilitate urination and reduce the passive venous congestion of the prolapsed mass in order to reduce the size of the prolapsed mass as reported by Dharani *et al.* (2010). Low plane of epidural anaesthesia was induced by administering 5 ml of 2% lignocaine hydrochloride into the sacro-coccygeal space to prevent straining during repositioning of the prolapsed mass. The vulva and the perineal region were cleaned thoroughly with lukewarm water. The prolapsed mass was washed with potassium permanganate solution (1:1000) followed by rinsing the exposed mucous membrane with Inj. Metronidazole solution to reduce the microbial load on the surface. Further reduction in the size of the prolapsed mass was achieved by topical application of POP IN<sup>®</sup> spray on the prolapsed mass and a finite amount of time was allowed to achieve its pharmacological action of reducing the size by reduction of edema with moderate desensitization. Both the vulval lips were spread apart and the mass was reduced by pushing the parts which were nearer to the vulval lips with gloved fist hands. The repositioning of the mass was initiated from the lateral walls, then the middle portion followed by the roof of the vagina and straightening of the organ was achieved by introducing the hand through the cervix with moderate force and the prolapsed mass was gently pushed inside the vagina by applying pressure alternatively from each side of the vulva.

Following repositioning to prevent further recurrence, retention was achieved by application of Buhner's suture with the help of three fourth inch width cotton tape soaked in povidone iodine and the embedded suture was tightened to allow placement of three fingers stretched vertically in the vulva. This facilitated easy passage of urine (Chauhan *et al.*, 2015). After retention the animal was under post operative care with Inj. Ceftriaxone (5 g IM for 5 days), Inj. Dextrose Normal Saline (6 L, IV), Inj. Metronidazole (1g IV), Inj. Calcium Borogluconate (450 ml, slow IV), Inj. Chlorpheniramine maleate Inj (15 ml, IM for 3 days) and Inj. Meloxicam (0.5 mg/kg b. wt., IM for 3 days). Cases with continuous tenesmus would not respond favourably to conventional treatments, therefore straining was counteracted through epidural anaesthesia with 0.4 ml of 0.5% solution or xylazine @ 0.05mg/kg b. Wt which prevented tenesmus for about 4 hours during which period involution of the uterus and cervix started to occur due to the therapy that was initiated after repositioning (Noakes *et al.*, 2009). The animal had an uneventful recovery after 5 days of postoperative care.

It was emphasized that the present case might have had lower calcium and phosphorus levels with higher concentration of magnesium as observed in buffaloes suffering from vaginal prolapse (Akhtar *et al.*, 2008) might have resulted in atony of the genital organs which could have predisposed for cervico-vaginal prolapse and further, it was opined that the hormonal imbalance during pre-partum and post-partum periods might have caused the prolapse of cervix and vagina (Roberts, 1971). According to Kapadiya *et al.* (2015) the postpartum cervico-vaginal prolapse occurred mainly after parturition due to combined effect of lack of myometrial tone and increased the intra-abdominal pressure. Increased abdominal pressure in the present case was due to consumption of excess volume of water immediately after parturition and housing the buffalo in a barn with slanty floor towards the hind quarters.

### Summary

The exact etiology of cervico-vaginal prolapse has not been fully ascertained but probable factors like hereditary, nutritional/mineral deficiencies, irritation of bladder and vagina, perivaginal fat, high oestrogen levels, lack of exercise, slanty floor, uterine contractions to expel the placenta, increased intra-abdominal pressure and feeding of mouldy feeds are believed to play a major role in predisposing the condition. Early detection with regards to tendency of prolapse and prompt correction of the predisposing factors with modification in the feeding and watering schedule might help in the prevention of this condition.

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**Fig (1):** The prolapsed cervix and vagina appearing as a red mass of tissue about the size of a football.