

Uterine Prolapse in a Sheep and its Management: A Case Report

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Introduction

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). Post partum uterine prolapse occurs in all large animal species. It is most common in the cow and ewe, less common in the doe goat and rare in the mare. In sheep, the condition is usually seen in mature females in the last trimester of pregnancy. Predisposing factors include increased intra-abdominal pressure associated with increased size of the pregnant uterus, intra-abdominal fat, or rumen distention superimposed upon relaxation and softening of the pelvic girdle and associated soft-tissue structures in the pelvic canal and perineum. 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). Animals with uterine prolapse treated promptly recovers without complication while delay treatment could result in death of the animal in a matter of hour or so from internal hemorrhage caused by the weight of the organ which tears the mesovarium and artery (Noakes *et al.*, 2001). Success of treatment depends on the type of case, the duration of the case, the degree of damage and contamination.

Case details

A 2 year old ewe weighing 17 kg was presented to Teaching Veterinary Clinical Complex Shuhama SKUAST-K for evaluation and treatment of a prolapsed uterus (Fig. 1) which was noticed by the owner soon after parturition of ewe. A thorough physical examination was carried out and the vital parameters were taken viz: Temperature 38.9°C, Heart rate 124 beats/min, Respiratory rate 74 cycles/min and pulse rate 122 beats/min. Mucous membrane was pinkish and the prolapsed uterus was swollen, necrotic and stained with faecal materials and debris.

Management

Epidural anesthesia was achieved by infiltration of 2 mL of lidocaine solution into the first intercoccygeal vertebrae to prevent straining during replacement of the prolapsed organ. After allowing 5 min for the anaesthetics to take effect, sensitivity around the perineal region was assessed by pricking with a needle. The debris and faecal materials were gently removed (Fig 2) and the prolapsed uterus was washed with dilute potassium permanganate solution (Hosie, 1993). The two hind limbs were pulled out behind her. The prolapsed mass was put to the cold application to reduce the size of the mass. Then using both hands with moderate force the prolapsed uterus was gently pushed in through the vagina. The body was first pushed in followed by the horns. Horizontal mattress sutures using nylon was placed in the vulva as a retention technique to hold the uterus in place (Fig 3). Oxytocin 10 iu, Procain penicillin 20,000 i.u/kg and streptomycin 10 mg/kg were administered for 5 days. The vulva retention suture was removed 7 days later and owner reported she was doing well.

DISCUSSION

The usual procedure for correction of uterine prolapse is its reduction by a gentle massage, reposition and retention by application of purse-string sutures. (Jean and Anderson 2006; Borobia-Belsué 2006). A one/two-fingers opening should be left when tying the purse string (Jean and Anderson 2006; Borobia-Belsué 2006) according to animal size. However, surgical correction is often necessary due to various damages of the prolapse (large oedema, laceration, rupture, infection, and necrosis). 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). Replacement of the organ followed by a method to keep it in the retained position is the goal in the treatment of uterine prolapse.

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Fig 1. Prolapsed mass.



Fig 2. Another view of prolapsed mass.



Fig 3. Placement of sutures after pushing the contents inside.

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