

PREGNANCY MANAGEMENT FOLLOWING ABDOMINAL EMERGENCY IN A FULL TERM QUEEN CAT

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A full term pregnant queen cat was presented with history of a traumatic cause of abdominal emergency. Abdominal ultrasound revealed non-viability of all foetuses in uterus. Laparotomy revealed no abnormalities of any of the abdominal visceral organs. An 'En-bloc' Ovariohysterectomy was performed and the abdominal tear was repaired.

Key words: Queen cat, Pregnancy, Abdominal emergency, En-bloc.

Incidence of dystocia in the queen cat is less compared to bitch (Johnston *et al.*, 2001). Causes of feline dystocia include inadequate size of maternal birth canal, foetal mal-presentation and malformation as well as maternal uterine inertia, uterine torsion, uterine prolapse and prolonged pregnancy (Ekstrand and Linde-forsberg, 1994). Less commonly, inefficient abdominal musculature from accidents or trauma may also reduce the efficiency of abdominal straining that is so important in the second stage of labour, resulting in dystocia (Jackson, 2004). This report puts on record a case of traumatic cause of abdominal emergency in a full term pregnant queen cat and its management.

Case history and observations

A four year old, full term pregnant, non-descript queen cat was presented to the Department of Veterinary Gynaecology and

Obstetrics, Veterinary College, Bangalore with a history of fall from a building, implicating a traumatic injury, the previous day. The rectal temperature was normal, but the respiratory rate and pulse rate was elevated. The queen cat was anorectic and lethargic. Physical examination didn't reveal any abnormality of the locomotor system. Examination of the abdomen revealed a tear through which omentum was protruding out (Fig. 1). Digital examination of the vagina did not reveal the presence of any fetus. Trans-abdominal ultrasound revealed no further complications with abdominal viscera. However, non-viable foetuses were observed in the uterus. As all penetrating wounds should always be surgically explored, to determine the damage implicated to internal organs not readily appreciable by physical or diagnostic procedures, laparotomy was performed (Fig.2).



Fig. 1



Fig. 2

Treatment and Discussion

The surgical site was prepared aseptically and anaesthesia was induced

with propofol @ 6mg/Kg, I/V and maintained with the same @ 0.25/Kg/min for 30 minutes. Preoperatively, ceftriaxone

(inj. Intacef-125 mg) and lactated Ringer's solution was administered intravenously. A ventral midline laparotomy was performed. On laparotomy, no other damages to any of the abdominal visceral organs were observed. As trans-abdominal ultrasound revealed non-viable fetuses and as the owner didn't want to maintain the breeding status of the queen cat, an 'En-bloc' ovario-hysterectomy was performed. The gravid uterus and the ovaries were extracted out of the laparotomy incision. After ligating both the ovarian pedicles followed by the broad ligaments and cervix with absorbable catgut No.0, the whole gravid uterus with dead fetuses and the ovaries were removed. Abdominal lavage was then performed using isotonic solutions and metronidazole solution. The tear on the abdominal muscles was scarified and sutured. Following this, the laparotomy incision was closed anatomically and postoperative analgesia provided with Inj. Tremadol @ 2mg/Kg, I/V. Supportive treatments with antibiotics, fluids and anti-inflammatory agents were continued for a week to prevent peritonitis and the queen cat has an uneventful recovery in a week time.

Dystocia in queen cat is uncommon compared to the bitch. In a study of nearly 3000 litters, the incidence of dystocia in the queen cat was found as 5.8 per cent and uterine inertia followed by foetal mal-disposition were reported to be the main causes as also mentioned by Gunn-Moore and Thrusfield (1995). Deterioration of abdominal muscle tone in old and obese animals reduces the efficiency of abdominal straining that is so important in the second stage of labor. Also, damage to abdominal muscles may also be sustained by cats from road accidents and trauma. Surgical repair may be possible to avoid

various potential problems, but may reduce the efficiency of straining as also reported by Jackson (2004). Abdominal tear and protrusion of omentum in the present case predisposing to inefficient abdominal contraction that can compromise labour progression was anticipated.

Interestingly, sixty percent of cases of dystocia in queen cats were resolved by caesarean section. Hysterectomy is advocated in cases of damage to the uterus or if the foetal death and decay have occurred. Also, Ovariohysterectomy is performed at the time of caesarean section, if owners do not wish to breed from their animal again as also mentioned by Jackson (2004). 'En-bloc' ovario-hysterectomy was performed in the present case owing to detection of all non-viable fetuses in the uterus as assessed by ultrasonography and owner's willingness not to breed the cat further. The maternal well-being obtained in this case following an emergency 'En-bloc' ovario-hysterectomy substantiates the intervention made.

References

- Ekstrand, C. and Linde-Forsberg, C. (1994). Dystocia in the cat: A retrospective study of 155 cases. *J. Small. Anim. Pract.*, **35**: 459-464.
- Gunn-Moore, D.A. and Thrusfield, M.V. (1995). Feline Dystocia. Prevalence and association with cranial conformation and breed. *Vet. Rec.*, **136** (14): 350-353.
- Jackson, P. (2004). Handbook of Veterinary Obstetrics. 2nd Ed. W.B. Saunders Company. London. Pp. 141-145.
- Johnston, S.D., Kustritz, M.V.R. and Olson, P.N.S. (2001). Canine and Feline Theriogenology. 1st Ed. W.B. Saunders Company, Philadelphia. Pp. 435-436.