

# Modified Mintchews Method to Control Chronic Cervico Vaginal Prolapse in a Post-Partum GIR Cow: A Case Report

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## Case Report

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### ABSTRACT

Chronic prolapse of the vaginal and cervix is observed after parturition and rarely occurs unconnected with pregnancy and parturition. Cervico vaginal prolapse is most commonly observed in large animals especially in cows and buffaloes with the visible parts of the vaginal and cervix protruding through the vulva with varying degrees of nature. Early attempt to treat the case leads to prompt recovery without much complication, however in delayed cases the intensity of the degree increases and neglected cases leads to a contaminated, necrosis of the vaginal mucous membrane with urine accumulation and severe inflammation and infection as in the present case. A Gir cow on its third lactation three months post-partum treated for chronic Vagino-Cervical prolapse with repeated vulval retention suture was presented and the same was examined and new modified technique of "Mintchews method" of dorsal vagino-pexy was employed after suitable restraining. Following the post-operative therapy and treatment with pain killers and anti-inflammatory drugs an uneventful recovery after two weeks was recorded.

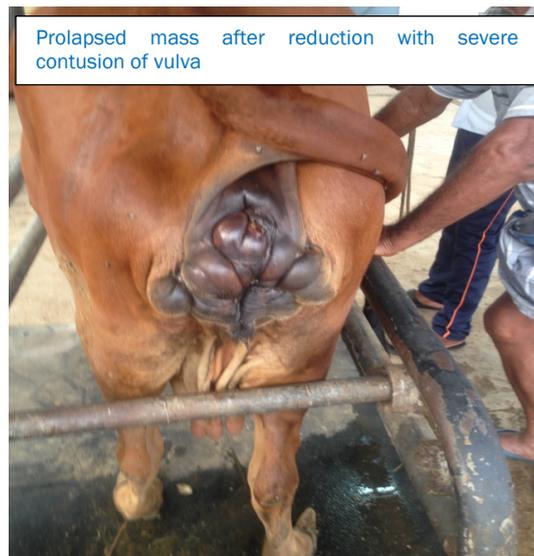
## CASE REPORT

Chronic Vagino-Cervical prolapse is a disorder occurring in the ruminants during their late gestation due to the stretching of the external urinary meatus and distention of the urinary bladder occasionally noticed in post-partum cases which are predisposed by anovulatory follicular cysts <sup>[1-5]</sup> (**Figures 1**). Protrusion or eversion of the all the parts of vaginal with or without involving the cervix through the vulva is commonly noticed (**Figures 5 and 6**). Reports' pertaining the control of the Chronic Vagino-Cervical prolapses using the "Modified Mintchews Method" of dorsal-vagino pexy is rare and first of its kind in this area <sup>[5,6]</sup> (**Figures 3-6**).

Vagino-cervical prolapsed mass with necrotic areas of vaginal /cervix



**Figure 1.** The protruded mass showed necrotic areas in an around the cervix and caudal vagina with muco- purulent foul smelling inspissated material with pressured necrosis and contusion of the vulval labia on both the sides



**Figure 2.** The unscrupulous suture causing severe compression and contusion was untied all the external mass protruding was cleaned with 0.1%  $KMNO_4$  antiseptic solution and washed with saline. Debridement of the necrosed portions was carried out. The urine was relieved and on application of the 2% lignocaine gel over the prolapsed mass was gently pushed inside for repositioning. Even after repositioning the prolapsed mass the edematous vulval compressions could be visibly seen in the deep seated ischio rectal fossa.



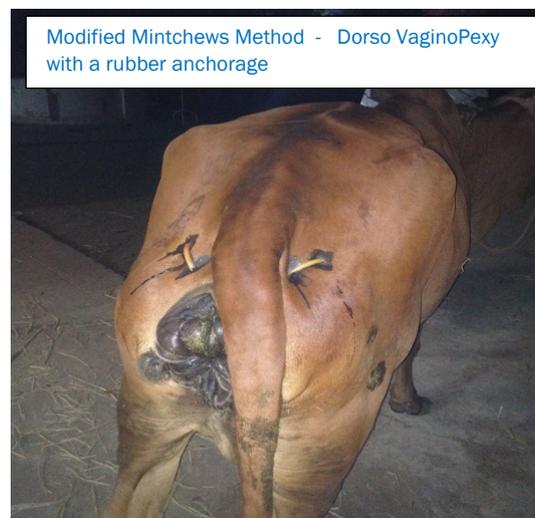
**Figure 3.** A 5 cm cubic area on pre and post sides of the intact sacroschiatic ligaments on both the sides was shaved and 5 ml of 2% lignocaine injection was infused through a spinal needle deep on the four sites preferred for vagino pexy. The Gerlac's needle pointing downwards anterior to the left side of the ligament was seen directing downwards



**Figure 4.** On directing the gerlacs needle downwards with the eye on the vaginal area is kept for securing the dorsal fixation with the threaded nylon wire enforced with rubber tubing on the anchorage area. A similar bite on the taken on the posterior portion of the left side of the ligament and securing the nylon thread a knot after enforcing the dorsal vainal pexy is fixed as anchor to avoid tissue damage.



**Figure 5.** A similar bite on the right side of the anterior and posterior area of the sacroschiatic ligaments is chosen to fix the dorsal area of the vagina and anchored. Care is taken not to damage the rectal wall and to avoid involving the rectum.



**Figure 6.** Both the walls of the vagina without involving the cervix was anchored with the rubber tubing. The reinforced rubber over and above the nylon threads on the inner aspect and outer aspects of the vagino pexy was done to avoid the tissue irritation and damage during the process of containment and healing.

A pluriparous Gir cow, three months post-partum has been treated with repeated vulval retention sutures which could not contain the mass and leading to the severe necrosis with third degree of prolapse and necrosis was presented to the casualty unit of the Teaching Veterinary Clinical Complex of the Veterinary College and Research Institute, Namakkal.

History and clinical signs of this chronic Cervico vaginal prolapse revealed fetid odor on examining the protruded mass. The animal was secured in the trevis and caudal epidural was given with 2% lignocaine.

The animal was in a position to pass urine without much straining and started passing dung thirty (30) minutes post operation indicating a good sign of relief <sup>[4,5]</sup>. The animal was kept under the antibiotics, non-steroidal anti-inflammatory drugs with serratiopeptidase and intravenous fluids, which showed a remarkable recovery after 15 days. After 28 days the suture was cut and removed with local application of the fly repellent ointment base and inflammations subsided with a complete healing.

The technique of dorso vaginopexy was carried out as per the modified Mintchews method considering the suitability of the present case as other options like peri-vulvar suturing, Buhners method (**Figure 2**) and buried method, Winkler's method, button suturing could not be adopted <sup>[2,4,6]</sup>.

## CONCLUSION

The present case being a chronic got complicated with more irritation of the vulval labia and inflammation of the vagina and cervix which led to induration and necrosis could be the reason. Appropriate suturing techniques are to be governed as the case would fetch a prompt result and recovery without complications and affecting the reproductive efficiency.

Retention suture with the dorso vaginal pexy with the modified Mintchews method in this chronic vagino cervical prolapse facilitated a complete recovery and it was successful without any further recurrence of prolapse. (Note: S.J. Roberts text shows the spelling as "MINCHEV" while Sloss & Dufty text shows the spelling as "MINTCHEW").

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