A SUCCESSFUL REPOSITION OF VAGINAL PROLAPSE IN CORRELATION WITH BIOCHEMICAL PROFILE IN CATTLE.

L.RAMSINGH[1], ASHOK KUMAR[2] D, RAJA BABU. B[3]
Department of Veterinary Clinical Complex, CVSc, Rajendranagar
P.V.Narasimha Rao Telangana Veterinary University, Hyderabad

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ABSTRACT

The vaginal and uterine prolapse are common obstetrical problems among pregnant cattle and buffaloes during the last quarter of gestation. In the present case, replacement of vaginal prolapse with Buhner's sutures and biochemical profile during 8th month of gestation is discussed. After application of mimosa pudica on the protruded prolapsed mass prolapse was repositioned and applied bhuner sutures. The biochemical profiles revealed that the concentrations of total protein (5.8 g DL), calcium (8.2 mgDL) and phosphorus (3.8 mgDL) were lower than the referral values of the normal pregnant cows. Based on these values cows were treated with calcium, phosphorous and astymin intravenously for 5 days and the animal was recovered unevenly and also delivered a calf after full length of gestation.

Key words: Biochemical profiles, vaginal prolapse, Sutures, Buhner's, Cow

INTRODUCTION

Uterine and vaginal prolapse are frequently observed in cows (Powell, 2007). Vaginal prolapse occurs commonly due to increased pressure in the abdominal cavity during the latter stages of pregnancy than uterine prolapse. If the 1st degree prolapse frequently exposed to environmental and infectious organisms may lead to 2nd and 3rd degree prolapse. Further, predisposing factors like imbalance nutrition, hypocalcaemia, prolonged gestation, poor uterine tone and fetal oversize (Roberts, 1971 and Alam et al., 2014) may help for progression of the condition. It also occur in the last trimester of pregnancy when placental estrogen production increases (Wolfe, 2009).

CASE HISTORY

A primiparous cow presented to Veterinary Clinical Complex, College of Veterinary Science Rajendranagar, Hyderabad with a history of vaginal prolapse. The cow was treated by a local veterinarian 2 days back but recurrence was observed with severe bleeding and swelling of vaginal part in the size of football like a hard and dry mass. The gynaeco-clinical examination revealed elevated body temperature, increased heart rate and respiration rate, pale mucus membrane and severe dehydration with frequent straining.

DIAGNOSIS AND TREATMENT

After presentation of cervico-vaginal prolapse case epidural anaesthesia was performed with 2% Lignocaine Hydrochloride and the prolapsed mass was cleaned with antiseptic solution and applied mimosa pudica leaf extract water. Later the size of prolapsed mass was reduced and Buhner's sutures was applied as per Roberts (1971). After replacement and sutures, the biochemical profiles were analysed which revealed that the concentration of total protein (5.8g DL), calcium (8.2mgDL) and phosphorus (3.8mgDL) were lower than the referral values of the normal pregnant cows. Based on the blood profile, the cows were treated with calcium (450ml) and phosphorous (15ml) in alternate days and astymin for 5 days intravenously along with Enrofloxacin (15ml), Melonex (10ml) and Chlorophenaramine maleate (10ml) intramuscularly for 5 days. After 7days of post treatment, the Buhner's suture was removed and observed that the cow was recovered uneventfully. After one month owner reported that the cow has delivered a male calf without any difficulty parturition.

Corresponding author e mail: lakavathsingh2013@gmail.com,
1. Associate Professor Veterinary Gynaecology and Obstetrics
2. Associate Professor , Veterinary Biochemistry , 3. PG scholar

DISCUSSION

The vaginal prolapsed mass in the present case persist since two days leads to a bout of tenesmus and therefore light epidural anesthesia is mandatory (Tyagi et al., 2006) and administered 10ml of lignocaine hydrochloride epidurally. The prolapsed mass was cleaned with antiseptic solution and applied with lubricant and mimosa pudica (shameplant) leaves extract water. The mimosa pudica leaf extract water is a rich source of sugars and antioxidants which helps to reduce the edema of prolapsed vagina (Alok kumar *et.al.,*2018 and Ashwini *et al.,* 2021a).

After 30 minutes of application of mimosa pudica leaf extract water, size of the prolapsed mass was reduced, then with the application of gentile pressure the prolapsed mass was pushed inside and repositioned properly (Shivanandaiah and Indudar 2010).

The lowered biochemical profiles in the present study viz., total protein: (5.8gDL), total calcium: (8.2mgDL) and phosphorus: (3.2mgDL) are responsible for inconsistent myometrial tensile potency leading to

vaginal prolapse is in accordance with the finding of **Ashwini Upadhyay**(2021) and the administration of these as indicated above, is considered to be responsible for quick recovery and non-recurrence of vaginal prolapse Ashwini Upadhyay (2021).

Therefore, it is inferred that the application of mimosa pudica leaf extract water instead of salt application is responsible for shrinkage of prolapsed mass and easy reduction, reposition and quick healing.

CONCLUSION

It is recommended that the application of mimosa pudica leaf extract water instead of salt application for shrinkage and easy reduction and reposition of the vaginal prolapse. Further, biochemical profile assessment also help the clinician in selecting the therapeutic regimen for successful treatment of vaginal prolapse.

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