

## TERMINATION OF PREGNANCY USING COMBINATION OF CABERGOLINE AND CLOPROSTENOL IN A QUEEN

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ABSTRACT

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A 11 month old domestic short hair queen at 40 days of gestation was subjected to medical termination of pregnancy using a combination involving antiprolactin drug, Cabergoline per os and prostaglandin analogue, Cloprostenol intramuscular administered once daily. Three foetuses were expelled on the 4<sup>th</sup> day of treatment. Ultrasonographic examination on 5<sup>th</sup> day revealed empty gestational sac suggesting that the termination was completed.

**Key words:** Cabergoline, Cloprostenol, Queen, Mismating, Termination of pregnancy.

### INTRODUCTION

Mismate or pregnancy termination is one of the most common reproductive requests made by cat owners (Eilts *et al.*, 2002). Although pregnancy termination in cats have been advised with either prostaglandins (Nachreiner and Marple, 1974) or antiprolactin drugs (Jochle & Jochle, 1993). There are very few reports available on the combined use of Prostaglandin and Cabergoline. Pregnancy termination in a queen using a combination of Prostaglandin analogue Cloprostenol and antiprolactin drug Cabergoline is reported.

### CASE HISTORY AND OBSERVATION

An eleven month old domestic short hair queen was brought to Small Animal Gynaecology and Obstetrics ward of Madras Veterinary College Teaching Hospital for pregnancy diagnosis. Ultrasonographic examination revealed that the queen to be 40 days pregnant. Since, the owner was not interested in retaining the pregnancy; it was decided to terminate it.

### TREATMENT AND DISCUSSION

Medical termination was done using a combination of PGF<sub>2α</sub> analogue Cloprostenol (Inj. Pragma®) @ 2 µg/kg subcutaneously once a day and Cabergoline (Tab. Cabgol®) @ 5 µg/kg/day per os. Side effects such as prostration, nausea, vomiting and listlessness noticed within 10 minutes of PGF<sub>2α</sub> injection and lasted for about one and a half hours. The queen expelled 3 fetuses on day 4 approximately 80 hours from the start of treatment and the completion of termination was confirmed by ultrasonography.

Termination of unwanted pregnancies with Cabergoline or Prostaglandins either alone or in combination have been investigated frequently in dogs but reports of their use in cats are rare (Erunal - Maral *et al.*, 2004). The corpora lutea of pregnancy in cats secrete progesterone until days 25 – 30 of pregnancy and decreases slowly thereafter. The feline placenta as a source of progesterone is still controversial and Scott (1970) stated that luteal progesterone was essential for maintenance of pregnancy until day 45 – 50. Plasma prolactin concentration begin to rise from day 35 of pregnancy, plateau around day 50 and abruptly decrease just prior to birth (Tsutsui and Stabenfeldt, 1993). Hence elimination of functional corpus luteum by administration of PGF<sub>2α</sub> and decreasing prolactin level by the use of dopamine

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agonist during the last trimester may terminate pregnancy (Garcia *et al.*, 2012 and Wanke *et al.*, 2002). Onclin and Verstegen, (1997) reported 100% success rate for inducing abortion in cats by administering Cabergoline daily and PGF<sub>2α</sub> analogue every other day for about 11 days starting later than day 30 after mating. Erunal - Maral *et al* (2004) studied the effect of Cabergoline and PGF<sub>2α</sub> analogue Alfaprostol in termination of pregnancy in cats. Treatments starting on days 25 – 42 of pregnancy had abortion rate of 100% and the duration of combined therapy lasted for 10 days. Baldwin *et al* (2000) reported that 40 days appeared to be critical time for initiation of prostaglandin effectiveness.

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