Mammary hyperplasia in a Main Coon queen
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Mammary fibroepithelial hyperplasia or fibroadenomatous hyperplasia (FAH) in cats is a benign generalized enlargement of one or more mammary glands reported in young queens during early pregnancy or pseudopregnancy, or in cats that have received an exogenous source of progesterone. A two-year old Main Coon queen that had been imported from Russia was presented to the Atlantic Veterinary College (AVC) due to a severe mammary gland enlargement. The queen had been exposed to a tomcat, and breeding. A typical after-mating reaction was reported to have occurred on several occasions. Mating occurred a month prior to presentation. On presentation, the queen was active, bright, alert and responsive, and physiological parameters were within normal range. The owner reported that the queen had a normal appetite and was still very playful. The chief complaint was the presence of severe mammary gland enlargement. Both right and left mammary glands, which included the most cranial thoracic and the most caudal abdominal/inguinal were swollen. However, both caudal mammary glands were the most affected and showed excessive enlargement with areas of purplish coloration, and areas suggestive of mild self-inflicted trauma. A presumptive diagnosis of FAH was made based on the reproductive history and examination findings. Transabdominal ultrasound revealed the queen to be non-pregnant. Palpation of the mammary gland did not elicit signs of pain and discomfort. The owner opted to not measure the queen’s blood concentration of progesterone, and agreed to have the queen started on therapy with aglepristone, a progesterone-receptor antagonist. The queen was treated with two injections of aglepristone 24 hours apart at 15 mg/kg subcutaneously, and seven days later two additional treatments were administered seven days apart at a dose of 10 mg/kg subcutaneously. No injection site reaction was noted. Before every treatment, the queen was revaluated for mentation, physiological parameters and reassessment of the mammary glands was performed using serial photographs to evaluate and document the degree of improvement reflected by the decrease of mammary gland size. Pain management, anti-inflammatory, and progesterone measurement were considered in this case, however due to financial constraints, clinical presentation and continuous improvement, progesterone receptor antagonist treatment alone was chosen. Three days after the second injection the cat had a remarkable improvement and continued to have the mammary gland decrease in size every week. Complete resolution of the mammary hyperplasia occurred by three weeks after the initial treatment. A lower dose of aglepristone once weekly was sufficient to resolve the FAH problem within three weeks in this case. Further studies are warranted on understanding the full pathogenesis of this disease.

Keywords: Mammary hyperplasia, fibroadenomatous hyperplasia, queen, aglepristone