

## Uterine Prolapsed in Crossbred Jersey Cow: its Treatment and Management

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**ABSTRACT:** Uterine prolapse typically occurs after giving birth, when increased intra-abdominal pressure during a prolonged labor or severe straining can cause this condition. A five-year-old cow gave birth to a female calf naturally in the morning hours and after 3hrs of calving a protrusion of mass through the vulva since last six hours. Based on clinical findings it was confirmed to be case of Uterine prolapsed. Treatment was given for severe straining in an animal, including injections, anesthesia, and sutures. Supportive therapy was administered, and after 12 hours, the animal became routine. The suture was removed after seven days, and the farmer was advised on prevention measures.

**Keywords:** Cow, uterine prolapsed, straining, eight knot, management.

### Highlights

- Satisfactory management of uterine prolapsed in a cow
- Satisfactory treatment of uterine prolapsed in a cow
- Prevention of uterine prolapsed in a cow

Uterine prolapse is a common condition in ruminants associated with calving, which brings severe economic losses to dairy farmers. Uterine prolapse is a non-hereditary complication that occurs immediately after parturition and occasionally up to several hours afterward (Blowey and Weaver 2011; Divers and Peek 2007). It involves the complete prolapse of the uterus, vagina, and cervix (Divers and Peek 2007). In ruminants, the prolapse is generally a complete inversion of the gravid cornua (Arthur *et al.*, 1996). In a large cow, uterine prolapse can vary in size from about 18 inches to 3-4 feet. The primary etiology of uterine prolapse is excessive straining, inadequate uterine tone, elevated intra-abdominal pressure, tympany, and excessive estrogen in the feed. In crossbred cattle, prolapse of the uterus is usually associated with hypocalcemia or milk fever. Early intervention and correction of cases of prolapsed uterine masses are vital in ensuring a good prognosis and survival of the cow (Abdullah *et al.*, 2016); poor or delayed intervention may result in bleeding, contamination resulting in infection, shock, gangrene formation, and lead to death of the animal (Andrews *et al.*, 2008). The case report aims to highlight the correction and management of uterine prolapse in field conditions to minimize the economic losses of the farmers.

**Case history:** The owner of a crossbred jersey cow from Udalguri town of Udalguri district of Assam on

August 19, 2023, reported that a five-year-old cow gave birth to a female calf naturally in the morning hours and after 3hrs of calving a protrusion of mass through the vulva since last six hours.

**Physical examination.** On physical examination, the cow was found weak, recumbent, and severely straining; the uterus prolapsed from the vulva with attached placenta up to the hind quarters. The cow had been off-fed since after parturition and was in restless condition. The uterus was enlarged and edematous with hemorrhage. The general health condition of the cow was poor, with increased respiration rate and gasping. Based on clinical examination, it was diagnosed as a case of Uterine prolapse.

**Treatment and discussion:** In order to manage a severe straining case, hydroxyl-progesterone (Progesyn inj., Hydroxy progesterone caproate 250mg) was injected at a dose of two ml IM. However, the straining was not initially controlled, so the dose had to be doubled. At the same time, epidural anesthesia with 2% lignocaine hydrochloride injection (Lox 2%, Lignocaine hydrochloride IP 21.3mg, Sodium Chloride IP 6.0mg, methyl paraben IP 1.0mg) five ml was given at the sacrococcygeal region. The prolapsed mass was cleaned with a diluted antiseptic solution using potassium permanganate. Initially, the prolapsed mass was larger and swollen, but it was replaced with gentle pressure. Loop sutures were applied to either side of the vulval lips at the hairline with double black braided silk. The three pairs of loops were connected with a rope to give the shape of figure “8” and tied with a slippery knot to adjust the diameter of the vulva as needed. The animal was then placed upside down with

a filled gunny bag under it to help the uterus regain its normal position. Supportive therapy was administered, including 1500 ml of 5% Dextrose (DNS, each 100ml contains Dextrose anhydrous I.P 5gm, Sodium Chloride I.P. 0.9g, water for injections I.P. q.s., concentration of electrolytes (mmol/L) Sodium 154, Chloride 154, calculated osmolarity approx 585mmol/L) calcium borogluconate injection I.P. (Calborol, composition: Calcium Gluconate I.P. equivalent to calcium 1.86% W/V, proportion of Boric acid I.P. to calcium 2.26 to 1, Chlorocresol I.P. 0.1% W/V, Water for injections I.P. q.s, concentration of electrolyte (m Eq/L) Ca<sup>++</sup> 927.44) of 500 ml, and an antibiotic (Intacef Tazo 4500mg, ceftriaxone Sodium IP 4000mg, Tazobactam Sodium IP 500mg), analgesic (Melonex Plus, Meloxicam IP 5mg, Paracetamol IP 150mg, Benzyl alcohol IP 1% W/V, Lignocaine HCL IP 1% W/V, Water for Injection IP Q.S.) and antihistaminic (Zeet, chlorpheniramine maleate I.P 10mg, chlorbutol IP 0.4% w/v) course for 5 days. After about 12 hours, the animal became routine and started eating and drinking. Additionally, the straining was controlled. After seven days, the suture was removed, and the farmer was advised to maintain an adequate balance ration during pregnancy and after calving to prevent such situations in the future. Our findings corroborate with the findings of Bhattacharyya *et al.* (2007), Deka and Das (2017), Joseph *et al.*, (2001) and Simson *et al.* (2015).

## CONCLUSIONS

Uterine prolapse typically occurs after giving birth, when increased intra-abdominal pressure during a prolonged labor or severe straining can cause this condition. Farmers are advised not to use home remedies to manage this emergency situation, but rather

to consult with a veterinarian for a positive outcome and good prognosis.

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