Management of post-partum total uterine prolapse in a non-descript doe under field condition: A case report

C Srinivasan and P Sathya

Abstract
A 3 years old non-descript doe was present in veterinary hospital, Dharmapuri with the history of uterine mass hanging up to hock joint after normal kidding. The epidural anesthesia with 2% lignocaine hydrochloride was given between 2nd and 3rd intercoccgeal joint. The uterine mass was replaced manually by small traction and reduction. The doe was administered with antibiotic and fluid therapy. The animal was recovered uneventfully.

Keywords: Non-descript doe, Post-partum, Epidural anesthesia, Uterine prolapse

Introduction
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) [2]. Total uterine prolapse is most common in the cow and ewe, less common in the doe and very rare in case mare. Complete eversion of the gravid uterus which turns inside out as it passes through the vagina. It normally occurs during the third stage of labour at a time when the fetus has been expelled and the fetal cotyledons have separated from the maternal caruncles (Noakes et al., 2001) [7]. Prolapse of uterus that occur more than 24 hours postpartum is extremely rare and is complicated by partial closure of the cervix, making replacement difficult or even impossible (Fubini and Ducharme, 2006). The etiology of uterine prolapse is unknown, but many factors have been associated with prolapse (Jackson, 2004 and Hanie, 2006) [4, 2]. These includes conditions such as poor uterine tone, increased straining caused by pain or discomfort after parturition, excessive traction at assisted parturition and the weight of retained fetal membranes. Success of treatment depends on the type of case, the duration of the case, the degree of damage and contamination.

Case history and observations
A 3 years old non-descript doe weighing around 20 kg was presented in veterinary hospital, Dharmapuri with the history of uterine mass hanging up to hock joint (Fig.1) after normal kidding. Doe had given birth to 2 healthy kids a 4 hours before and fetal membranes were expelled out. The animal was dull and depressed. Physical and clinical examination was carried out and rectal temperature (39 °C), heart rate (93 beats/min) and respiratory rate (60 cycles/min) were recorded. The ocular mucous membrane was pale.

Correspondence
C Srinivasan
M.V.Sc Scholar, Dept. of Animal Nutrition, College of Veterinary and Animal Sciences, Mannuthy, Kerala, India
Treatment
The 2 ml of 2% lignocaine hydrochloride was administered between 2nd and 3rd intercocygeal joint to attain epidural anaesthesia to prevent straining during replacement of the prolapsed uterine mass. The uterine mass was washed gently with saturated salt solution to reduce the edema again washed with 1% potassium permanganate solution. 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 with moderate force the prolapsed uterus was gently pushed in through the vagina. The proper replacement was ensured by introducing the hand through the cervix and no vulval retention suture was applied and ensured proper reduction of uterus to avoid recurrence prolapsed (Fig.2). The animal was administered with inj. Calcium borogluconate (75 ml, slow i/v), inj. Oxytocin (10 IU, i/v), inj. DNS (200 ml, i/v), inj. Enrofloxacin (5mg/kg BW) and inj. Chlorpheniramine maleate (30 mg, i/m). The antibiotic and antihistamine was continued for three days and animal recovered uneventfully.

Discussion
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) [7]. The exact etiology of uterine prolapse is still unclear, however hypocalcaemia (Roberts, 2004) [9], poor uterine tone, increased straining, conditions that increase the intra abdominal pressure including tympany, excessive estrogen content in the feed (Kumar and Yasotha, 2015) [6] and forced traction of the foetus (Noakes et al., 2001) [7], Prompt treatment of the condition is essential to prevent toxaemia and death of the animal. Faecal contamination of prolapsed uterus may increase the risk of toxaemia (Katare and Sharma, 2014) [3]. The aim in the treatment of uterine prolapse is the reduction of uterus followed by a method to keep it in a retained position. A full clinical examination of animals with uterine prolapse must be undertaken as signs of toxaemia like inappetence, increased respiratory rate, raised pulse and congested mucus membrane. Once the uterus is in its normal position, oxytocin 10 IU intramuscularly should be administered to increase uterine tone. Fubini and Ducharme (2006) also reported that most of the animals suffering with uterine prolapse are hypocalcaemic. So, calcium boro gluconate was administered to prevent impending signs of hypocalcemia. An injectable broad spectrum antibiotics once administered for three to five days after replacement of the prolapsed will prevent secondary bacterial infection (Hosie, 1993; and Plunkett, 2000) [3-8]. Animals with uterine prolapse that were properly managed can conceive again without any complication. In the present comminique, Doe recovered successfully without further complications due to prompt treatment.

Reference