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### **Case report**

### Vaginal and uterine prolapse in a 3-year old ouda ewe in Sokoto, Nigeria

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#### ABSTRACT

A three (3) year old ewe weighing 37kg was presented to the Usmanu Danfodiyo University Veterinary Teaching Hospital Sokoto, Nigeria with a prolapsed vaginal and anorexia. Clinical examination reveals straining, pain, weakness, rough hair coat and diarrhea. The animal was reveals the presence of helminthes. However the animal lambed 2 days after presentation but uterine prolapse occurred. The Helminthosis was treated using Albendazole suspension; while the prolapsed organs corrected in each case. Straining must have caused the vaginal prolapse while the violent contraction uterus coupled with the fact that the animal is a primiparal and the parturition that interrupted tile initial management of the vaginal prolapse may be responsible for the uterine prolapse.

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#### 1. Introduction

Vagina prolepse is the protrusion of the vagina through the vulva (Merck, 2005). It is a condition of ruminant in their last trimester, often seen after parturition1 and rarely occurs unconnected with pregnancy or parturition (Arthur et al 1982), such as in young non-pregnant ewes (Merck, 2005). No other specie suffers so frequently from vagina prolapse antepartum as the sheep (Sobiraj, 1990). The case of this prolapse is not clear but certain factors such as grazing on estrogenic plant or exogenous administration of estrogenic compounds, increase intraabdominal pressure caused by increase size of the pregnant uterus (Merck. 2005) and previous history (Ayen and Noakes, 1997) predispose to vagina prolapse. Sub clinical low Magnesium and Calcium levels have been reported

to be a consequence rather than a cause (Hoise et at 1991) but breed disposition have been reported to exist (Low and Sunderland, 1987; Merck. 2005). DyMucia and high lamb mortality lates has been reported to be associated with vagina prolapse (Sobiraj, 1990).

Uterine prolapse is essentially an eversion of the uterus which turns inside out as it passes through the vagina as a prolapse (Jackson, 1995). It is a common complication of third stage labour (Arthur et al.. 1982) which occurs immediately after or within several hours of parturition when the cervix is open and the uterus lacks tone (Merck, 2005). The cause of uterine prolapse is unclear and sporadic but there is no doubt it occurs during the third stage of labour (Arthur et al., 1982). Several factors such as increase intraabdominal pressure, post parturient discomfort and increase straining (Jackson. 1995) predispose ewes to uterine prolapse. Its occurrence seems to be affected by seasonal and regional factors (Arthur et at., 1982).

#### 2. Case report

An adult, ewe weighing 37kg was presented to the University Veterinary Teaching Hospital Nigeria with complaint of a protruding mass genital part and inability to feed which was day before presentation. The ewe was a prirnitmral and reported to have been kept with 5 other goats (a buck and 5 does). They were managed under semi-system and fed on grass and wheat bran. On presentation, the ewe was weak and on recumbency. Physical examination revealed rough hair coat, everted and telescoping vaginal with the external os of the cervix extruding as a small pinkish mass at the tip of the base of the vagina. The udders were enlarged. Abdominal ballottement revealed the ewe was pregnant in its last trimester. There was diarrhea, straining with jaw twitching and teeth grinding reveal pain. The blood and feacal samples were taken, for parasitological examination.

Epidural anaesthesia was given using 5ml of 2% solution of Lignocaine. The everted organ was disinfected using Savlon® (2.3% of Pin oil 1.1% 5- Chloro 2-hydroxyl methane) while glucose Q solution was applied by gentle massage to reduce oedpma. The organ was replaced by gentle manipulation. Nylon suture material was used to suture the labia lips of the vulva to prevent reoccurrence. 5mls of Vitas power® (Multivitamin) for 3 days. Pen strep (200mg procaine penicillin G and 200mg Dihydrostrptomycin base) once daily for 5 days and 10mls of glucose solution (4 times daily for 2 days) were given. The animal was admitted in the clinic for close monitoring.

By the next day straining continued but was reduced. Amniotic sac appeared 2 days after initial presentation to the clinic. The stay sutures were removed to allow normal lambing which was followed by uterine prolapse. The prolapsed organ was disinfected using Savlon and replaced into the pelvic brim in similar manner as the vaginal nrolapse. However, 2 bolus of Vetcotrim® (2.0g SulphIrdiazine and-0.4g trimethropin) uterine implant were give intrauterine after which stay suture of nylon materi; were-applied.

#### 2. Materials and methods

The dam began feeding 1 day after lambing while the lamb fed on colostrum from the dam. Vital parameters of temperature, pulse rate, respiratory rate and packed cell volume taken are presented in Table 1. There was no parasite found in the blood sample collected. However, strongyle egg (++) were found in the feacal sample. The ewe was given 7mls orally (Albendazole 7.5mg'kg).

**Table 1**Vital parameters of temperature, pulse rate, respiratory rate and packed cell volume.

Parameter	Days post-presentation to the clinic				
	Day 0	Day 1	Day 2	Day 3	Day 4
Temperature (°C)	39.6	38.8	38.5	38.6	38.5
Pulse rate	52	102	105	110	105
Respiratory rate (Beats/min)	35	20	20	30	23
Packed cell volume (%)	31	-	-	-	38

There was no significant change in temperature but pulse rate decreased and the respiratory rate increased during the vaginal prolapse. The decrease in pulse rate, may probably have resulted from weakness and anorexia. Straining, jaw twitching and teeth grinding may be responsible for the increase respiratory rate. Packed cell

volume decreased suggesting anaemia due to Helminthosis. The vaginal prolapsed may be caused by prolonged straining while 'the violent uterine contraction may be responsible for the uterine prolapse coupled with the fact that the ewe was a primiparal animal and the parturition which interrupted the initial management of the vaginal prolapse. Both dam and lamb were discharged 2 days after lambing. They were in good condition 2 weeks after lambing when sutures were removed.

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