Management of uterine prolapse in a non-descript doe: case report

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Abstract
The present communication reports a case of uterine prolapse in a local non-descript Doe and its successful reduction, replacement and repositioning.

Keywords: Uterine prolapse, Doe, epidural anaesthesia, calcium borogluconate

Introduction
Uterine prolapse is one of the most potentially dangerous complications associated with calving (Kumar and Yasotha, 2015) [5]. Complete eversion of the gravid horn is termed as uterine prolapse (Noakes, 2009). The etiology for uterine prolapse may be due to poor uterine tone, increased straining caused by pain or discomfort after parturition, excessive traction during parturition, retention of fetal membranes, increased intra-abdominal pressure due to poor quality roughages or tympany and feeding of excessive estrogenic feeds (Roberts, 1982) [10]. In ruminants, the incidence of uterine prolapse is 0.3 to 0.5% of all calvings (Luktuke and Chaudhary, 1965) [6]. Animals with uterine prolapse treated promptly will recover without complication, while delay in treatment could result in death of animal due to internal haemorrhage caused by the weight of the organ (Noakes et al. 2001) [7]. The present study reports the post partum uterine prolapse in a local non-descript Doe.

Case history and clinical examination
A pleuriparous local non-descript Doe aged about 3 yrs was brought to Teaching Veterinary Clinical complex, College of Veterinary science, Rajendranagar, Hyderabad with a complaint of hanging mass from vulva. Doe had given birth to 2 healthy kids a day before and fetal membranes were expelled out. The uterus was turned inside out exposing inner walls, cervix was edematous, inflammed and the maternal caruncles were covered by dirt, dust, soil and hanging up to the hocks (Fig. No. 1). Few of the caruncles were damaged due to mechanical trauma. Clinical examination revealed rectal temperature of 101.5ºF, pale conjuctival mucous membrane, respiratory and pulse rates were slightly elevated.

Treatment
The prolapsed mass was washed gently with warm saline and then with 1% potassium permanganate solution to remove the debris. To prevent straining during prolapsed organ replacement, 2% lignocaine (3ml) was given epidurally at first and second inter-coccygeal space. For easy repositioning, the everted mass was elevated above urethra to facilitate animal to urinate and reduce passive venous congestion of uterus, so that edema of prolapsed mass is reduced (Selvaraju et al. 2010) [12]. After application of 2% Lignocaine jelly onto the surface of prolapsed mass, it was pushed gently through vagina, cervix and uterine body by applying pressure with both palms alternatively. To prevent the recurence of the prolapse, perivulvar retention sutures were applied. The animal was treated with fluid therapy, Inj. 5% DNS 250 ml and Inj. Mifex 200 ml I/V, antibiotic (Inj. Enrofloxacin 5mg/kg b.wt), anti-inflammatory analgesics (Inj. Meloxicam 0.2 mg/kg b.wt) and antihistamines-Chlorphenaramine (Inj. Histanil – 5 ml). Antibiotic and analgesic therapy was given for 5 days. Retention sutures were removed on the 5th day and the Doe recovered uneventfully.
Discussion:
The exact etiology of uterine prolapse is still unclear, however hypocalcemia (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) [5], and forced traction of the foetus (Noakes et al. 2001) [7], are the contributing factors for the onset of the condition. The common complications of uterine prolapse may be haemorrhages, shock, septic metritis, sucking problems, infertility and death. Uterine prolapse is an emergency, which needs immediate proper treatment, otherwise interference in the blood supply of prolapsed mass may result into edema, cyanosis and later on may develop into gangrene (Kapadiya et al. 2015) [3]. Sometimes in delayed cases, partial contraction of cervix interferes with repositioning, resulting in reoccurrence of prolapse (Srinivas et al. 2014) [13].

Prompt treatment of the condition is essential to prevent toxaeemia and death of the animal. Faecal contamination of prolapsed uterus may increase the risk of toxaeemia (Katare and Sharma, 2014) [4]. So, prolapsed mass was washed gently with 1% potassium permanganate solution. Vigorous attempts to remove superficial contamination should be avoided as they may prove counterproductive by increasing toxin uptake (Scott and Gessert, 1998) [11]. After replacement of the uterus, hand was inserted to the tip of both uterine horns to ensure that there was no remaining invagination which could incite abdominal straining and reprolapse as reported by Fubini and Ducharme, 2006 [2]. Fubini and Ducharme (2006) [2] also reported that most of the animals suffering with uterine prolapse are hypocalcaemic. So, calcium borogluconate was administered to prevent impending signs of hypocalcemia. An injectable broad spectrum antibiotic was administered for 5 days post treatment to combat secondary bacterial infection as reported by Borobia-Belsue, 2006 [1]. Animals with uterine prolapse that were properly managed can conceive again without any complication. Complications develop when lacerations, necrosis and infections are present or when treatment is delayed (Wachida and Kisani, 2011) [14]. In the present comminique, Doe recovered successfully without further complications due to prompt treatment.

References