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Therapeutic management of uterine prolapse in cows

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Abstract
The present studied carried out in 8 Nondescript cows under field condition with the history of uterine prolapse in Mhow region. All the animals were irrespective of age, breed, parity, duration of prolapse problem and status were recorded. After applying rope truss therapeutic management was done by Inj. Calcium borogluconate 450 ml (200 ml s/c and 250 ml slow i/v) was administered with supportive therapy was given for 5 days. Out of 8 cows, 7 was recovered by rope truss with therapeutic management and one cow was recovered by applying Bruner's suture along with therapy.

Keywords: Bruner's suture, epidural, non descript, uterine prolapse

Introduction
One of the most common problems of postpartum in cattle and buffalo is uterine prolapse, which necessitates prompt medical attention in order to preserve the animal's life, health and fertility. It is a dairy animal postpartum problem that happens right away after calving, though it can also happen a few days later, The uterine prolapses mean coming out of the uterus and vagina from their normal position through the vaginal opening in the three degree of uterine prolapse refers to the protrusion of the uterus into out (complete uterine prolapse). Uterine prolapse was very common in Mhow region. Mostly high yielder was affected with uterine prolapse. Uterine prolapse occurs mainly after parturition, when the intra-abdominal pressure is high (Bhattacharyya *et al*., 2007) [2], compared to the vaginal prolapse, the uterine prolapse is larger, longer (usually hanging down to the hocks when standing), deep red in colour and covered with the "buttons" where the placenta was attached (Ward and Powell, 2005) [9]. Poor myometrial contractions during the post-partum period and traction during difficult births are two postulated etiologies of uterine prolapse (Purohit *et al*., 2018). Hypocalcaemia results in myometrial fatigue and delays the cervical involution turning out to be yet another factor for uterine prolapse (Kasturi *et al*., 2017) [5]. High level of blood estrogen has also been ascribed to uterine prolapse (Meisner and Anderson, 2008). Deficiency of calcium, phosphorus and magnesium levels in the last period of pregnancy and at the parturition are some of the possible causes of post parturient
Uterine prolapse in cows (Al-Saeed *et al*., 2017) [1]. Cows, treatment involves removing the placenta (if still attached), thoroughly cleaning the endometrial surface, and repairing any lacerations. The uterus is then returned to its normal position (Gilbert, 2015) [3] Buhner's suture is the most effective way to keep the uterus in position and is removed after a week's time when the uterus is settled in its position (Hasan *et al.*, 2017) [4]. Supportive treatment is instituted to minimize the chances of infection and also enhance the immunity of the animal. This case study describes proper treatment of uterine proper which almost occurs just after parturition in order to prevent the risk of animal and any loss to farmer.

Treatment and Discussion
The present study was conducted on 8 cows from July 2021 to Feb 2023 in Mhow region, District Indore. The cows included in our study were irrespective of breed, age, parity and having problem of uterine prolapse (prepartum and post-partum). At the time of clinical examination, all animals were either standing or could be persuaded to stand, out of 8 cows, 4 cows suffered with in 3rd parity, 3 cows were suffered in 2 parity, 1 cow was suffered in 5th

parity. In order to manage, local anesthesia was achieved by Inj. Xylocaine 0.03 mg per kg body weight intramuscularly in 3 cows and in 5 cows, only epidural anesthesia local infiltration was given 2% lignocaine hydrochloride. The prolapse mass was cleaned with povidine iodine and herbal spray was applied to reduce the mass size. The prolapse mass was kept in hanging position for few minutes. The uterine prolapse mass was putted inside after removing the placenta from uterus. The care should be taken avoid any rupture while keeping in it position. After putting uterus in its position, the animal was staining continuously. To prevent the mass, prolapse again in 7 cows rope trass method was used along with therapeutic management and in 1 cow bruner's suture are placed after that intravenous fluid was administered which include inj. Calcium borogluconate 350 ml and Ringer's lactate 5 Liters intravenously, inj. Ceftiofur sodium @ 2.2 mg per kg body weight given intramuscularly for 3 days, inj. melonex @ 0.5 mg per kg body weight, inj. Multivitamins 10 ml were given and furea bolus placed intrauterine. The animals are kept under observation for few days and we are in touch with the owner in order to proper observation for postoperative care. In this case study, out of 8 cows, 7 cows were survived and 1 cow get collapsed after 2 days of treatment. The recovered cows were healthy in condition. Such cows have good production performance.

Fig 1: Uterine Prolapse (Before and After)

Fig 2: Cervicovaginal Prolapse (Before and After)

Fig 3: Bruner's Suture

Fig 4: Uterine prolapse (Before and after)

Fig 5: Rope Trass

Conclusion

In our study the prolapse cases are more in shanker breed and then hf crossbreeds in mhow region, Indore. During rope trass method, proper care should be their around vulvar lips to avoid damage position, appropriate space for urination and defecation such method needs proper observations and attention of owner until animals get healthy. In such cases veterinarian should be called immediately so that proper management of prolapse. Sometime the prolapse mass is due to various hormonal therapy injections used by the owner. In some study it was notices that due to estrogenic plants eaten by the animals. Uterine prolapse is most commonly reported in pluriparous dairy cows, even though its occurrence is widespread affecting all animal species (Roberts, 1986) [8].

References

1. Al-Saeed AHN, Abd SA, Al-maliki SG. A comparison between prolapse and mineral deficiency in Iraqi local cattle and buffalo cows (*Bubalus bubalis*). Res J Life Sci Bioinform Pharm Chem Sci. 2017;2(5):32-40.
2. Bhattacharyya HK, Peer FU, Buchoo BA, Ansari MM. Management of uterine prolapse in cattle. Indian Vet J. 2007;84(7):744-745.
3. Gilbert RO. Overview of uterine prolapse and eversion. Merk's Vet Manual; 2015.
4. Hasan T, Azizunnesa PM, Paul P, Akter S, Faruk MO, Hossain D. Correction and management of vaginal prolapse in a cow by Buhner's technique. Res J Vet Pract. 2017;5(1):1-4.
5. Kasturi N, Selvaraju M, Sendilvelan S. Uterine prolapse in a Jersey-Red Sindhi cross cow. Res J Pharm Biol Chem Sci. 2017;8(1):1039-1042.
6. Miesner MD, Anderson DE. Management of uterine and vaginal prolapse in the bovine. Vet Clin North Am Food Anim Pract. 2008;24:409-419.
7. Purohit GN, Arora AS, Gocher T, Gaur M, Saraswat CS, Mishra P. Uterine prolapse in buffaloes: A review. Asian Pac J Reprod. 2018;7(6):241.
8. Roberts SJ. Injuries and diseases of the puerperal period. In: Roberts SJ, editor. Vet Obstet Genit Dis. 3rd ed. Woodstock, VT: Roberts SJ; 1986. p. 353-397.
9. Ward H, Powell J. Reproductive prolapsed of cattle. Agric Nat Resour. University of Arkansas System; 2005.