

SURGICAL MANAGEMENT OF RECURRENT GENITAL PROLAPSE IN THE COWS BY BUTTON FIXATION AND VAGINOPEXY**B.D. Desai, P.H. Tank and J.V. Vadaliya**

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ABSTRACT

The present clinical study was carried out in Saurashtra region of Gujarat. Total 12 animals affected with various kinds of genital prolapses were studied. The animals were divided into two groups of 6 each. Animals affected with genital prolapses treated by vaginopexy and button fixation in group 1 and 2, respectively. Both the technique was done by administering epidural anaesthesia in animals. Half circled "U" shaped needle was used in vaginopexy technique and straight needle was used for button fixation technique. A marked pus formation was observed in button fixation technique as compared to vaginopexy technique. The duration of postoperative treatment was less in vaginopexy technique as compared to the button fixation technique. Overall, the vaginopexy was significantly better and excellent than the button fixation technique.

KEYWORDS: Half circled "U" shaped needle, Button fixation technique, Vaginopexy**INTRODUCTION**

Reproductive disorders of domestic animals cause significant economic loss to the animal industry. Among these disorders, prolapse is one of the major problems in cows which significantly affect the animal and its milk production. A prolapse can be basically defined as an abnormal repositioning of a body part from its normal anatomical position. Two distinct types of prolapses, uterine and vaginal (Powell, 2007) occur in the reproductive tract of cattle:

Bouckaert et al. (1956) modified the Minchev's technique and they additionally place the stay sutures cranial to the lesser sciatic foramen. In this technique firm attachment frequently did not occur, so prolapse of vagina may reoccur. Hogg (1960) employed a technique of vaginopexy to the gluteal region by using an unspecified instrument (like a double set of spaying needles). His technique was primarily indicated for vaginal ballooning. Hentschl (1961) documented that, one button placed in vagina and the other on dorsal aspect of the gluteal region. In most of the cases, resulting adhesions prevent the prolapse from recurring after the suture and button were removed. Desai *et al.* (2013) successfully managed chronic recurring genital prolapse in cows by pervaginum overio-hysterectomy.

In view of the above facts, a systematic study on clinical studies of button fixation & vaginopexy in recurrent genital prolapse of the cows was carried for testing the efficacy of technique in cows and to evaluate the successful conduction of surgical procedure in field condition.

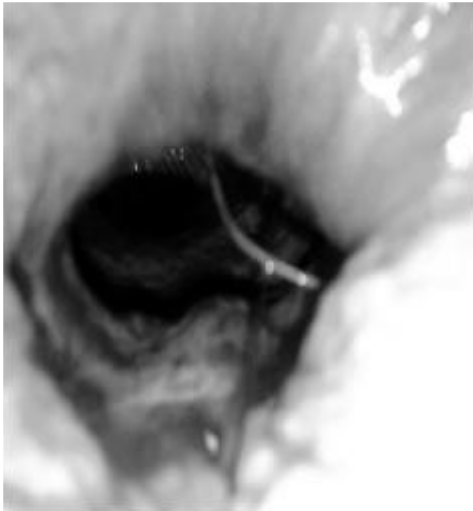
MATERIALS AND METHODS:-

In the present clinical study, a total of 12 animals were selected for fixation of prolapsed mass by inducing epidural anaesthesia. Before preparation of the surgical site, the cow was secured in a trevis and urine was removed by catheterization or manually by lifting the prolapsed mass. Washing of the hind quarter and prolapsed mass was carried out with mild antiseptic. The animals were allotted to two groups of 6 cows each as Vaginopexy technique (n = 6) and Button fixation technique (n = 6).

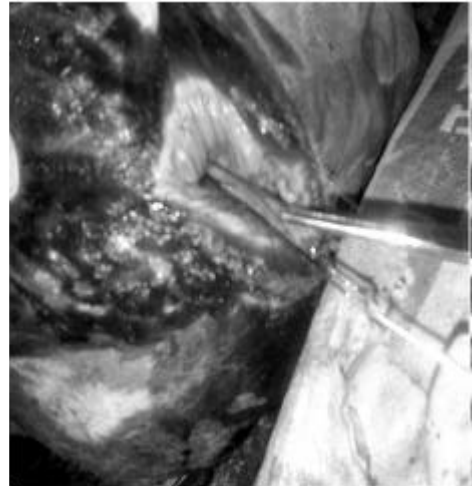
Vaginopexy technique:-

In this technique after achieving the desired level of analgesia, prolapsed mass was set and vaginal douche was given with Povidone iodine. After that per vaginal palpation was carried out to locate prepubic tendon. At the anterior side of the pubis in the lateral floor of vagina at both the sides prepubic tendons were located. After that a half circled “U” shaped needle was threaded with Vicryl No.2 for the fixation of the prolapsed mass with the prepubic tendon. This “U” shaped needle was

VAGINOPEXY



Needle directed towards prepubic tendon



Knot taken on vaginal wall.



Button and needle introduced in Vagina dorso-laterally.



Needle removed from skin



Needle removed from skin.



Button fixation.

introduced with covering of the palm, so that injury did not occur to any other part of vagina. The point of the needle was directed towards lateral wall of the vagina and the prepubic tendon was located and the bite was then taken which included the vagina and prepubic tendon. Later the needle was pulled back into vagina. Further, the needle was removed from the vagina and with the help of forceps a knot was taken which fixed the vagina with prepubic tendon.

Button fixation technique: -

After giving the epidural anaesthesia to the affected cows, the prolapsed mass was set and vaginal douch was given with Povidone iodine. In this technique, buttons having two holes were used. No.2 black silk thread having the two strands of equal length were threaded into the holes of the button and these four strands were threaded into the straight needle. Then the needle was introduced into the vagina under the covering of the palm near the posterior aspect of Ilium. Needle was pierced into vagina dorso-laterally through the vaginal wall. Button was held in a palm and hand acted as a bearing surface when forcing the needle through the gluteal muscle and skin. The needle was removed through the skin and No.2 black silk was threaded into another button. Two equal strands of thread were tied on button so that the retroperitoneal surface of vagina and peritoneum of pelvic cavity comes in apposition to form adhesions. After tying the knot on button further vaginal douche was given with Povidone iodine using 20 ml syringe.

RESULTS AND DISCUSSION:-

The present clinical study on 12 cases of cows was undertaken for fixation of the prolapsed mass with the pelvic floor by vaginopexy and button fixation technique. The postoperative complications like pus formation, Anorexia, weakness and recurrence were observed in button fixation technique. In this type of complications, buttons were removed and antiseptic dressing was done at the site of wound till complete recovery. In group 1, there were no postoperative complications in any of the six cows and the duration of postoperative treatment was 3 days only, vaginopexy found to be more suitable than the button fixation technique in recurrent genital prolapse. The duration of postoperative treatment was less in vaginopexy as compared to the button fixation techniques.

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