

Recurrent post-partum uterine prolapse in a primiparous Mehsana buffalo- A case report

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Abstract

A three year old Mehsana buffalo parturated a day before was presented at veterinary clinics with the history of prolapse of genitalia two hours after the assisted delivery of female calf. Owner also had the veterinary help twice for reoccurrence of the genitalia prolapse. On general examination, congested contracted gravid uterine horns exposing maternal caruncles were found hanging out through the vulva. Under epidural anaesthesia and after proper lubrication prolapsed uterine horn was repositioned and buhner's suture was applied at vulva using intra venous infusion tube. The retention suture was removed after eight days with uneventful recovery of buffalo.

Keywords: Buffalo; buhner's suture; post-partum; uterine prolapse.

Introduction

Post-partum prolapse of uterus through vulva is an obstetrical non-hereditary complication of third stage of labor, commonly observed in the cattle, buffalo and ewes, occasionally in sows and rare in bitches, queens and mares (Roberts, 1971; Bhoi and Parekar, 2009). In most cases, it occurs immediately after parturition or occasionally up to several hours afterward and rare cases, it may occur 48 to 72 hours after parturition (Roberts, 1971; Noakes *et al.*, 2001). In ruminants the uterine prolapse is generally a complete inversion of the gravid cornua with incidence 0.3 to 0.5 % of all calvings (Luktuke and Chaudhary 1965; Arthur *et al.*, 2001). Prolapse of genitalia is one of the major problem causing heavy economic losses to livestock owners through negative influence on the productive and reproductive performance of the buffalo (Khan *et al.*, 1984; El-Wishy, 2007). The present communication deals with a case of post-partum uterine prolapse in a primiparous Mehsana buffalo.

Clinical history and observation

A three year old primiparous Mehsana buffalo was presented with hanging prolapsed mass with adhered placenta at vulvar lips after the two hours of assisted delivery of female live calf. According to owner, placenta was removed and prolapsed uterus was repositioned but efforts were futile and prolapse reoccurred twice. So, case was ultimately referred to Dr. V. M. Jhala Clinical Complex, College of Veterinary Science and Animal Husbandry, Sardarkrushinagar Dantiwada Agricultural University, Deesa.

The buffalo was dull and depressed with dry muzzle and pale eye mucus membrane. Vital parameters likes temperature (100.2^oF), respiration rate (18 per minute) and heart rate (65 per minute) were within normal clinical range. Prolapsed mass was edematous, inflamed and contracted involving vagina, cervix and gravid uterine horn exposing maternal caruncles covered by dirt, dust, soil and blood clots and hanging up to the hocks with violent tenasmus (Fig. 1). A part of the retained placenta was severely adhered to ovarian pole of the gravid uterine horn. The opening of the non-gravid horn was as an oval slit like orifice near the vulva on the ventral and lateral side of the prolapsed gravid horn. Cervix was torn at right lateral side and lies at vulval lips.

Clinical management

Under caudal epidural anaesthesia using 2 % Lignocaine hydrochloride (Lidocaine®), 5 ml, prolapsed mass was irrigated with mild antiseptic solution of potassium permanganate (1:1000) to remove the contaminants. The reduction of prolapsed mass was achieved by lifting above the level of ischial arch to drain out the urine. For the easy repositioning, prolapsed mass was smeared with the mixture of the Lignocaine hydrochloride gel, Liquid paraffin and cephalixin powder (Lixen®). Then, with the help of figure tips and palm the prolapsed mass was repositioned up to vagina. Finally, the prolapsed uterine mass was pushed gently by first through vagina, cervix and uterine body (Chauhan *et al.*, 2013). Four Furea boluses were placed intrauterine. To avoiding recurrence of prolapse, modified buhner's suture was applied using sterilized I.V. infusion set tube as suture material. For that, one stab incision was made on the dorsal and second on the ventral vulval commissure, about 3-4 cm away from vulval margin. An unthreaded sterilized buhner's needle was inserted from ventral stab incision of one vulvar lip in an upward direction, without piercing the vulvar surfaces. The tip of the needle was drawn through dorsal stab incision and threaded with sterile I. V. infusion set tube into eye, pulled out from the entry point. Then, needle was unthreaded and reinserted as above procedure on the opposite side of the vulva and slippery knot was applied and tied firmly at ventral commissure. Dorsal stab incision was sutured with an interrupted horizontal mattress suture (Fig. 2). The buffalo was medicated with Inj. Normal saline (3 litre), Inj. Pitocin (100 I.U.) and Inj. Calborol (450 ml) given intravenously while Inj. Oxytetracycline (40 ml), Inj. Melonex (15 ml), Inj. Anihistamin (15 ml) and Inj. Utrasafe (5 ml) given intramuscularly. The case showed excellent response to the treatment, as prolapse did not reoccurred after completion of initial treatment and later on till the buhner's and horizontal mattress suture was removed after completion of eight days of treatment.



Fig. 1 Edematous and inflamed prolapse mass with contracted cervix



Fig. 2 After proper repositioned and sutured

Discussion

In the ruminants, the post partum uterine prolapse is generally predisposed or resulted due to long myometrial attachments, violent tenasmus, relaxed atonic flaccid uterus, retention of placenta especially at ovarian pole of the gravid horns, excessive traction on fetus and retained fetal membrane, hyperestrogenism, low plane of nutrition, lack of exercise, hypocacemia, extreme laxity of the perineum and vulval lips etc. (Roberts, 1971; Noakes *et al.*, 2001; Kumbhar *et al.*, 2009). The lower calcium, lower phosphorus and higher magnesium serum concentration were also observed in buffaloes suffering from uterine prolapse (Ahmed *et al.*, 2005; Akhtar *et al.*, 2008). In the present case, recurrent uterine prolapse of the gravid horn might be due to firm attachment retained fetal membrane at ovarian pole and improper reposition along with sever tenasmus. According Noakes *et al.*, (2001) the post partum uterine prolapse occurs mainly after parturition due to combination of loss of myometrial contraction and increase the intra-abdominal pressure.

Uterine prolapse is an emergency, which needs immediate proper treatment, otherwise interference in the blood supply of prolapsed mass may resulted into edema, cyanosis and later on may develop into gangrene. So, this condition can be corrected with favorable prognosis if treatment is initiated at early stage to avoid injury to prolapsed genital organs (Noakes *et al.*, 2001). Sometimes in delayed cases, partial contracted cervix and severely edematated prolapsed mass interferes with proper repositioning and resulted into reoccurrence of prolapse (Singh *et al.*, 2011) which also one of the cause in present case. Non-gravid horn may not be everted completely due to strong inter-cornual ligament. A buried purse string type of buhner's suture was applied on vulval lips to prevent the reoccurrence of uterine prolapse which were found successful. Horizontal mattress stay suture was also taken to close the dorsal stab incision to prevent the contamination through feces and helps in better healing. Bhoi and Parekar (2009) successfully treated a case of post partum uterine prolapsed along with retention of placenta in non-descript buffalo by applying purse string suture with sterile cotton thread around anterior vagina followed by truss to overcome the tenasmus. A successful retention of prolapsed mass was also attained by a modified buhner's suture using iv infusion tube (Bhattacharyya *et al.* 2012). Kumbhar and co-workers (2009) was successfully managed the postpartum uterine prolapse in Marwadi buffalo with rope truss vulval suture.

The usual sequel of uterine prolapse is haemorrhage, shock, septic metritis, peritonitis, infertility or death. These conditions are always challenging to the filed veterinarians and its promptly management not only save the life of the dam but also restore the normal fertility.

References

- 1) Ahmed S, Ahmad I, Lodhi LA, Ahmad N and Samad HA, 2005. Clinical, haematological and serum macro mineral contents in buffaloes with genital prolapse. *Pakistan Veterinary Journal*, 25(4): 167-170.
- 2) Akhtar MS, Lodhi LA, Ahmad I, Qureshi ZI, Muhammad G, 2008. Serum concentrations of calcium, phosphorus and magnesium in pregnant Nili-Ravi buffaloes with (or) without vaginal prolapse in irrigated and rain fed areas of Punjab. *Pakistan Veterinary Journal*, 28(3): 107-110.
- 3) Bhattacharyya HK, Fazili MR, Buchoo BA, Akand AH, 2012. Genital prolapse in crossbred cows: prevalence, clinical picture and management by a modified Bühner's technique using infusion (drip) set tubing as suture material. *Veterinarski Arhiv*. 82(1): 11-24.
- 4) Bhoi DB, Parekar SS, 2009. Post-Partum Uterine Prolapse in a Non-descript Buffalo. *Veterinary World*, 2(4):149.
- 5) Chauhan PM, Sutaria TV, Maheswari VK, Sharma VK, 2013. Post-parturient complete uterine eversion in a Surati Goat: a case report. *Ruminant Science*. 2 (2): 223 – 224.
- 6) El-Wishy AB, 2007. The postpartum buffalo: I. Endocrinological changes and uterine involution. *Animal Reproduction Science*, 97: 201-215.
- 7) Khan MZ, Verma SK, Khar SK, 1984. Studies on Antepartum prolapse of vagina in buffaloes. *Haryana Agricultural University Journal of Research*, 14(3): 282- 285.
- 8) Kumbhar UB, Suryawanshi AA, Mulani JB, Raghuvanshi DS, 2009. Clinical management of Post-partum eversion of Uterus in Marathwadi Buffalo. *Veterinary World*, 2(5): 202.
- 9) Luktuke SN, Choudhury G, 1965. Studies on the incidence of physiological and pathological termination of pregnancies in Haryana females. *Indian Veterinary Journal* 42: 930-36.
- 10) Noakes ED, Parkinson TJ, England, GCW, 2001. *Arthur's Veterinary Reproduction & Obstetrics*. 8th edition Published by Harcourt (India) Private Ltd., New Delhi.
- 11) Roberts SJ, 1971. *Veterinary Obstetrics and Genital Disease* 2nd Edn. CBS Publishers and Distributors, India. Pp.308-313.
- 12) Singh B, Singh KP, Singh SV, Singh JP Singh HN, 2011. Post-partum cervico-vaginal prolapse in a buffalo. *Intas Polivet*, 12(1): 32-33.