

SUCCESSFUL TREATMENT OF POST PARTUM CERVICO- VAGINAL PROLAPSE IN A PLURIPAROUS CROSS BRED JERSEY COW

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Abstract: A jersey cross bred cow of 6 years old and calved 2 days before was presented to Obstetrics unit, Veterinary Clinical Complex, Veterinary College and Research Institute, Orathanadu with Cervico-Vaginal prolapse. The prolapsed mass was oedematous and reddish. The cow was restrained and 2% lignocaine hydrochloride 3 ml was administered epidurally to reduce straining. The prolapsed mass was washed with 1% potassium permanganate solution and oedema was reduced by applying common salt over prolapsed mass. Urinary bladder was emptied by using urinary catheter. After reducing the oedema Cetrimide cream applied over the prolapsed cervix and vagina. The prolapsed mass was repositioned and vulval retention suture was applied. The cow was treated with antibiotics, anti-inflammatory, anti-histaminic drugs and fluid therapy for four days.

Keywords: Cervico-vaginal prolapse, crossbred jersey cow and postpartum.

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. Vaginal prolapse mostly happened in cross breed cattle before calving, usually in the last trimester of pregnancy (Roberts, 1971). The etiological factors may be attributed to the condition like higher estrogen secretion from placenta, heredity, mineral deficiency, increased intra-abdominal pressure, excessive relaxation, weakening and atony of the vaginal musculature, pelvic ligaments and, vulvar sphincter muscles, bacterial or fungal infections, and ingestion of phyto-estrogens, hormonal imbalance, etc. (Roberts, 1971; Arthur *et al.*, 1989). Genital prolapses are mostly seen in ruminants specially cattle, buffalo, sheep, goat (Patra *et al.*, 2014).

A various number of dietary factors such as hypocalcaemia and the grazing on pastures with an abundance of clover have also been linked to the disorder. In addition to this, it is assumed that the occurrence of prolapse has a genetic foundation in both cattle and sheep

(Kumar Umesh *et al.*, 2015). A combination of increased estrogens levels with decreased progesterone and production of relaxin and especially in the last two weeks of pregnancy may cause relaxation of the pelvic ligaments and surrounding soft tissue structures. These changes along with increased intra-abdominal pressure to expel out fecal materials play crucial role in the vaginal prolapse (Tanjila Hasan *et al.*, 2017). Vaginal prolapse is an acute one when it sustain for prolong duration and turned into fibrosis resulting impossible in retention to its normal position. High estrogen content present in maize and barley resulting in high incidence rates of cervico-vaginal prolapse (Bennett, 1994). The present article envisages the successful treatment of postpartum Cervico-Vaginal prolapse in a pluriparous Cross bred Jersey cow.

Case history and observation

A jersey cross bred cow of 6 years old, calved two times and calved 2 days before was presented to Obstetrics unit, Veterinary Clinical Complex, Veterinary College and Research Institute, Orathanadu with the history of continuous straining and prolapsed mass of cervix and vagina since one day. Animal was anorectic, increased body temperature (39.8⁰ C) and the cow could not pass urine due to post partum prolapsed. Cow started straining and vagina and cervix was protruded outside the perineum. The prolapsed mass was soiled, oedematous and reddish (Fig.1).

Treatment and Discussion

The cow was restrained and 2% lignocaine hydrochloride 3 ml was administered epidurally to reduce straining. The prolapsed mass with soil and dung materials were washed with potassium permanganate (1:1000) solution and oedema was reduced by applying common salt over prolapsed mass. Urinary bladder was emptied by using sterile stainless steel urinary catheter. After reducing the oedema Cetrimide cream applied over the prolapsed cervix and vagina. The cow was administered Streptopenicillin@ 12.5 mg/kg body weight, Meloxicam @ 0.2mg/ kg IM, Chlorphenaramaine maleate 0.5mg/ kg for 5 days and Inj. Oxytocin 60 I.U., total dose intramuscularly immediately after suturing. The fluid therapy was provided with Dextrose 25% 1000 ml, Ringer's Lactate 1000 ml, Calcium borogluconate at a dose of 450 ml. and Tribivet 10 ml by intravenous route. After reducing the oedema Cetrimide cream applied over the prolapsed cervix and vagina. The prolapsed mass was repositioned and vulval retention suture was applied (Fig.2). The sutured area was dressed daily for 5 days with Povidone iodine liquid and Drez ointment. The animal recovered successfully.

Vaginal contusion at parturition, followed by *Fusobacterium necrophorum* infection exerts a high degree of irritation with frequent expulsive efforts (Arthur, 2001). Patra *et al.*, (2014) reported that successful surgical management of cervico-vaginal prolapse can be achieved by retention suture or Buhner's suture technique. Vaginal prolapse is an emergency condition and it should be treated immediately before there may occur any trauma or laceration to prevent haemorrhage or bacterial infection. Sometimes the prolapsed may cause infertility in subsequent pregnancy. Vaginal prolapse in cow is a hereditary, chronic, recurrent disorder. It is one of the reproductive disorders which cause economic loss to dairy farming by hampering the cows and their milk production. The cure of vaginal prolapse depends on early diagnosis, immediate replacement of vagina and assurance of further recurrence. Delayed in correction may cause some critical condition such as oedema, fibrosis, necrosis, septicemia, myiasis. (Tanjila Hasan *et al.*, 2017).

References

- [1] Arthur GH (2001) Arthur's Veterinary Reproduction and obstetrics, 8th edn. Edited by Noakes DE, Parkinson TJ and Gary CW, Elsevier's, London.
- [2] Roberts SJ (1971). Veterinary Obstetrics and Genital Disease (Theriogenology) 2nd Edn. CBS Publishers and Distributors, India
- [3] Patra BK, Nahak AK, Dash SK, Sahu SS, Das SP, Das S and Mohanty DN (2014). Cervico Vaginal Prolapse in a Pregnant Cow and Its Management - A Case Report. Int. J. Livestock Res. 4(5):55-59. <https://doi.org/10.5455/ijlr.20140821123522>.
- [4] Tanjila Hasan, Azizunnesa, Md. Anowar Parvez, Pranab Paul¹, Sharmin Akter, Md. Omer Faruk, Delower Hossain (2017) Correction and Management of Vaginal Prolapse in A Cow by Buhner's Technique Research Journal for Veterinary Practitioners 5(1): 1-4
- [5] Bennett HW; Two sheep problems on subterranean clover dominant pastures. J Agric. West Aust. 1994; 21: 104-109.
- [6] Kumar Umesh, Lakde C.K, Patil M.S, Sahatpure S.K, Gawande A.P (2016). Pre and post partum prolapse in a crossbred Jersey cow: A case report Kumar Umesh Sch J Agric Vet Sci; 3(1):48-50



Fig.1: Cow with Cervico vaginal prolapse



Fig.2: Application of simple vulval retention tape suture