Management of postpartum uterine prolapsed in buffalo: A case report

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Abstract
The present study describes resolving uterine prolapsed in buffalo. Under epidural anaesthesia and after proper lubrication prolapsed uterine horn was repositioned and horizontal mattress sutures were applied. The retention suture was removed after ten days with uneventful recovery of animal.

Keywords: Buffalo, horizontal mattress sutures, post-partum, uterine prolapse

Introduction
Prolapse of uterus is most commonly observed in large ruminants like cows, buffaloes. The reproductive performance in buffalo is poor due to various diseases of the reproductive system, including genital prolapse \[1, 2\]. It generally occurs during the 3rd stage of parturition or immediately after it in buffaloes, but in rare cases it may be seen 24 h to 48 h after parturition. Prolapse of uterus is regarded as one of the major reproductive disorders in buffaloes and causes great economic loss to farmers \[3\]. However, the exact etiology and epidemiology of this condition in buffaloes remains unclear. However, forced extraction, over relaxation of the pelvic structure, flaccid uterus and hyperestrogenism are considered as predisposing factors \[4, 5\]. Hypocalcemia results in atony of uterus and delay in cervical involution, both of which could predispose to uterine prolapse in buffaloes \[6, 7\].

History and Clinical Examination
A 5yr old buffalo was attended in the farmer’s doorstep for treatment of post-partum uterine prolapse (Figure.1) which was noticed by farmer after 8hrs of parturition with normal expulsion of fetal membranes. Interaction with the owner revealed that it was a second calving. It was observed that animal was in sternal recumbency. On gynaecological examination it was found that the uterus was turned inside out exposing inner walls, the prolapsed mass was edematous and found lying on the ground. It was soiled with dirt, dust. The animal was showing signs of discomfort, restlessness, continuous straining, off feed. Clinical examination the findings were rectal temperature 100.5ºF Respiration rate and heart rate were slightly elevated.

Treatment
Epidural analgesia was performed at intercoccygeal space with lignocaine 5mL. The urinary bladder was catheterized to remove urine. Prolapsed mass was washed with cold potassium permanganate solution (1:1000 dilution) to get rid of soil, dust and dirt sticking to the mass and ice packs were applied to reduce the edema and volume of the prolapsed mass. Alternatively the ventral and dorsal portions of the prolapsed organ were replaced into the pelvic cavity (Fig. 2) and two liters of normal saline was infused intravaginally so that uterus remains in its normal anatomical position owing to gravity, then horizontal mattress suture were applied (Fig. 3). Supportive therapy such as administration of duraprogen 2mL i/m, enrofloxacin 5 mg/kg body wt. i/m, meloxicam 0.2 mg/kg body wt i/m on the 1st day followed by administration of enrofloxacin and meloxicam for next 3 days was practised. Topical fly repellent paste was applied externally over the vulval lips. Mineral mixture (agrimin forte) was recommended @ 50 g per day in concentrate. The animal was kept under observation for another 7 days and animal showed uneventful recovery.

Discussion
According Noakes et al., \[8\] the post-partum uterine prolapse occurs due to combination of lack of myometrial contraction and increase the intra-abdominal pressure.
Uterine prolapse needs immediate clinical intervention, or else obstruction in the blood supply of prolapsed mass may result in edema, cyanosis and gangrene. The usual sequel of uterine prolapse is haemorrhage, shock, septic metritis, peritonitis, infertility or death. The present experiment suggested that epidural anesthesia in large ruminants like buffalo could be useful for restoring an everted uterus successfully [9]. Successful clinical management of uterine prolapse with better prognosis is possible if the cases are taken at the earliest. These conditions are always challenging to the veterinarians and its prompt treatment not only save the life of the dam but also restore the normal fertility.

References
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