

## Short Communication

# MANAGEMENT OF RECURRENT UTERINE PROLAPSE IN A BUFFALO - A CASE REPORT

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**ABSTRACT:** Uterine Prolapse is one of the most potentially dangerous complication associated with calving and need immediate intervention. The present communication describe recurrent uterine prolapse in a 4 year old non-descript buffalo and its successful obstetrical and therapeutic management.

**Key words:** Buffalo, Uterine prolapse, Replacement.

Uterine prolapse is a common obstetrical problem, which adversely affects reproductive and productive performance of cattle by delaying the postpartum return to estrus, conception rate and calving interval. Among the reproductive disorders, complete uterine prolapse is always an extremely serious condition in any farm animal. Uterine prolapse is a non-hereditary complication occurring immediately after parturition and occasionally up to several hours afterwards (Roberts 1971). In ruminants the prolapse is generally a complete inversion of the gravid cornua (Arthur *et al.* 1996). Prolapse of the uterus is a common complication of third stage of labour in buffaloes (Joseph *et al.*, 2001). Compared to the vaginal prolapse, the uterine prolapse is larger, longer (usually hanging down to the hocks when standing), more deep red in color and covered with the “buttons” where the placenta was attached (Arthur *et al.* 1996). The etiology of uterine prolapse in buffalo is not clear; however, forced extraction over relaxation of the pelvic structure, flaccid uterus and hyper-estrogenism are considered as predisposing factors (Hanie 2006, Jackson 2004). If prompt treatment is instituted, a post-operative fertility rate of 40-60 % has been recorded (Tyagi and Singh 2002). But, success of treatment depends on physical status of dam, degree of uterine damage and presence of any complication (Tyagi and Singh 2002).

The aim of this study was to manage and correct recurrent uterine prolapse and to save the buffalo.

### Case history and clinical observations

A 4 year old buffalo heifer was presented in Teaching Veterinary Clinical Complex of Dr. G.C. Negi College of Veterinary and Animal Sciences, Palampur, India with a history of recurrent uterine prolapse since last 6 days. Buffalo was having history of normal parturition giving birth to a healthy female calf and expulsion of placenta normally within 6 hours followed by uterine prolapse. The case was previously handled by local Veterinary doctor by reposing the uterine mass inside with horizontal mattress suture on vulva to retain the uterine mass. But on recurrence, uterine mass broke through the sutures tearing the vulvar lips and was hanging outside the vulva. Vulvar lips tearing, vaginitis and necrosis of prolapse mass were evident. Feeding, defecation and urination of the animal were satisfactory. Rectal temperature, respiration rate and heart rate of buffalo were elevated.

### Treatment and discussion

Considering the condition of uterus (as it was dry, fragile and necrosed) (Fig. 1) the replacement of the prolapsed mass seemed difficult. But it was decided to reposition the prolapsed uterine mass before resorting to hysterectomy.

Epidural anaesthesia was given to the animal using 5 ml of 2% Inj. Lignocaine hydrochloride (LOX®, Neons labs, India). The prolapsed mass was gently washed with light Potassium Permanganate solution (1:1000 dilution)



**Fig. 1. Uterine prolapse in Buffalo with dry and necrosed tissues.**

to remove dirt and debris and superficial necrosed tissues were also trimmed gently. Hydrotherapy with ice cold water and application of ice packs on the prolapsed uterine mass was done for 1-2 hours to reduce its size and excessive edema. Then a paste of Zinc oxide, Soframycin ointment (Soframycin®, Sanofi, India) and lignocaine jelly (Lignox®, Neon labs, India) was applied on the prolapsed mass for easy introduction. Firstly uterus was pushed in the vagina with moderate force of fist of both hands. Care was taken to keep vulvar lips wide open and avoid turning inwards. The body was first pushed in followed by uterine horns considering ovarian pole to be replaced properly and finally complete uterine replacement was assured by applying arm pressure (Fig. 2 and Fig. 3).

Animal was given Inj. Oxytocin 100 I.U. as total dose (Evatocin®, Neon Labs, India) Intramuscularly, Inj. Texableed 10 ml (Mankind Pharma) by intramuscular route and Inj. Calcium magnesium borogluconate at the dose rate of 1.5 ml/Kg body weight (Mifex®, Novartis Pharma, India) by slow i/v route. Antibiotic Ceftriaxone @ 10 mg/kg body wt. (Intacef, Intas Pharmaceuticals Ltd.), anti-inflammatory Flunixinmeoglumine @ 1.1 mg/Kg body wt. (Unizif, Intas Pharmaceuticals Ltd.) intramuscularly along with application of Zinc oxide, Soframycin and Lignocaine jelly paste on affected vulvar parts was done for five days. Inj. Belamyl 10 ml i/m and Bolus Ecotas were given for 4 days as animal had slight reduction in feed intake. Powder Sodium Acid Phosphate and Hexamine were given orally for prevention of any



**Fig. 2. After repositioning of Uterine prolapse.**

possible urinary tract infection. Among reproductive disorders, prolapse of reproductive organs occurs as a common gestational accident. Post-partum uterine prolapse is more common than the pre-partum prolapse (Roberts 1971) mainly because of increase in intra-abdominal pressure, uterine inertia and loss of muscular tone. An epidural anesthesia should be used in sufficient dose to provide good anesthesia (Roberts 1971).



**Fig. 3. After repositioning on 2<sup>nd</sup> day post-operative therapy.**

After the uterus is replaced properly, animal was given oxytocin, which help the uterus to contract (Roberts 1971). Parenteral antibiotic therapy are often indicated to control uterine infection after replacement (Roberts, 1971), which was also given in this case. Anti-inflammatory and analgesic were given to reduce inflammation and pain and liver tonic plays important role in correction of off feeding that occurs due to long antibiotic therapy. The prognosis in uterine prolapse varies greatly. In most cases in which condition observed early, the veterinarian called promptly and uterus not severely injured, the prognosis for life of animal is good (Roberts 1971). Complications occur if lacerations, necrosis and infections are present or when treatment is delayed. If uterus is contaminated, dried or lacerated, the prognosis is more guarded due to possibility of septic metritis, perimetritis or peritonitis (Roberts 1971). This was also a 6 days delayed case of uterine prolapse but, proper repositioning and post-operative care helped the animal recover. If animal show straining following replacement of the uterus it may be due to invagination of the ovarian pole (Roberts 1971), which might happened earlier in this case also because very rarely uterine prolapse recur if the uterus is properly replaced (Roberts 1971). The buffalo recovered without any further complication.

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