

POST-PARTUM TOTAL UTERINE PROLAPSE IN A GOAT

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Abstract: A post-partum total uterine prolapse in a 3 years old non-descript goat was presented. This paper reports a clinical management of the case. The everted uterus was carefully assessed and gross debris gently removed and disinfected with dilute chlorhexidine solution. Epidural anaesthesia was achieved using 1.5 ml of 2% lignocaine solution administered at the intercoccygeal joint. The prolapsed uterus was replaced and no suture was placed on the vulva. Oxytocin, calcium borogluconate, broad-spectrum antibiotics (ceftriaxone) and DNS solution were administered. The animal was completely recovered.

Keywords: Clinical Management, Goat, Post-partum, Uterine, Prolapse.

Introduction

Uterine prolapse has been recorded in all animal species. It is most common in cow and ewe, less common in doe and rare in mare (Roberts, 1986) and is an emergency condition which needs prompt and immediate attention (Noakes et al. 2001). It is simply an eversion of the uterus which turns inside out as it passes through the vagina. Prolapse of the uterus generally occurs immediately after or a few hours of parturition when the cervix is open and the uterus lacks tone (Hanie, 2006). Prolapse that occur more than 24 hours post-partum is extremely rare and is complicated by partial closure of the cervix, making replacement difficult or even impossible (Fubini and Ducharme, 2006). In the period immediately after prolapse occurs the tissues appear almost normal, but within a few hours it becomes enlarged and edematous. Some animals will develop hypovolaemic shock secondary to internal blood loss, laceration of the prolapsed organ or incarceration of abdominal viscera (Potter, 2008). The prolapse is visible as a large mass protruding from the vulva, often hanging down below the animal's hock. The placenta may likely be retained during this period (Roberts, 1982). It normally occurs during the third stage of labour at a time when the foetus has been expelled and the foetal cotyledons have separated from the maternal caruncles (Noakes et al. 2001). The etiology of uterine prolapsed is unknown, but many factors have been associated with prolapsed (Jackson, 2004 and Hanie, 2006). This include conditions such as poor uterine

tone, increased straining caused by pain or discomfort after parturition, by excessive traction at assisted parturition or by the weight of retained foetal membranes. Conditions that increased intra-abdominal pressure including tympany and excessive estrogen content in feeds. Animals with uterine prolapse treated promptly recovers without complication while delay in treatment could result in death of animal in a matter of hour or so from internal haemorrhage caused by the weight of the organ which tears the mesovarium (Noakes et al.2001). Success of treatment depends on the type of case, the duration of the case, the degree of damage and contamination. This paper focuses on the clinical case presented and it highlighted the clinical management of total uterine prolapse in small ruminant (Doe) which occurred after forceful delivery of kid in a non descript goat.

Case history and observations

A non descript goat on its first kidding was brought to field veterinarian with the history of having one live kid after forceful delivery by animal owner. After delivery the animal had continuous straining and the uterus was prolapsed. At the time of observation, the animal was dull and depressed. The clinical examination of the animal showed a pale visible mucus membranes, body temperature 38.9°C , heart rate 88/min, respiratory rate of 22/min and grinding of teeth. The foetal membranes were tightly adhered over the caruncles which was soiled and inflamed.

Treatment and discussion

The goat was administered 1.5 ml of 2 per cent lignocaine at first coccygeal space to attain epidural anaesthesia. Prolapsed uterus was gently washed and disinfected with dilute chlorhexidine solution (Hosie, 1993) and the foetal membranes were separated manually from the maternal caruncles. Urine was relieved from bladder by urinary catheterization. The mass was washed with saturated salt solution to reduce the edema, again washed with 1% potassium permanganate solution. Cetrimide cream was liberally applied over the mass. The hind portion of the animal was elevated by folding the hind limbs at the level of hock joint. The vulval lips were pulled apart and the everted mass was reduced using the palm of both the hands. Proper replacement was ensured by introducing the hand through the cervix and no vulval retention suture was applied. Once the uterus is replaced, the operators hand should be inserted to the tip of both uterine horns to be sure that no remaining invagination could incite abdominal straining and re prolapse (Fubini and Ducharme, 2006). If the uterus is completely and fully replaced all the way to the tip of the uterine horns, the prolapse is unlikely to occur (Hanie 2006). The animal was administered inj.Calcium borogluconate (75

ml, slow i/v), inj.Oxytocin (10 IU,i/v), inj. DNS (400 ml,i/v), inj. ceftriaxone (200 mg,i/m) and inj.Chlorpheniramine maleate (30 mg,i/m).The antibiotic and antihistamine was continued for three days and animal recovered uneventfully. Prolapse of the uterus normally occur during the third stage of labour at a time when the fetus has been expelled and the fetal cotyledons has separated from the maternal caruncles (Noakes et al.2001). In small animals, complete prolapse of both uterine horns is usual (Jackson, 1995; Munro, 2004). But in the present case prolapse of uterus was observed after forceful delivery of kid. The goal in the treatment of uterine prolapse is replacement of the organ followed by a method to keep it in a retained position. Once the uterus is in its normal position, oxytocin 10 IU intramuscularly should be administered to increase the uterine tone. It has also been reported that most animals with uterine prolapse are hypocalcaemic (Fubini and Ducharme, 2006). Where signs of hypocalcaemia are noticed such animals should therefore, be given calcium borogluconate. An injectable broad spectrum antibiotic administered ones in a day for three to five days after replacement will prevent secondary bacterial infection (Hosie, 1993; Plunkett, 2000 and Borobia-Belsue, 2006).

References

- [1] Borobia-Belsue,J.,2006.Replacement of Rectal Prolapse in Sows, *Vet. Rec.*,19:380.
- [2] Fubini, S. L. and G. N. Ducharme, 2006. Surgical Conditions of the Post Partum Period in *Text Book of Farm Animal Surgery*, (2006), 333-338.
- [3] Hanie, E.A.,2006. Prolapse of the Vaginal and Uterus in *Text Book of Large Animal Clinical Procedures for Veterinary Technicians*”, (*Elsevier, Mosby*,2006), 218-221.
- [4] Hosie, B., 1993. Treatment of Vaginal Prolapse in Ewes, *Practice*, 15:10-11.
- [5] Jackson, P.G., 1995. Post parturient Problems in Large Animals, in P.G. Jackson (Ed.), *Handbook of Veterinary Obstetrics*, 2nd Edition, (WB Saunders,London ,1995),209-232.
- [6] Jackson, P.G.G., 2004. Post parturient Problems in Large Animals in *Hand Book of Veterinary Obstetrics*, 2nd Edition,(Elsevier Saunders.2004), 209-231.
- [7] Munro, I.B., 2004. Replacing the Prolapsed Bovine Uterus, *Veterinary Record*, 155: 344.
- [8] Noakes, D.E., T.J. Perkinson and G.C.W. England,2001. Post Parturient Prolapse of the Uterus, in *Arthur's Veterinary Reproduction and Obstetrics*, (Saunders,2001), 333-338,
- [9] Plunkett, S.J., 2000. Vaginal Edema (Hyperplasia) or Prolapse and Uterine Prolapse in *Text Book of Emergency Procedure for the Small Animal Veterinarian*, (WB auders.2000), 217-218.
- [10] Potter, T., 2008. Prolapse of the Uterus in the Cow, *UK Veterinary Journal*, 13:1-3.

- [11] Roberts, S.J., 1982. Injuries and Diseases of the Puerperal Period in *Text Book of Veterinary Obstetrics and Genital Diseases*, (Indian Edn.1982), 300-340.
- [12] Roberts, S.J., 1986. Injuries and Diseases of the Puerperal Period”, in S J Roberts (Ed.), *Veterinary Obstetrics and Genital Diseases*, 3rd Edition, (Vermont, Woodstock, 1986) 353-397.

BEFORE REDUCTION OF PROLAPSED UTERINE MASS IN A GOAT



AFTER REDUCTION OF PROLAPSED UTERINE MASS IN A GOAT

