

## **SURGICAL MANAGEMENT OF CHRONIC RECURRENT GENITAL PROLAPSE BY PERVAGINUM OVARIO-HYSTERECTOMY IN SIX COWS**

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### **ABSTRACT**

Six cows suffering from chronic recurrent genital prolapse in which the prolapse mass was infected, oedematous, lacerated and necrotic. Also the organ became swollen, hardened and friable making replacement more difficult. These types of pathological changes not responding medical management so that it requires surgical manipulation by pervaginum ovario-hysterectomy as salvage measure. To alleviate the suffering and stress, the cows were subjected to ovario-hysterectomy including resection of affected cervico-vaginal prolapsed mass through vaginal approach under mild xylazine sedation and epidural anaesthesia in lateral recumbency. Urination was facilitated by catheterization of urethra. Evaluation of surgical site were recorded for any post operative complications and if any infectious vaginal discharge were observed vaginal douching given with Povidone iodine. The complications like anorexia and weakness were observed in 4 cases. Two cows died after few days of the surgery. Four cases having uneventful recovery.

**KEYWORDS:** Chronic recurrent genital prolapse, Pervaginum ovario-hysterectomy

### **INTRODUCTION**

A prolapse can be basically defined as an abnormal repositioning of a body part from its normal anatomical position. Two distinct types of prolapses occur in the reproductive tract of cattle: uterine or vaginal (Powell, 2007). Bhattacharyya et al. (2007) found severe tenesmus and bleeding in two cows with prolapse. In one of them, the mass was infected, oedematous, lacerated and necrotic. In the second cow, they noted rapid respiration, grunt and pale mucous membrane. In the opinion of Ishii et al. (2010), if the case was not recent, the organ became swollen, hardened and friable making replacement more difficult. Amputation of uterus is advised by Roberts (1949) for the recurrent prolapses where replacement is not possible.

Tank et al. (2006) successfully managed chronic recurrent genital prolapse in cow by Pervaginum ovariohysterectomy. The present paper describes pervaginum ovariohysterectomy as salvage surgical management of chronic recurrent genital prolapse in twelve cows.

### **MATERIALS AND METHODS**

A total of 6 cows belonging to different Panjarapole suffering from chronic recurrent genital prolapse were selected for pervaginum ovario-hysterectomy as salvage surgical management of the cases. All the cows were kept off water and off feed 48 hours prior to the surgery. Detailed history regarding the age, breed, number of lactations, occurrence and duration of genital prolapse etc., information regarding the vascularity of prolapsed mass, consistency of prolapsed mass, tone of prolapse, involvement of bladder and reducibility of prolapsed mass were also recorded. Before beginning of the surgery animal was restrained physically and epidural injection was administered using 10-15 ml of lignocaine hydrochloride. Local infiltration of the Xylocain (2%) was also used to achieve analgesia, in some cases animal was also restrained chemically by administration of the Xylazine @ 0.1 mg/kg i/m. Before preparation of the surgical site, urine was removed by catheterization or

manually by lifting the prolapsed mass. Animals were medicated with DNS (2 liter, i/v), inj. Calmax (250ml, i/v), inj. Streptopenicillin 2.5 gm, inj. Ketoprofen @ 2mg/kg and inj. Chlorpheniramine maleate 50 mg total dose i/m before the surgery. A circumscribed incision was made on the outer layer of the prolapsed mass and after that inner layer was incised. The adhesions were removed by blunt separation. By palpation through the incision, both the ovaries and uterus were located and were retrieved out. An utero-ovarian vessel was transfixed. The ovaries, uterus as well as prolapsed mass were excised out. The vagina was closed by continuous sutures using Vicryl No.1. Surgical procedure for pervaginuum ovariohysterectomy in cow is depicted in Plate I. Daily antiseptic dressing of vagina by Povidone iodine solution for three days, Inj. Streptopenicilline 2.5 gm IM for 5 -and inj. Ketoprofen 10 ml IM for 3 consecutive days were given as postoperative treatment.

### Plate I OVARIOHYSTRECTOMY



Incision on dorsal wall of the vagina.



Retrieval of Ovaries.



Retrieval of uterus.



Vagina closed by continuous suture.

## RESULTS AND DISCUSSION

All the six cases in the present study had 3rd to 4th degree chronic prolapsed genitalia which could not be reduced due to adhesions and fibrous enlargement. The chronicity of the problem, necrosis, adhesions within the mass, chronic wounding and infection of the site were some of the major factor to select these cows for salvage surgical measure.

Ovariohysterectomy, including resection of affected cervico-vaginal prolapsed mass, was performed through vaginal approach under epidural analgesia in lateral recumbency. The circumscribe incisions layer by layer facilitated easy identification of the structures, separation of adhesions and minimized the bleeding. Pervaginum ligation of utero-ovarian vessels was quite easy and most approachable. Meticulous cleaning of the affected prolapsed mass prior to the surgery was bit tough task due to long standing nature of the malady. Lateral recumbancy during surgery was advantageous in palpation and retrieval of both the ovaries.

The complications like anorexia and weakness were observed in 4 cases. Two cows died after few days of the surgery. Pus formation was not observed in any case. Maximum duration of post-operative treatment was seven days in this group.

## CONCLUSION

Pervaginum ovariohysterectomy was performed in 6 cows to treat chronic recurrent genital prolapse not responding to medical as well as other clinical management. Operative and peri-operative Clinico-surgical protocols for the treatment of the cases were considered optimum and ideal for pervaginum ovariohysterectomy in cows under field conditions. Weakness and anorexia were noticed during the course of the present study. The recovered cows regained normalcy and continued to live pain free and stress less life in addition to progressive improvement in general health. The technique was easy, uneventful and could be applied in the field conditions as salvage measure to the cows suffering from chronic recurrent genital prolapse.

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