Abstract
A 2 year old female cat treated with slow release GnRH analog (deslorelin 4.7 mg per implant) for temporary suppression of oestrus is presented and discussed.

Key words: Cat- GnRH analog- suppression - oestrus

Cat populations exist worldwide and raise concern about public health, impact on wildlife, and welfare of the cats themselves (Levy et al., 2011). Sterilization is an effective method of reducing population size and aggression in these colonies but it involves surgery and anaesthesia with the potential for complications and post-operative pain. Newer non-surgical approaches for oestrus suppression in cats involve the use of slow release GnRH agonist implant or GnRH vaccination. The present case report describes the use of GnRH agonist implant, deslorelin for temporary suppression of oestrus in a queen cat.

Case History and Observations
A 2 year old female cat with hind limb fracture was referred to Small Animal Obstetrics and Gynaecology unit of Madras Veterinary College Teaching Hospital for temporary suppression of oestrus to prevent mating until ovario-hysterectomy was performed after fracture healing.

Treatment and Discussion
For achieving oestrus suppression and preventing unwanted pregnancy, the queen cat was treated with slow release deslorelin implant (Suprelorin, Peptech Animal Health, U.S.A.), an analog of GnRH at the dose rate of 4.7 mg per implant. The dorsal cervical region cranial to the scapulae of the queen was clipped and cleansed with povidone iodine solution. The implant was placed subcutaneously cranial to the interscapular region using an implanting device under xylazine hydrochloride sedation.

Following implant administration, no major local reaction was observed. However, on the third day the queen cat was found to be exhibiting oestrus signs like tail deflection, lordosis, rubbing against objects, rolling, vocalization, etc. for about one week during which period the owner was advised to take extra care to prevent the cat from breeding. Thereafter no signs of oestrus were reported for the next three months during which time complete healing of fracture took place and ovario-hysterectomy was performed successfully.

Gonadotropin releasing hormone (GnRH) has long been recognised as a potential target for the control and management of fertility in human and animal medicine. Similar to the actions of native GnRH, synthetic GnRH agonists like nafarelin, leuprolide, deslorelin, buserelin, and goserelin stimulate production and release of gonadotropins from the pituitary gland (Ismet Alkis et al., 2010). So far seven studies have been published using implants with either different active ingredients or different dosages of the same active substance indicating that GnRH agonist implants offer a suitable alternative to surgical spaying in queens.

In the present study, subcutaneous implantation of deslorelin in the queen cat resulted in an immediate release of FSH and LH from the anterior pituitary gland due to the up-regulation mechanism leading to an increase in the concentrations of gonadal sex hormones and thus was responsible for the oestrus signs exhibited by the queen. However, constant release of deslorelin from the implant resulted...
in suppression of FSH and LH secretion because of the down-regulation of the GnRH receptors on the gonadotroph cells which in turn caused low levels of gonadal steroid hormones leading to oestrus suppression (Toydemir et al., 2012).

Munson et al. (2001) reported that the treatment of cats with implants containing 6 and 12 mg of deslorelin suppressed oestradiol secretion for at least 14 months in 80% of the animals. However, Sandra Goericke-Pesch et al. (2013) reported that the duration of oestrus suppression was highly variable and varied between 483 days (16 months) and more than 1102 days (>37 months) in cats treated with 4.7 mg of deslorelin implant.

Summary

Thus, from the present study it could be concluded that subcutaneous application of 4.7 mg deslorelin implant represented a practical method for temporary suppression of oestrus in queen cat.

References


Dystocia Due to Fetal Anasarca in a Spitz Bitch

M. Palanisamy1, S. Manokaran, G. Senthilkumar, S.Raja, V.Prabaharan, R.Rajkumar and P.Jayaganthan

Department of Veterinary Gynaecology and Obstetrics, Veterinary College and Research Institute, Orathanadu, Thanjavur - 614 625, Tamil Nadu.

(Received : 27-10-2017 341/17 Accepted : 07-12-2017)

Abstract

Dystocia due to fetal anasarca in Spitz dog was successfully treated by cesarean section and is reported.

Key words: bitch, dystocia, anasarca, cesarean section.

Anasarca is generalized edematous condition of body. The affected puppies will have deadly amount of fluid underneath the skin. The anasarca puppy is also called as walrus/swimmer/water puppy (Cunto et al., 2015). The condition is most commonly reported in ruminants and less common in dogs. The present report records a case of dystocia due to fetal anasarca in a Spitz dog.

Case History and Observations

A three years old Spitz bitch in its first gestation was presented with history of dystocia since previous day evening. The signs of whelping started previous day afternoon and the first puppy delivered by 5.00 PM. Afterwards continuous straining was observed but the animal has not delivered the fetus. During admission, the bitch was dull and depressed and was having continuous

1Corresponding author : Email : drmpsamy@gmail.com