

Abstract:

A 2-year old local breed goat was bought to Santhia Upazilla Veterinary Hospital, Pabna with a history of uterine prolapse immediately after parturition. On clinical examination the doe was found apparently healthy. The prolapsed uterus was cleaned with diluted potassium permanganate solution. After low epidural anaesthesia with 2% Lidocaine HCL (3 ml) the protruded mass was pushed back to in its normal position. Afterwards, Buhner's suture was applied subcutaneously which was parallel to the valva. The suture was removed after 10 days. Post operative care was prospectively followed for 60 days until the goat came to heat. At the post-operative phase antibiotic (Streptopenicillin -1.5 ml IM for 5 days and Histanol 1.5 ml IM for 5 days) was given. The doe was recovered from the problem without any complication.

Keywords: Goat, Uterine prolapse, Management.

CHAPTER-I

INTRODUCTION

Uterine prolapse is the protrusion of the uterus from the vulva with the mucosal surface exposed (Gustafsson *et al.*, 2004) . Uterine prolapse occurs most often immediately after parturition and occasionally up to several hours afterward. The presence of a part of the fetal membrane in the genital passage induces strong tenesmus and prolapse. Various predisposing factors have been suggested for uterine prolapse in goat, e.g. hypocalcaemia, prolonged dystocia, fetal traction, fetal oversize, retained fetal membranes, chronic kidney disease and paresis (Risco *et al.*, 1984; Reynolds *et al.*, 1984; Ishii *et al.*, 2010; Aoki *et al.*, 2010). Prolapsed of the uterus at post parturient period through the genital passage and it's expulsion outside the body is a frequent sequel to protracted dystocia. Uterine prolapse has been recorded in all species of animal, although occasionally in goat occurring immediately after parturition (Roberts, 1971; Simon, Gupta *et al.*, 2015). Incidence of post partum uterine prolapse varies from 6.6 % to 12.9 % (Nanda and Sharma, 1982). In the period immediately after prolapse occurs the tissues appear almost normal, but within a few hours they become enlarged and edematous. Some animals will develop hypovolumic shock secondary to internal blood loss, laceration of the prolapsed organ or incarceration of abdominal viscera (Ramsingh *et al.*, 2013). It is regarded as a veterinary emergency because without treatment, the goat is likely to die (Murphy and Dobson, 2002; Miesner and Anderson, 2008). This case report describes the successful correction of uterine prolapse in a goat.

CHAPTER-II

Materials and Methods

2.1. Case presentation & history

A two years old local breed goat was presented with history of protrusion of mass through the vulva since twelve hours after parturition. She delivered two male kid. On gynaeco-clinical examination the goat was apparently healthy with moderate tenesmus and the physiological parameters were within the normal range. The uterine prolapsed mass was larger, longer (hanging down to the hocks when standing), more deep red in colour and covered with foetal membranes. The prolapsed mass was also edematous and engorged .

2.2. Surgical management

a. General approach

Before to the treatment physical examination was done and recorded the temperature, pulse rate, respiration rate, body weight etc.

b. Correction of uterine prolapse

Low epidural anesthesia was done with 3ml 2% lignocaine HCl for prevention of straining. Then the partial foetal membrane was carefully separated avoiding damage to maternal caruncles and bleeding (Figure 2.2). The tissue debris was removed by washing and cleaning the prolapsed mass with water. The prolapsed mass was thoroughly irrigated with 1:1000 potassium permanganate solutions (Figure 2.3). With gloved and lubricated hand, the everted uterus was pushed through the vagina by manual pressure to regain its normal position (Figure 2.4 and Figure 2.5). Re-occurrence of prolapse due to tenesmus was prevented by applying Buhner's sutures (Figure 2.6).

c. **Post operative care:** Antibiotic [Streptopenicillin, 1.5ml, intramuscularly], antihistaminic [1.5ml, intramuscularly] Calcium borogluconate solution [200ml, intravenously], and dextrose saline [(20%) 500ml, intravenously] were injected for 5 days.



Figure 2.1: prolapsed uterus with placenta



Figure 2.2: Separation of placenta from uterus



Figure 2.3: Application of potash water in the uterine



Figure 2.4: Insertion of uterus in its normal position



Figure 2.5: Repositioning the prolapsed mass



Figure 2.6: Applying Buhner's suture



Figure 2.7: After correction

Advice:

1. Animal should remain in dry place.
2. All prescribed medicine should be maintained in proper dose.

CHAPTER-III

RESULTS AND DISCUSSION

The goat showed good recovery without recurrence and other complications. The suture was removed after 10 days. The incidence of uterine prolapse registered frequently in goat and sheep (Bhattacharyya *et al.*, 2012;). It is generally noticed during immediately post-partum especially after dystocia (Sah and Nakao, 2003). But in the reported case, the prolapse was observed in goat after normal parturition of two male kid. The objective in the treatment of uterine prolapse was replacement of the organ to its original position and prevention of recurrence. In the reported case the prolapsed mass was replaced to its normal position carefully. The usual sequel of uterine prolapse is haemorrhage, shock, septic metritis, peritonitis, infertility or death. Bhattacharyya *et al.*, (2012) reported 9.09 % mortality rate and 18.18 % goats developed metritis. However, careful removal of dung and dirt materials using potassium permanganate solution prevented the uterine infection in this case as noticed by (Simon *et al.*, 2015;) . Elevation of hind quarters helps in repositioning of prolapsed uterus with good recovery rate (Ishii *et al.*, 2010;). It was observed that the hygienic handling, proper management and treatment should definitely prevent further reproductive tract damage and aid in quick recovery.

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CHAPTER-I
LIMITATIONS

1. Due to short duration, I could not follow up the case.
2. Due to lack of resources , I could not do the Surgery aseptically.

CHAPTER-V

CONCLUSION

Uterine prolapse may appear immediately after parturition. Diagnosis and treatment of uterine prolapse is very much important task. Delayed in correction may cause some critical condition such as edema, fibrosis, necrosis, septicemia. So the farmers should be careful about early correction of the condition which will save the goat from life-threatening condition by the help of veterinarians.

CHAPTER-VI

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CHAPTER-VII

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CHAPTER-VIII

BIOGRAPHY

I am Robiul Hasan, son of Abdul kader pramanik and Mrs. Belly Khatun. I passed my Secondary School Certificate (SSC) examination from Galaxy kinder garden and high school, Bera, pabna in 2010 and Higher Secondary Certificate (HSC) examination from Alhera Academy School and College, Bera, Pabna in 2012. I enrolled for Doctor of Veterinary Medicine (DVM) degree in Chittagong veterinary and Animal Sciences University (CVASU), Chittagong, Bangladesh in 2012-13 sessions. At present I am doing my Internship programme which is compulsory for awarding my degree of Doctor of Veterinary Medicine (DVM) from Chittagong Veterinary and Animal Sciences University. In the near future I would like to work and have massive interest in wildlife medicine, wildlife and conservation of nature.