Pre-partum Cervico-Vaginal Prolapse in a Crossbred Cow and Its Therapeutic Management-A Case Report

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Abstract

A 4 years old crossbred cow was reported to have cervico-vaginal protrusion in Pyllum Village, Ri-Bhoi District of Meghalaya, India. The cow was restrained in standing position and epidural anaesthesia (2% Lignocaine hydrochloride @0.2 mg/kg body weight) was administered. The prolapsed organ was made aseptic by washing with 2% potassium permanganate solution followed by washing with warm normal saline. A course of parenteral antibiotic (Ceftriaxone sodium @5mg/kg) along with anti-inflammatory drug (Meloxicam @1ml/kg body weight) was given for 5days. To maintain the full term pregnancy progesterone (hydroxyprogesterone @3ml/animal) was injected intramuscularly. The cow recovered successfully and delivered a healthy calf after complete term of gestation.

Key words: Prepartum, Cervico-Vaginal Prolapse, Crossbred Cow, Meghalaya

Introduction

Typically, Prolapse of the vagina and cervix (CVP) is a disorder of ruminants normally occurs in late gestation, occasionally after parturition and rarely does it occur without connection of pregnancy or parturition (Noakes et al., 2009). Prolapse of the vagina usually involves a prolapsed of the floor, the lateral walls and a portion of the roof of the vagina through the vulva with the cervix and uterus moving cauded and mostly seen in ruminants rarely in other species (Roberts, 1982). Causes of disorder are multiple. In the last 2 to 3 months of gestation when a large amount of estrogenic hormone is being secreted by the placenta which causes a relaxation of the pelvic ligaments and adjacent structures and an edema and relaxation of the vulva and vulvar sphincter muscles (Roberts, 1982) leading to cervico-
vaginal prolapsed in bovines. In other words, it occurs at 5-6 months of gestation. Predisposing factors include increased intra-abdominal pressure associated with increased size of the pregnant uterus, intra-abdominal fat, or rumen distention superimposed upon relaxation and softening of the pelvic girdle and associated soft-tissue structures in the pelvic canal and perineum. The placenta may likely be retained during this period (Roberts, 1982). An animal with cervico-vaginal prolapse treated promptly recovers without complication while delay treatment could result in death of the animal (Noakes et al., 2009). Success of treatment depends on the type of case, the duration of the case, the degree of damage and contamination.

Case history and clinical observations
A 4 years old crossbred cow was reported to have protrusion of internal genetalia in Pyllum Village, Ri-Bhoi District Meghalaya, India. The owner reported that the cow was in its 2nd Trimester of about 5 months of gestation. On clinical examination, protrusion of the whole uterus hanging through the vulva was observed. The animal was apparently healthy and the physiological parameters were within the normal range. However, it was reported that the animal was straining profusely since last 2 days which resulted in the prolapse of cervix and vagina.

Treatment and Discussion
The cow was restrained in standing position and epidural anaesthesia (2% Lignocaine hydrochloride @ 0.2 mg/kg body weight) was administered to prevent straining and defecation. The prolapsed organ was made aseptic by washing with 2% potassium permanganate solution followed by washing with warm normal saline. Then the organ was lubricated with liquid paraffin and then gently returned to its normal position and broad spectrum antibiotic powder (Ceftriaxone sodium) was sprinkled on the organ. Finally, the vulvar lips were sutured by means of eight knot suture leaving the labia minor open for urination. A course of parenteral antibiotic (Ceftriaxone sodium @ 5mg/kg) along with anti-inflammatory drug (Meloxicam @ 1ml/kg body weight) was given for 5 days. To maintain the full term pregnancy progesterone (hydroxyprogesterone @ 3ml/animal) was injected intramuscularly and repeated weekly for
3 occasions. The cow recovered uneventfully and delivered a normal healthy calf after complete term of gestation.

References