Second Degree Perineal Laceration with Post-Parturient Uterine Prolapse in a Doe

C.Jayakumar[1], Leeba Chacko[1] and Amritha Aravind[1]

[1]*Assistant Professors, Department of Animal Reproduction, Gynaecology and Obstetrics, College of Veterinary and Animal Sciences, Pookode, Wayanad-673576*

Abstract

A rare case of postpartum uterine prolapse with second degree perineal laceration in a doe goat is reported.

Keywords: *Uterine prolapse, Goat, Perineal laceration.*

Introduction

Prolapse of the uterus is a common complication of the third stage of labour in the cow and the ewe, less common in the doe goat and sow. In the ruminant species, prolapse is generally a complete inversion of the gravid cornua while in multipara inversion is generally partial and comprises one horn only (Noakes et al., 2001). First-degree perineal lacerations involve only the skin and mucosa of the vagina or vestibule. Second-degree perineal lacerations involve vestibular mucosa and sub-mucosa, skin of the dorsal commissure of the vulva, and perineal body musculature, including the constrictor vulva; but there is no damage to rectal mucosa. (LeBlanc,1999; Woodie, 2006; Hendrickson, 007). The present paper puts on record a rare case of second degree perineal laceration with unicornual prolapse eight days after kidding.

Case History and Observation

A five year old malabari crossbred goat was presented to the Teaching Veterinary Clinical Complex (TVCC) attached to College of Veterinary and Animal Sciences, Pookot, Wayanad, Kerala, with the complication of uterine prolapse. The goat kidded 8 days back under forced traction and was in her third kidding. Subsequent to kidding, there was eversion of uterus five hours later, which was repositioned and applied with vulvar sutures. After few hours of reduction, the animal showed severe tenesmus and respiratory distress that made the owner to severe the retention suture laid around the vulva. The uterus prolapsed again and was reduced successfully by a veterinarian and treated with antibiotics.

On clinical examination the animal was apparently healthy and in standing position. The rectal temperature, pulsation and respiration were recorded and were within the normal range. The vulva was severely oedematous and the suture laid around was intact and tight. Examination revealed that the prolapsed uterus escaped through a tear in the left lateral wall of vagina just behind the vulva keeping the retention sutures intact. On detailed exploration, the condition was diagnosed as second degree perineal laceration. The right uterine horn only had everted through the perineal laceration which was swollen and stained with faecal material and debris (Fig. 1).

Fig. 1: Eversion of uterus through perineal laceration

Treatment

The suture laid around the vulval lips was severed. The vulva and perivulvar area were thoroughly cleaned with antiseptic solution. The debris and faecal materials were removed and the prolapsed mass was lavaged with weak potassium permanganate solution (1:1000). The hind limbs of the doe were pulled behind and raised the perineum. Obstetrical cream was applied sufficiently and moderate pressure was applied to reduce the prolapsed mass through the lateral side of the vulva. Reduction through that site failed as the everted mass was severely oedematous.

Surgical correction was resorted to reduce the prolapsed mass. The hair at the perivulvar area and behind the thigh was clipped. Epidural anaesthesia was achieved by infiltration of lignocaine hydrochloride (Inj. Xylocaine 2%, 2ml) solution into the first intercoccygeal vertebrae. After allowing 5 minutes for the anaesthetic to take effect, the left vulval lip was disengaged at the centre and tear at the lateral side was made continuous with it. By gentle pressure the body of uterus was reduced inside followed by the horn. Following repositioning of the organ, vaginal mucous membrane and subcutaneous tissue were sutured by simple continuous suture using chromic catgut No.2 approaching through the opening at the left side. Then the muscle was sutured using catgut followed by apposition of skin using black braided silk. The left vulval lip was also reconstructed by suturing at subcutaneous tissue and the skin (Fig.2).

Fig. 2: After reduction of uterus and reconstruction of area

Retention suture was laid around vulva to prevent re-prolapse. Oxytocin (10 IU) and tetanus toxoid (5Lf) were administered intramuscularly. A course of antibiotic (Inj. Ceftriaxone, 500mg) was given for 5 days parentrally. The animal had uneventful recovery and vulval retention sutures and skin sutures were removed after 7 days.

Eversion of uterus occurs most often immediately after parturition and occasionally up to several hours afterward. In rare cases, it may occur 48 to 72 hours after parturition (Noakes et al., 2001).

Prolapse of the uterus is predisposed by long mesometrial attachements, strong tenesmus, uterine atony, incomplete separation of placental membranes and excessive traction at aided parturition (Jackson, 2004). In the present case, eversion following kidding accompanied a forced traction at assisted parturition. Excessive straining by the animal and tight closure of the vulva by retention sutures predisposed to tear at the weak perineal region and resulted in second degree perineal laceration with recurrence of prolapse eight days after kidding.

References

Hendrickson, D.A. 2007. Equine urogenital surgery. In: Hendrickson, DA (Ed.), Techniques in large animal surgery. 3rd edn., Iowa, Blackwell. pp. 179-184.

Jackson, P.G.G. 2004. Handbook of veterinary obstetrics, 2nd edn, Saunders, Westline Industrial Drive, St. Louis Missouri, pp. 22-23.

LeBlanc, MM. 1999. Diseases of the vagina, vestibule and vulva. In: Colahan, PT; Mayhew, IG; Merritt, AM and Moore, JN (Eds.), Equine medicine and surgery. 5th edn., St. Louis, Mosby. pp. 1175-1193.

Noakes, D.E., Perkinson, T.J. and England, G.C.W. 2001. Post Parturient Prolapse of the Uterus. Arthur's Veterinary Reproduction and Obstetrics. 8th edn. Saunders, pp. 333-338.

Roberts, S.J 1971. Veterinary Obstetrics and Genital Diseases. 2nd edn, CBS publishers and Distributors, New Delhi. pp. 189-196.

Woodie, B. 2006. The vulva, vestibule, vagina and cervix. In: Auer, JA and Stick, JA (Eds.), Equine surgery. 3rd edn., Philadelphia, *W.B. Saunders Co.*, pp. 845-852.