

Case Study

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Management of Bilateral Uterine Horn Prolapse in a Queen Cat

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ABSTRACT

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A two year old non-descript queen cat weighing 3 kg was brought to Madras Veterinary College Teaching Hospital with the history of a mass protruding out from the vulva from past 8 hours. A rare case of bilateral uterine horn prolapse in a queen cat and its successful management is reported.

Introduction

Uterine prolapse, the common post parturient complication in domestic species of animals and it is a rare obstetrical emergency in feline species (Jutkowitz, 2005; Deroy *et al.*, 2015).

Uterine prolapse usually occurs during prolonged labour or abortion or within 48 hours of normal parturition (Roberts and Straw Rodney, 1988) and predisposing factors include severe tenesmus, over relaxation of the pelvic musculature, uterine atony,

incomplete placental separation and flaccid mesovaria (Jutkowitz, 2005) which involves one or both horns (Wallace *et al.*, 1970). The present report describes the successful management of postpartum bilateral uterine horn prolapse in a queen cat.

Case History and Observations

A two year old non-descript queen cat weighing 3 kg was brought to Madras Veterinary College Teaching Hospital with the history of a mass protruding out from the

vulva from past 8 hours. Further enquiry revealed that she had kittened two live kittens previous day without assistance and the cat is straining since last night. On general examination the cat appeared dehydrated and was straining continuously.

The mucous membrane was pink, dry with a body temperature of 102°F and visual inspection of the prolapsed mass revealed dry, oedematous uterine horns without any laceration. On abdominal palpation no abnormalities revealed. Based on the clinical observations the case was diagnosed as

bilateral uterine horn prolapse.

Treatment and Discussion

Various methods have been described for the treatment of uterine prolapse in cat including amputation of the everted uterus, manual reduction and repositioning by abdominal palpation with fluid infusion and manual reduction of the prolapsed mass through a laparotomy incision, followed by ovariohysterectomy (Johnston *et al.*, 2001) (Fig. 1 and 2).



Fig.1 Bilateral uterine horns prolapse



Fig.2 Manual reduction of uterine horn prolapse

In the present case prolapsed uterine mass was slightly oedematous and there was no any lacerations, necrosis or tear so, it is decided manual reduction and reposition of the mass followed by ovariohysterectomy since owner not interested to breed the cat in future. The cat was stabilised by administering 100 ml of dextrose normal saline intravenously. The cat was pre-anaesthetised with injections xylazine @ 1mg/kg, atropine sulphate @ 0.04 mg/kg and ketamine @ 10 mg/kg i.m. General anaesthesia was induced with ketamine and diazepam at 10mg/kg and 0.05mg/kg i.v., respectively.

The anaesthesia was maintained with 1/3 - 1/2 dose of the induction combination. Under general anaesthesia prolapsed mass was reduced and repositioned without any resistance by insertion of index finger through everted mass with mild pressure after lubrication of prolapsed mass with liquid paraffin. After preparation of the surgical site ovariohysterectomy was performed through mid-ventral approach and the abdominal incision was closed as per the standard procedure.

Post-operative care with antibiotics, intravenous fluids and supportive therapy was continued for 7 days. Post-operative dressing of the suture site was done on 3rd and 5th day. On day 7 the skin incision was completely opposed without any complication and the cat recovered uneventfully.

Uterine prolapse in cat is considered as a rare finding (Biddle and Macintire, 2000). It has been reported in queens ranging from 10 months to 6 years. Possible causes for uterine prolapse in cats may include rough handling during parturition, severe tenesmus, excessive relaxation and stretching of the pelvic musculature, intense dilation of the cervix, uterine atony due to metritis, incomplete

separation of the placental membranes, rupture of the mesovarium and mesometrium (Bigliardi *et al.*, 2014).

In the present case uterine prolapse might have occurred due to the continuous straining, excessive relaxation and stretching of pelvic musculature following the delivery of kittens. Diagnosis is made based on the history and visual inspection of the prolapsed uterine mass. Various treatment methods have been described including amputation of the everted uterus, manual reduction of the prolapsed mass and then perform ovario-hysterectomy (Vaughan and McGuckin, 1993).

In the present case prolapsed tissue mass successfully reduced and repositioned as described by Sathiamoorthy *et al.*, (2011). Uterine horn prolapse may leads to adverse complications such as rupture of meso-ovarium ligament it can be managed by laparotomy followed by ovariohysterectomy as described by Gokulakrishnan *et al.*, (2009). Feline uterine prolapse can be successfully treated by manual reduction and repositioning followed by ovariohysterectomy.

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