

Case Study

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Uterine Rupture and its Management in a Queen Cat

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ABSTRACT

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Successful management of life threatening case of uterine rupture with emphysematous fetus by caesarean section in a queen cat was reported.

Introduction

Uterine rupture is a major emergency which occur during late pregnancy (Roberts, 1986). The most common causes of uterine rupture is external trauma during pregnancy, severe alterations of the uterine wall, improper obstetrical procedures and indiscriminate use of drugs such as oxytocin or prostaglandin F₂ alpha (Jackson, 1995). This paper describes about emergency caesarean section in a queen cat following diagnosis of uterine rupture and presence of two emphysematous fetuses in the abdominal cavity with the help of ultrasonographic and radiographic aids.

Case history and observations

A Three years old, domestic short hair queen cat in lateral recumbency was presented to Small Animal Obstetrics and Gynecology ward of Madras Veterinary College Teaching Hospital with the history of having queened three live kittens on the previous day morning and anorexia for past two days.

Clinical examination revealed distended and tensed abdomen. Vaginal examination showed edematous vulval lips with oozing of blood and no foetus palpable in the vaginal passage.

Further the case was subjected to diagnostic aids such as ultrasound scanning and radiographic examination of abdomen which were revealed the presence of dead and emphysematous fetuses (Fig.1) in the abdominal cavity respectively. The radiographic findings of fetus, in terms of radio opacity and shape, were in accordance with fetal death or ectopic pregnancy (Carrig *et al.*, 1972) and fetal viability assessed through ultrasonography. Caesarean section was carried out through a midline laparotomy.

Treatment and Discussion

The Queen cat was premedicated with Inj. Atropine sulphate (0.04 mg/Kg B.Wt, S/C), and sedated with Inj. Xylazine (1 mg/ Kg B.Wt.I/M). Anaesthesia was induced and maintained with Inj. Ketamine + Inj. Diazepam in the ratio of 4:1 at the dose rate of 5 mg/Kg B.Wt. I/V were administered. A Midline laparotomy was performed. Immediately after opening the linea alba, two emphysematous fetus (Fig.2) was found in the abdominal cavity. Further detailed inspection of the uterus revealed rupture of left uterine horn. The emphysematous fetuses were

removed followed by flushing of the abdominal cavity with isotonic saline at the rate of 200 ml/kg (Seim, 1995). The uterus was exteriorized and ovariohysterectomy was done as per standard surgical procedure. The Surgical site was closed with Polyglycolic acid (PGA) 2-0 and skin incision was closed with silk. Post-operative treatment with Ringer's lactate solution at the rate of 10 ml per kg, antibiotic Inj. Intacef-Tazo 20mg /Kg B. Wt and analgesic Inj. Tramadol (2mg/Kg B.Wt) was continued for seven days.

The case of uterine rupture can be successfully treated with fluid replacement, antibiotic therapy, ovariohysterectomy, removal of the fetuses as recommended by Linde Forsberg (2010). The queen cat had an uneventful recovery without any complication. Uterine rupture in the cat is generally asymptomatic, with only abdominal distension occurring (Ristic and Raijmakers, 1997). Feline fetuses when they are expelled in to the abdomen after uterine rupture mostly get mummified and are essentially an incidental finding in surgical exploration or routine ovariohysterectomy (Johnston *et al.*, 2001).



Fig.1 Radiography with extra uterine emphysematous fetus



Fig.2 Ruptured uterus along with emphysematous fetus

There are few reports where these cases referred to as ectopic pregnancies, implying extra uterine fetal growth (Palmer, 1989). The prompt diagnosis and subjecting the animal to caesarean section at the earliest is the key to good prognosis to safeguard the animal. Feline uterine rupture with emphysematous fetus can be successfully treated by caesarean section.

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