

OBSTETRICAL MANAGEMENT OF POSTPARTUM TOTAL UTERINE PROLAPSE BY COELIOTOMY AND SINGLE DOSE OF CEFOVECIN SODIUM IN A QUEEN CAT

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SUMMARY

The present paper describes the postpartum total uterine prolapse in a queen cat and its management by coeliotomy and single dose administration of injection Cefovecin sodium subcutaneously.

Keywords: Cat, Cefovecin sodium, Ovariohysterectomy, Postpartum, Total uterine prolapse

Total uterine prolapse is uncommon in cats. Uterine prolapse occurs when the uterus turns inside out and passes through the cervix into the vagina (Deroy *et al.*, 2015) but can occur without mucosal eversion (Bigliardi *et al.*, 2014). Complete uterine prolapse is reported in cats aged between 10 months to 6 years (Ucmak *et al.*, 2018) and the incidence is less than 0.03% (Senna *et al.*, 2015). It is mostly as a sequel of dystocia and increased straining and can occur instantly or up to 48 hours after delivery of the last kitten or after a prolonged queening or abortion (Jarolmasjed, 2017). The condition has been reported during the process of queening in a queen (Ucmak *et al.*, 2018) and in a non-pregnant queen (Valentine *et al.*, 2015).

In the present case, a two year old queen cat weighing 2.8 kg was presented with a large pink mass protruding through the vulva after labour. She had delivered six kittens on the previous night and was brought the next day morning with a mild lacerated total uterine prolapse mass. On presentation, the cat was dehydrated and did not have milk secretion. On clinical examination, heart rate, pulse rate and respiratory rate were within normal limits. Obstetrical examination revealed complete total uterine prolapsed mass (Fig 1). The uterus did not have any fetus and it was observed that there was a rupture of the mesovarium, mesometrium and utero-vaginal connection around the cervix. Due to extensive damage of the uterus and the torn ligaments, manual reduction of the prolapsed uterus was not possible and an emergency ovariohysterectomy was performed.

The animal was administered Inj. Xylazine @ 1 mg/kg I/M and Inj. Ketamine @ 5 mg/kg BW I/M as the pre-anaesthetics and the anaesthesia was maintained with Inj. Ketamine @ 5 mg/kg BW and Inj. Diazepam @ 2 mg/kg BW @ 4:1 ratio intravenously. The prolapsed mass and surgical site was aseptically prepared and the apex of the uterine horns were lubricated with liquid paraffin. The

mass was replaced through the vagina (Fig. 2). A coeliotomy (Fig. 3) was performed and the ovariohysterectomy was done as per the standard procedure using PGA (2-0). Surgical incision was closed by lockstitch suturing of muscular layer followed by intra dermal closure using PGA (2-0). Post-operatively, the queen was administered a single dose of Inj. Cefovecin sodium @ 8 mg/kg BW S/C. Since the animal had reduced milk secretion, kittens were fed with milk replacers and the queen recovered uneventfully.

In bitches, the severity of clinical signs and prognosis depend on the duration of the prolapse (Sathiamoorthy *et al.*, 2011). Described methods of treatment include external hysterectomy, manual reduction through a laparotomy incision followed by ovariohysterectomy, reduction and repositioning of the prolapsed organ by abdominal palpation and use of an infusion (MacPhail, 2013). Uterine prolapse should be considered an emergency and treatment should be done immediately to prevent infection. Urethral catheterization should be done to prevent damage to the urethra during hysterectomy (Deroy *et al.*, 2015). Prognosis improves if treatment is instituted rapidly and is excellent following ovariohysterectomy, if hemorrhage and shock are treated accordingly.

The present case describes the reduction of the prolapsed mass carefully by repositioning it followed by performing ovariohysterectomy. Post operatively single dose Inj. Cefovecin sodium was administered as a single, one time subcutaneous injection at a dose of 3.6 mg/lb (8 mg/kg) body weight and its therapeutic concentration are maintained for approximately 7 days. One antibiotic injection Cefovecin sodium given by subcutaneous route provides up to 14 days of antibiotic therapy, which in many cases eliminates the need for owners to give their pets medications at home. It is aqueous, non-depot injection for rapid release and it provides sustained, uninterrupted

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Fig. 1. Lacerated total uterine prolapsed mass



Fig. 2. Repositioned mass presented intra-abdominally

therapeutic drug concentrations. It gives owners peace of mind that their pets are receiving the treatment they need without the stress of administering daily oral medications. Thus prompt and quick decision on the treatment aspect of total uterine prolapse renders good prognosis pertaining to the animal's livability

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Fig. 3. Ovariohysterectomized total uterine mass

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