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Optimized Approach for Managing Post-Parturient Uterine Prolapse in Non-descript Goats

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ABSTRACT

This paper presents two post-partum total uterine prolapse in 3 and 4 years old pluriparous non-descript goats and its successful management. On gross examination, the uterine mass was found to be hyperemic, swollen, and soiled with intact fetal membranes in Patient 1 and without fetal membranes in Patient 2. Both cases were presented within 8 hours after parturition. Administered epidural anaesthesia using 2% lignocaine, the prolapsed uterine mass was washed with potassium permanganate solution, hypertonic salt solution (to reduce the edema) and the prolapsed uterus was repositioned back into the pelvic cavity. The vulval retention sutures were placed to avoid reoccurrence. Broad spectrum antibiotics (Amoxycilln-cloxacillin), anti-inflammatory, antihistamines, calcium borogluconate, supplements and supportive fluid therapy were administered for five days. The vulval sutures were removed after 7 days and the patients recovered uneventfully.

Keywords: Goat, Non-descript, Post-partum, Repositioning, Suture, Uterine Prolapse.

INTRODUCTION

Prolapse of uterus, otherwise called as casting of wethers or casting of the calf bed is a usual complicacy of the third stage of parturition in animals and it needs immediate attention (Noakes *et al*, 2001). Casting of wethers is the eversion of the post parturient gravid horn in which the uterus turns inside out as it passes through the vagina and hangs below or up to the level of hock. This condition is common in cow and ewe than doe, sow, mare, queen and bitch (Oh and Shin, 2017). The etiology of the uterine prolapse in small ruminants is obscure but various factors contribute to the occurrence of this condition. They are hypocalcemia, excessive traction to relieve dystocia or retained fetal membranes, absence of uterine tone, extreme relaxation of the pelvic and perineal regions, intense straining caused by pain after parturition, increased intra-abdominal pressure due to bloat, lack of exercise and exorbitant estrogen levels in feed/fodder (Senthilkumar, 2014; Oh and Shin, 2017). However, prepartum vaginal prolapse is not a predisposing factor for the postpartum uterine prolapsed (Youngquist and Threlfall, 2007).

Casting of the calf bed usually occurs immediately after parturition or few hours after parturition when cervix is dilated with absence of uterine tone (Robking, 2012). Prolapse of uterus after 24 hrs is extremely rare and even if it occurs, it is difficult to replace / sometimes unfeasible because of the partially closed cervix (Fubini and Ducharme, 2006). If the prolapse occurs immediately after the parturition, uterus will be warm to touch and looks normal. With the passage of time, uterus becomes cold, edematous, congested and after several hours uterus may become ischemic and necrotic. In some cases, animal may progress into the state of hypovolemic shock due to internal blood loss or tears/lacerations in the prolapsed uterus (Senthilkumar, 2014). The prognosis depends upon duration of the condition and degree of damage in the prolapsed uterus. The prognosis is good if the condition is treated within one or two hours of occurrence.

The small ruminants affected by the prolapse of uterus usually conceive again and the reoccurrence of this condition in subsequent parturition is exception rather than the rule. In very delayed cases, when the degree of damage/ contamination is excessive, prognosis is poor; in such cases amputation of the uterus is an option (Noakes *et al*, 2001). The present paper reports two cases of post partum uterine prolapse in Non-descript goats and its successful management.

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Table 1: History and Vital Parameters of the Patients.

Patient	Weight	Age	Parity	Body Temperature	Pulse	Respiratory rate	Time of presentation
Patient 1	22 Kg	4 years	3	102.7 °F	82/ minute	20/ minute	4 hours
Patient 2	25 Kg	3 years	2	102.4 °F	85/ minute	19/ minute	7 hours

CASE HISTORY AND CLINICAL EXAMINATION

A total of two cases of post-partum uterine prolapse in pluriparous does were presented to Veterinary Dispensary, Mukkudal, Tirunelveli, Tamil Nadu. Both the does were thoroughly examined and all vital parameters were found to be normal (Table 1). On further examination, the uterine mass was found to be hyperemic, swollen, soiled, with intact fetal membranes in Patient 1 and without fetal membranes in Patient 2. But both the whole uterus was fresh without any wounds or damages. The uterine masses were hanging up to the level of hock joint.

TREATMENT

Two ml of 2% lignocaine was administered epidurally to both the goats to reduce the straining. The prolapsed uterus was washed with washed with 1:1000 potassium permanganate solutions gently to remove all the debris, faeces and then the intact fetal membranes were removed manually from the caruncles in Patient 1. Then the uterine masses were washed with hypertonic salt solution to reduce the edema and again washed with 1:1000 potassium permanganate solutions. The uteruses were lubricated liberally with cetrimide cream and with the help of another assistant the uteruses were elevated up to the level of the vulva and held high. The hind quarter of the does were also raised. By everting the vulval lips, the uterine masses were replaced by manual pushing with gentle manipulations to avoid uterine tear or haemorrhages. Proper replacement of the uterine mass was ascertained by introducing hand into the uterus and vulval retention sutures were applied to prevent reoccurrence.

Each doe was treated with 100 ml of 5 per cent Dextrose injection and 100 ml Ringer's lactate intravenously, Inj. Amoxicillin Cloxacillin @ 20mg/Kg (I/V), Inj. Oxytocin - 10 IU (I/V), Inj. Calcium borogluconate - 75 ml (slow I/V), Inj. Tetanus toxoid 0.5ml (I/M), Inj. Chlorpheniramine maleate @ 0.5mg/Kg (I/M), Inj. Meloxicam @ 0.5mg/Kg (I/M) and 2 ml B complex (I/M). The treatment with antibiotic, antihistamine and analgesic was continued for five days, the vulval retention suture was removed after seven days and the animals recovered uneventfully.

RESULTS AND DISCUSSION

The uterine prolapse usually occurs during the third stage of labor when the fetus was expelled and fetal membranes get separated from maternal caruncles. In small ruminants, prolapse of both the post gravid uterine horns are possible (Jackson, 1995). Sometimes the intestines or bladder may get strangulated inside the everted uterus, in such cases careful replacement should be carried out. But in the present two cases, only prolapse of the uterus was observed. One of the most important complications observed in uterine prolapsed cases was toxaemia, which was due to the soiled uterus. Hence, proper gentle cleaning of the prolapsed mass with antiseptic solution is mandatory to avoid such complications. But aggressive cleaning procedures to remove dirt/ contaminants adhering to the endometrium may facilitate the systemic absorption of toxic contaminants (Scott and Gessert, 1998).

The duration, degree of damage and contamination are the crucial components associated with the prognosis of the animal. In the present two cases, mild uterine damages and contamination of the uterus was observed as the owner covered the prolapsed mass with clean cloth which aided in decreased occurrence of complications. In addition, both the does were presented within 8 hours which resulted in easy management of the condition. Unattended uterine prolapse cases for a longer time may hinder the blood supply to the uterus resulting in congestion, edema, necrosis and gangrene, thus resulting in poor prognosis (Kapadiya *et al,* 2015). Similar cases of uterine prolapse in goats were reported by many authors (Selvaraju *et al*, 2010, Manokaran *et al*, 2011, Senthilkumar, 2014, Oh and Shin, 2017, Nair *et al*, 2019, Bharti and Singh, 2020 and Krishnaveni and Kumar, 2024). In case of milder uterine damages, the future fertility of the goats will not be affected as in this case report.

Patient 1:

Patient 2:

REFERENCES

Bharti B and Singh B (2020). Management of Post-Partum Uterine Prolapse in Caprines- Report of Three Does. *Intas Polivet* **21**:159-160.

Fubini SL and Ducharme GN (2006). Surgical conditions of post-partum period. *Text Book of Farm Animal Surgery*, Pp. 333-338.

Jackson PG (1995). Post parturient Problems in Large Animals, in Handbook of Veterinary Obstetrics, 2nd Edition. WB Saunders, London. Pp. 20.

Kapadiya PS, Chauhan PM, Nakhashi HC, Sharma VK and Sutaria TV (2015). Recurrent post-partum uterine prolapse in a primiparous Mehsana buffalo - A case report. *J Livestock Sci* **6**:109-112.

Krishnaveni P and Kumar SJ (2024). Post Partum Uterine Prolapse in a Goat: A Case Report. *Indian Vet J* **101***:*55-57.

Manokaran S, Vijayanand V, Gokulakrishnan M and Nagarajan L (2011). Management of post partum uterine prolapse in does. *Indian J Small Ruminants* **17**:113-114.

Nair SS, Sharun K, Anuraj R and Mathew J (2019). Management of post-partum uterine prolapse in malabari goats. *Int J Curr Microbiol App Sci* **8**:2136-40.

Noakes DE, Perkinson TJ and England GCW (2001). Post Parturient Prolapse of the Uterus, in Arthur's Veterinary Reproduction and Obstetrics, W. B. Saunders, London. Pp.333-338.

Oh A and Shin ST (2017). Uterine prolapse in a korean black goat. *J Vet Clin*. **34**:307-309.

Robling KA, Jenks JA and Holler L (2012). Two cases of uterine prolapse in free-ranging deer in South Dakota. *J Wildl Dis* **48**:806-808.

Scott P and Gessert M (1998). Management of ovine vaginal prolapse. *In Pract* **20**:28-34.

Selvaraju M, Ravikumar K, Palanisamy M, Prabaharan V, Ezakial Napolean R, Ravi R and Chandrahasan C (2010). Total uterine prolapse after abortion in a goat. *Indian J Field Vet* **5**:73.

Senthilkumar A (2014). Clinical management of post-partum total uterine prolapse following excessive traction during delivery of kid in a Non-Descript Goat. *IOSR J Agri Vet Sci* **10**:9-11.

Youngquist RS and Threlfall WR (2007). Periparturient infections and structural abnormalities. In: Current Therapy in Large Animal Theriogenology. 2nd edition. St Louis: Elsevier Saunders. Pp. 572-574.

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