Postpartum partial uterine prolapse in an Assam Local (Bos indicus) cow-
A case report
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Abstract
One Assam Local cow (Bos indicus), aged 5-years-old, approximately 175 kg body weight of second lactating stage suffered from postpartum uterine prolapse. The part of uterine mass along with cervix and vagina came out two hours later of third stage of parturition. The everted mass was red, enlarged and smeared with uterine discharge. The cow intermittently applied force by raising its tail and sloping the rump to the ground. Before handling the case epidural anaesthesia (Xylocaine 2% @ 7.0ml) was given i/coxygeally. Using weak antiseptic solution (pot. Permanganate; 1:1000) at first the everted mass was disinfected after cleaning with tap water. One vial of Bistrepen V (Alembic) 2.5 G powder was spread all over the averted mass. To reduce the mass to reasonable size the crushed sugar (as much as required) was applied over the everted organ. Then prolapsed organ was placed manually in situ. One “eight-knot” suture was applied and kept for one week over the vulvar area. A course of Anistamin (5ml x 5 days), Intacef (@500mg x 5 days) and Tribivet injection (@5ml x 5 days) was given to guard probable postpartum complications. The case was not recurrent till one month of correction.

Introduction
The postpartum prolapse is a disease of puerperal period, most commonly reported to be occurred in cow than small ruminant (ewe) bearing cotyledonary type extra embryonic membrane. The disease is reported to be predisposed by long mesometrial attachments (Roberts, 2004). A negative correlation which occurred between serum calcium, phosphorus and estrogen levels (Jacono and Robertson, 1987) immediately after parturition might also be a factor of this condition. The partial inversion of the gravid uterine organ hardly occurs in ruminant species (Noakes et al., 2009). The available literature revealed

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that partial postpartum prolapse is rarely occurs in Assam local cattle (Bos indicus). Therefore, the present case is presented here as a piece of study.

Fig.1. Bos indicus cow : a.) partial postpartum uterine prolapse and b.) at one month after treatment

Observation and diagnosis
A farmer reported one of his Assam Local cow (Bos indicus), aged 5-years-old, approximately 175 kg body weight of second lactating stage delivered normally one female calf early in the morning. The placenta fell down after three hours of parturition. After two hours of third stage of parturition was over suddenly the owner observed that the animal started straining at frequent interval and within half an hour a fleshy reddish mass came out through vulva. Clinical examination revealed that a part of uterus along with cervix and vagina averted through vulva. The exposed mass was found red and enlarged due to congestion of blood and moist with uterine discharge. The cow was straining 10 to 15 minutes interval with lifting its tail as if she was trying to defecate (Fig. 1.a). The case was diagnosed as partial postpartum uterine prolapse.

Treatment and discussion
At the outset the cow was treated with epidural anaesthesia (Xylocaine 2% @ 7.0ml) to relieve the animal from pain at the time of correction. After anaesthetic action was initiated (confirmed by pricking the tail tip) the averted mass was thoroughly cleaned with simple water and weak pot. Permanganate (1:1000) was applied as antiseptic solution. One vial of Bistrepen V (Alembic) 2.5 G powder was spread all over the averted mass to guard against gram +ve and gram –ve bacterial infection. Crushed sugar (as much as required) was applied over the congested mass thoroughly and wait for 15 to 20 minutes till it
reduced to a reasonable size. The averted mass was then lifted up to the level of vulvar opening and using palm and fingers the organ was placed in situ. Occurrence of postpartum uterine prolapse might be due to increased estrogen and decreased calcium levels during third trimester of pregnancy which caused greater relaxation of pelvic structures and reduced vaginal and uterine muscle tone (Roberts, 2004). Arthur et al. (2001) reported that hypocalcaemia was common cause of uterine prolapse which lead to loss of myometrial tone and influenced uterine prolapse during the peristaltic contractions of third stage of labour. Postpartum uterine prolapse occurs mainly after parturition when intra abdominal pressure increases. The reduced macro-(calcium and phosphorus) and micro-(copper and zinc) mineral levels in mother at the time of parturition might also be a cause of this postpartum prolapse (Ahmed et al., 2005; Akhtar et al., 2008; Bhatti et al., 2006). One “eight-knot” suture was given to close the vulvar lips and kept it temporarily for one week to prevent recurrence. Considering early stage of treatment and devoid of injury to the partly prolapsed uterine organ the prognosis of the case was considered guarded as reported by Noakes et al. (loc cit.). A course of Anistamin (5ml x 5 days), Intacef (@500mg x 5 days) and Tribivet injection (@5ml x 5 days) was given to guard probable postpartum complications. After treatment the cow was kept under observation for one week; till one month of correction the case was reported as non-recurrence by the owner (Fig. 1.b).

Conclusion

A case of postpartum prolapse in an Assam Local cow (Bos indicus) was corrected successfully.

References


