

Surgical Approaches to Feline Mammary Tumor and Abdominal Mass

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INTRODUCTION

Mostly the feline mammary tumors are malignant tumors, the ratio or percentage of malignant mammary tumors is higher in cat (86%) as compared to dog (42%) and the histology of feline mammary tumors is closer to that in human breast cancer[1]. Adenocarcinomas are the second frequent tumor in cats, followed by mast cell tumor. Gastrointestinal stromal tumor (GIST) are thought to originate from the interstitial cells which from a network that coordinates peristalsis in gastrointestinal tract. These occur most frequently in the jejunum, caecum and colon[2]. Abdominal radiography image and histopathological examination helped to diagnose and the way to decide the treatment.

CASE REPORT

The study was conducted in Pradika Rabbit Pet Shop, Vet & Care, Surabaya. First, A 13-years old, 4.6 Kg, female household Ratu cat came, refer from other vet. The body condition score 4/5, had a 6-month history of abnormal massa in abdomen and always diet with kitten nutrition. The Ratu cat was unable to eat and drink in 3 days, The owner comment that Ratu is senior stage cat and thought pregnancy but more than 2-month haven't babies. So the owner decided to come the vet.

The first clinical examination with general checked up and palpation in abdomen had some hard mass in abdomen that like the bone. So suggest the Cat to get the examination test such radiography and hematological, but the owner only approved the radiography test.

DISCUSSION

The first radiography image indicated a large mass in the abdomen which location in out of uterine tract and intestines, and also any abnormality mass in mammary.



Figure 1. A- First medio-lateral radiography view of the Ratu cat showing dilatation of urinary vesica, radiopaque abnormality mass and same fecal in colon. B-Ventro-dorsal view dilatation of gastric and urinary vesica, also some abnormality mass like out of intestine.

Based on the radiography result, suggested Ratu to get the surgery to take the mammary tumor and abnormality mass. Also suggested to take the sample to have histopathology test. But the owner didn't approve the surgery examination. The term and conditions of Ratu was explained.

After 20 days, Ratu came back with second clinical examination showed nipple appear to be red and swollen. Abdominal palpation revealed some abnormality mass. Difficulty eating and loss of appetite rapid growth of abnormality cells. So we suggested to radiography and hematological tests. The Radiography of Ratu Cat were manually taken providing cranio-caudal and medio-lateral views.



Figure 2. A- Mediolateral preoperative radiographic view of the Ratu cat showing an abnormality mass in abdomen and mammary. B- Ventrodorsal preoperative view abdomen of the Ratu cat.

Moreover, the blood test revealed the condition still well to do the surgical removal mass with advice by two times surgical treatment. The aim to prevent contamination material tumor between abdomen and subcutaneous layer. Then, owner agree to surgery approach and give sign in surgery and opname forms.

According to blood test, the first surgery consist to remove abnormality mass in abdomen which suspect fetal mass. The laparotomy surgical has been to take some mass. The result of exploring laparotomy obtained some tumor mass and didn't contain fetal maceration or mummification. After the first surgery, the general condition was good include appetite with wet recovery feed and dry senior stage dry feed,

In next 14 days, the second surgery focused in mammary tumor with regional mastectomy procedure. And taken the sample for histopathology test.

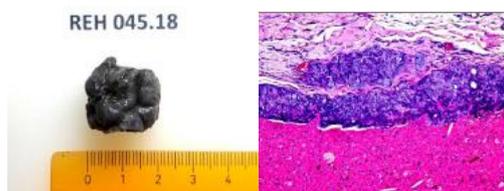


Figure 3. A-Macroscopic view a sample tissue size 2x2x1cm and weight 2 gram, irregular shape, multiple cavity contain black matrix. B-Microscopic view tumor tissue consists of proliferation cell epitel anaplastic and view tumor cell with cysta pattern.

The diagnoses of histopathology test was adenocarcinoma. It can occur in some higher mammals, including humans. These cancers may appear as glands and possess secretion properties. They may not have definite glandular appearance in some cases. While each gland may not be secreting the same substance, any secretory property, glandular form and malignant appearance is named adenocarcinoma[3].

The maintenance treatment of Ratu was consume immune system supplement and the nutrition only used senior stage dry feed daily.

To our knowledge, this is the first report of the occurrence of mammary tumor and abnormality mass suspect maceration in feline.

CONCLUSION

The main feedback is that to understand the surgical approach of feline mammary tumor and abdominal mass with the urgency step of the examination.

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