

## MANAGEMENT OF POST PARTUM CERVICO – VAGINAL PROLAPSE IN A BUFFALO : A CASE REPORT

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**An 8 years old buffalo of second parity was reported with post-partum cervico-vaginal prolapse. The mass was reduced and replaced to its normal position. To prevent the recurrence horizontal mattress suture was applied on the vulvar lip. The animal was treated with calcium magnesium borogluconate, oxytocin, 5 % dextrose normal saline (DNS), ceftriaxone, chlorpheniramine maleate, meloxicam, vitamins and minerals. After treatment the animal recovered uneventfully.**

**Key words:** Buffalo, Cervico-vaginal prolapsed, Vulvar lip suture

Cervico-vaginal prolapse is one of the most commonly occurring reproductive disorder in buffaloes and in several other species. It usually involves prolapse of the floor, lateral walls and portion of the roof of the vagina through the vulva with the cervix (Roberts, 1971). Any delay in management

and treatment of such condition may leads to oedema, ischemia, lacerations, haemorrhages, toxemia, prostrations and shock, making prognosis poor to hopeless (Pandey and Pandey, 2002). The exact etiology of such condition in domestic animals is not yet known. Hypocalcaemia

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may result in atony of genital organ which could predispose for prolapse of genitalia (Pandit *et al.*, 1982). Jacono and Robertson (1987) reported a negative correlation between the serum calcium, phosphorus and estrogen levels. The increased level of estrogen during third trimester of pregnancy may result in greater relaxation of pelvic structures and the decreased level of calcium can lead to reduced vaginal and uterine muscle tone which predisposes the animals to vaginal prolapse (Roberts, 1986). Azawi *et al.* (2007) reported around 2.4 % buffaloes with vaginal prolapse were predispose to uterine infection. Mineral balances have also been supposed to play important role in the occurrence of genital prolapse (Abbas and Fahad, 2016). Injuries or stretching of the birth passage at the first or subsequent parturition may predispose the animal to prolapse after parturition. Dystocia or forceful removal of placental membrane may contribute to occurrence of prolapse. Hormonal imbalance during partum and post partum may also cause prolapse of genitalia (Roberts, 1971). Whatever may be the cause, treatment is the most important area to veterinarians should concentrate for better results. The treatment should be hygienic and should not affect the future breeding life of the animal. Early detection and prompt treatment may be imperative to control the vaginal prolapse in buffaloes (Sah and Nakao, 2003). The present paper is record a case of post partum cervico-vaginal prolapse in an indigenous buffalo.

An eight years old buffalo of second parity, was brought to Government Veterinary Hospital, Devranian, Barielly with the history of cervico-vaginal prolapse following normal delivery of a calf 12 hours earlier. The prolapsed mass was injured, oedematous and contaminated with mud, dung and wheat straw (Fig. 1). Vaginal wall was tense, oedematous, swollen, thicker and bluish pink in appearance. The prolapsed mass had numerous bleeding points and lacerations. The animal was dull, depressed and anorectic with normal body temperature. The animal was straining continuously.

The animal was restrained in standing position by injecting 8 mL of 2 % Xylocaine epidurally at sacro-coccygeal space to prevent straining. The vulva and perineal region was cleaned thoroughly with soap solution. The prolapsed mass was washed thoroughly with chilled water containing potassium permagnate (1:1000) followed by flushing with metronidazole solution and the mass was lifted to the level of ischial arch and urine was removed from bladder by catheterization. The prolapsed mass was lubricated with Xylocaine gel and replaced into normal position by applying gentle pressure by fist. To prevent the recurrence of prolapse horizontal mattress suture with sterile silk was applied on vulva from dorsal commissure to the centre of the vulva leaving the passage for urine excretion (Fig. 2). The buffalo was administered with injection calcium magnesium borogluconate (Mifex) 450 mL, slow i/v; injection dextrose normal

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**Fig. 1. Cervico-vaginal prolapse in a buffalo**



**Fig. 2. Retention of prolapsed mass using horizontal mattress suture**

saline (5%) 3.0 L, i/v; injection oxytocin, 25 IU i/m only on first day. Followed by the injection ceftriaxone (Intacef) @ 10 mg/Kg body weight, i/m; injection meloxicam (Melonex) @ 0.5 mg/kg body weight, i/m; injection anistamin chlorpheniramine maleate, (Anistamin) @ 10 ml, i/m and injection B<sub>1</sub>, B<sub>6</sub> and B<sub>12</sub> (Tribivet) @ 10 mL, i/m were injected for 5 days.

The owner was also advised for oral administration of Cyclomin -7 (2 bolous bid for 3 days) and applied wisprec cream to the suture line for preventing infection. The animal showed recovery after 5 days and no recurrence prolapse was reported by owner. After 10 days sutures were removed. Similar line of treatment was also reported by Singh *et al.* (2011) for post partum cervico-vaginal prolapse in buffalo. Retention of the prolapsed mass is most important to prevent trauma to the prolapsed mass. Epidural anaesthesia was given to check the straining and easy repositioning of the prolapsed mass and to relieve tenesmus with short acting lignocaine hydrochloride with an aim of desensitizing sensory motor and autonomic nerve (Rai and Prabhakar, 2000). Lower calcium (Mandali *et al.*, 2002 and Ahmed

*et al.*, 2005) lower phosphorus and higher magnesium concentration (Akhtar *et al.*, 2008) were observed in buffaloes suffering from vaginal prolapse. Atonicity of genitalia caused by hypocalcaemia was treated with parenteral calcium. Among microminerals, serum copper and zinc were lower in prolapsed buffaloes (Bhatt *et al.*, 2006) was treated with oral cyclomin -7 bolous. Meloxicam injection was given for rapid reduction of inflammation and to reduce pain. Broad spectrum antibiotic was given to minimize infection, which might be present due to exposure of structures to the environment. Lignocaine gel was applied on the prolapsed mass for lubrication as well as anesthetizing the prolapsed mass.

In the present study, it was concluded that reduction, reposition and retention of prolapse mass followed by administration of calcium magnesium borogluconate, oxytocin, 5 % dextrose normal saline (DNS), antibiotic, antihistaminic, anti-inflammatory, vitamins and minerals successfully manage the cervico-vaginal prolapse in a buffalo.

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