

## MANAGEMENT OF POST PARTUM COMPLETE UTERINE PROLAPSE IN A GIR COW AND A JAFFRABADI BUFFALO

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### ABSTRACT

Case reports of complete uterine prolapsed in a Gir cattle and a Jaffrabadi buffalo are presented. The complete uterine prolapsed cow and buffalo with inability to stand were treated. Applying gentle pushing and meticulous pressure on the prolapsed uterine mass repositioned the uterine horns normally in both, and both the animals were treated for prevention of uterine infection with antibiotics, anti-inflammatory and antihistaminic drugs. Both the animals recovered completely without any future reproductive complication.

**Keywords:** Prolapse, hypocalcaemia, uterus, reproductive complication

### INTRODUCTION

Among the reproductive disorders, complete uterine prolapse is always an extremely serious condition in any farm animal. A prolapsed uterus is highly prone to mechanical injury and/or trauma and environmental contamination, and this may lead to increased maternal morbidity and even to the death of the animal owing to trauma, laceration, subsequent hemorrhage, tissue necrosis, bacterial contamination, some time urinary incontinence, hypocalcaemia, stress incontinence and shock (Jana and Ghose, 2004), and therefore,

it requires early attention, prompt and efficient management and proper treatment to overcome further serious complications in reproductive performance of the animal in the future

The present clinical case studies are on incidence of post partum complete uterine prolapse in an indigenous pluriparous post parturient cow and buffalo and its successful obstetrical and therapeutic management.

### Case History And Observation

Case-I A seven-year-old gir cow in its 4<sup>th</sup> lactation attended (Cattle Breeding Farm, J.A.U., Junagadh) was treated for the correction of complete uterine prolapse and for its inability to stand, and for prevention of uterine infection.

Case-II A six-year-old Jafferabadi buffalo in its 2<sup>nd</sup> lactation was treated for the correction of the uterine prolapsed, for its inability to stand and for prevention of uterine infection.

It was reported that both the animals cow and buffalo had given normal birth to healthy male and female calves, respectively, and both the animals expelled the placenta normally within 6-8 hr post calving, but after the placenta had been expelled, a uterine mass started protruding from the vulvar lips, and in the cow, during the night (16-18 h post calving), the whole uterus had prolapsed out whereas in the case of the buffalo, the whole uterus had prolapsed out in early morning (28-30

h post calving). The cow could not rise up even after mechanical supports were applied, while the buffalo was able to rise with assistance and keep standing in such a way that the hind quarters remained in upward position. In the case of the cow, gynecological examination led to the diagnosis of the condition as post parturient paresis and complete uterine prolapse, whereas in the buffalo, examination led to the diagnosis of the condition as complete uterine prolapse. Respiration and pulse were normal, but the animals were hypothermic (98°F in the cow and 98.5°F in the buffalo). Both the animals were alert, but were not taking food or water nor passing urine.

#### **Treatment**

The everted uteri were washed gently with 1% potassium permanganate solution with detachment of placenta and removal of all debris and dead tissues and prolapse masses were lifted upward to pass the urine. Gently application of 50 gm of nopolase powder (Virbac) on the prolapsed mass was made, followed by waiting for 10-15 minutes. With gentle pushing and meticulous pressure, the prolapse mass was pushed inside with half closed hand into the pelvic cavity and both the uterine horns were repositioned normally. The vulvar lips were cleaned with 1% potassium permanganate solution and vaginal passaries viz., Furea (Intas Pharmaceutical) 2 boli were placed in each horn of the uterus in each animal. Horizontal metrees suture were taken at the vulvar lips in both the animals to overcome further complication.

As the rectal temperature of both the animals indicated hypothermic, hypocalcaemic, uterine inertia and loss of energy due to calving stress, immediate slow intravenous administration of 20 I.U. of oxytocine along with lactomag 450 ml (Intas Pharmaceuticals Limited) a combination

of calcium gluconate, magnesium hypophosphite and anhydrous dextrose followed by intravenous administration of 450 ml of 25% dextrose (Wockstrose 25%, Wockhardt) to combat energy loss due to calving stress. A course of antibiotic i.e. two shots of long acting oxytetracycline hydrochloride (Terramycine L.A., pfizer) 5 mg/kg of body weight were injected intramuscularly at 48 h intervals and non steroidal anti inflammatory meloxicam (Zobid-M, Sarabhai Zydus) were administered intramuscularly 0.5 mg/kg of body weight for the 1<sup>st</sup> day followed by 0.2 mg/kg of body weight for the subsequent 3 days. The supportive treatment was given to both the animals with antihistaminic (Cadistin, Sarabhai Zydus) 10 ml total dose for 3 days and vitamin B-complex with liver extract (Balamyl, Sarabhai Zydus) 10 ml total dose for the subsequent five days.

#### **RESULT AND DISCUSSION**

Both the animals (the cow and the buffalo) rose after 3-4 h of treatment on their own and fed normally feeding. On the 5<sup>th</sup> day the sutures were removed. Both the animals recovered completely without any future reproductive complication.

Arthur *et al.* (1996) stated that uterine prolapses are associated with the onset of uterine inertia during the 3<sup>rd</sup> stage of labor when a portion of detached afterbirth occupies the birth canal and protrudes from the vulva. In the present prolapses, intravenous administration of calcium and magnesium corrected the hypothermia due to hypocalcaemia and gave tonicity to perinial muscular tissue which helped to withhold the prolapse uterine mass, simultaneously oxytocin provided tonicity and slight contraction to the smooth uterine musculature which helped in

repositioning it normally and corrected uterine inertia. Parenteral as well as intrauterine antibiotic therapy were instituted to control and combat possible bacterial infection and to establish uterine hygiene for future reproduction and performance. Anti-inflammatories, analgesics and antihistaminic are helpful to correct pain and inflammation, and vitamin B-complex and liver tonic plays important role in correction of off feeding occurs due to long antibiotic therapy

Both the cases (the cow and the buffalo) recovered successfully without further complication of prolapse and hypocalcaemic paresis for 3 months of post therapeutic observation.

Among reproductive disorders, prolapse of reproductive organs occurs as a common gestational accident. Post partum uterine prolapse is more common than the prepartum prolapse (Roberts, 1971) mainly because of increase in intra abdominal pressure, uterine inertia and loss of muscular tonicity. Post partum uterine prolapse most often occurs immediately after parturition and occasionally up to several hours afterwards (Arthur *et al.*, 1996; Robert, 1971).

The relaxation of pelvic ligaments due to the perous nature of the cow along with straining and lack of uterine tonicity as described by Wani *et al.* (2000) and the increase in intra abdominal pressure, uterine inertia and loss of muscular tonicity as described by Arthur *et al.* (1996) might be the cause of uterine prolapse in this case.

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