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Splenik Lenfomalı Bir Kedinin Klinik Değerlendirmesi ve Tedavi Süreci: Olgu Sunumu

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Öz

Splenik lenfoma kedilerde nadir görülen ve önemli bir neoplazmadır. Bu olgu sunumu, 15 gün boyunca artan hareketsizlik, kusma, sürekli uyku ve karın şişliği şikayetiyle kliniğimize gelen, travma öyküsü olmayan, 14 aylık, dişi, aşıları tam, British Shorthair bir kedidir. Klinik bulgular, laboratuvar sonuçları ve görüntüleme tekniklerinin desteğiyle kediye splenik lenfoma tanısı konularak tedaviye başlandı. Tedavi kapsamında öncelikle cerrahi splenektomi operasyonu gerçekleştirildi. Ameliyat sonrası dönemde demir takviyesi, B12 vitamini enjeksiyonları, NSAID'ler, opioidler ve geniş spektrumlu antibiyotikler kullanıldı. Ayrıca hastanın beslenme durumunun iyileştirilmesi amacıyla yüksek kalorili gıda ve takviye vitaminler verildi. Sonuç olarak; Başarılı bir splenektomi sonrasında hastanın genel sağlık durumunda belirgin bir iyileşme gözlenirken, tedavi sürecinde uygulanan destek tedavilerinin komplikasyonları önlemede ve iyileşmeyi hızlandırmada önemli rol oynadığı gözlendi. Kedilerde splenik lenfomanın tanısı ve etkin tedavisi için erken teşhis ve uygun cerrahi müdahaleler, veteriner hekimlerin bu hastaları kapsamlı bir şekilde değerlendirmesine ve doğru teşhis ve tedavi planı oluşturmasına bağlıdır.

Anahtar Kelimeler: British shorthair, dalak, kedi, lenfoma.

Clinical Evaluation and Treatment Process of a Cat with Splenic Lymphoma: Case Report

Abstract

Splenic lymphoma is a rare and important neoplasm in cats. This case report is a 14-month-old, female, fully vaccinated, British Short hair cat with no history of trauma that came to our clinic with complaints of increasing inactivity, vomiting, constant sleeping and abdominal swelling for 15 days. With the support of clinical findings, laboratory results and imaging techniques, the cat was diagnosed with splenic lymphoma and treatment was started. As part of the treatment, firstly a surgical splenectomy operation was performed. In the post-operative period, iron supplements, Vitamin B12 injections, NSAIDs, opioids, and broad-spectrum antibiotics were used. In addition, high-calorie food and supplementary vitamins were given in order to improve the patient's nutritional status. As a result; after a successful splenectomy, a significant improvement was observed in the patient's general health status, and it was observed that the supportive treatments applied during the treatment process played an important role in preventing complications and accelerating recovery. Early diagnosis and appropriate surgical interventions for the diagnosis and effective treatment of splenic lymphoma in cats depend on veterinarians performing a comprehensive evaluation of these patients and creating an accurate diagnosis and treatment plan.

Keywords: British shorthair, cat, lymphoma, spleen.

Introduction

Lymphoma, when evaluated with all its subtypes, is one of the most common malignant tumors identified in cats, and digestive lymphoma is the most common form of the disease (Ettinger 2003). However, Splenic lymphoma is an important neoplasm rarely encountered in cats. Lymphoma is defined as a malignant proliferation of lymphocytes and can affect various organs. Splenic lymphoma is a type of lymphoma that specifically affects the spleen and usually occurs as part of a systemic disease.

The prevalence of lymphoma in cats may vary depending on factors such as age, breed and gender. In general, lymphoma is more common in older cats, but it has been reported that it can occur at any age. In addition, genetic predisposition has been observed in certain breeds such as the British Shorthair, but the exact causes are not fully understood. Splenic lymphoma usually presents with nonspecific symptoms (immobility, lethargy, difficulty breathing, weight loss due to loss of appetite, vomiting, diarrhea, a mass felt by palpation in the abdomen, anemia).

These symptoms may vary depending on the degree of progression of the disease and the presence of metastasis. In the diagnosis of splenic lymphoma; physical examination (detection of splenic enlargement by palpation in the abdominal region), laboratory tests (complete blood count (CBC), biochemical panel, etc. are performed. As a result of these tests, anemia, hypoproteinemia, and elevated liver enzymes may be observed. Imaging techniques (Radiography, Ultrasonography) and biopsy (fine needle aspiration biopsy) are used in the diagnosis.

Depending on the stage of the disease and the general health status of the cat, surgery, chemotherapy, and supportive treatment options can be applied for treatment in splenic lymphoma. This case report aims to evaluate the clinical and treatment process of a cat diagnosed with splenic lymphoma in detail and to contribute positively to the literature.

Case Presentation

On 25.04.2024; A 15-month-old, female, fully vaccinated, British Short Hair breed cat with no history of trauma was brought to our clinic with complaints of increasing inactivity, vomiting, constant sleeping and abdominal swelling for 15 days. In the patient's first physical examination, its general condition was evaluated as lethargic. Its body condition score was determined as 4/9. A significant swelling and hardness were detected in the abdominal region during palpation. The mucous membranes were pale and the capillary refill time was prolonged (>2 seconds), which was evaluated as compatible with anemia. Systemic physical examination revealed no significant abnormalities in other organs.

Biochemical analyses revealed anemia, mild thrombocytopenia, a slight increase in GLOB levels, and a significant increase in fSAA levels (Table 1). X-rays imaging performed for imaging revealed enlargement in the abdominal region, especially in the spleen (Figure 1).

Table 1. Biochemical changes before and after surgery

Parameters	Pre-operative	Post-operative
WBC (10^9/L)	5.56	17.93
RBC (10^{12}/L)	2.80	4.04
HGB (g/L)	53	69
HCT (%)	18.0	22.9
MCV (fL)	64.1	56.6
MCH (pg)	18.9	17
MCHC (g/L)	295	300
PLT (10^9/L)	26	265
fSAA (ug/mL)	113.4	5
GLO (g/L)	58.4	35.6
TP (g/L)	86.1	78,6
ALB (g/L)	27.7	34.1
ALT (U/L)	28	72
AST (U/L)	10	28
GGT (U/L)	0.9	1,3
BUN (mmol/L)	8.1	9.47
CRE (umol/L)	66	76
GLU (mmol/L)	5.11	6.9

Abbreviations: WBC (White Blood Count), RBC (Red Blood Cells), HGB (Hemoglobin), HCT (Hematocrit), MCV (Mean Corpuscular Volume), MCH (Mean Corpuscular Hemoglobin), MCHC (Mean Corpuscular Hemoglobin Concentration), PLT (Platelets), fSAA (Cat Serum Amyloid A Protein), GLOB (Globulin), TP (Total Protein), ALB (Albumin), ALT (Alanine Aminotransferase), AST (Aspartate Aminotransferase), GGT (Gamma Glutamyl Transferase), BUN (Urea), CRE (Creatine), GLU (Glucose).

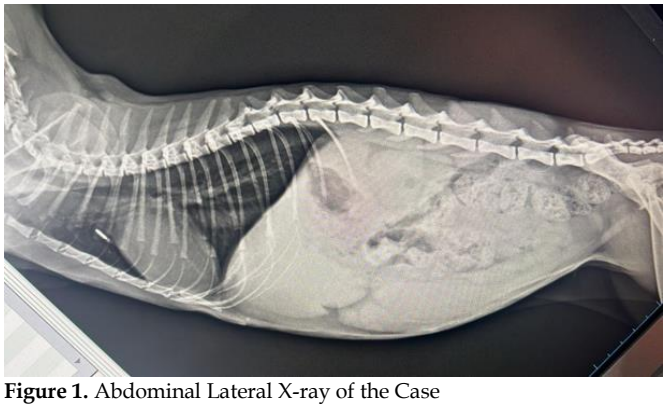

Figure 1. Abdominal Lateral X-ray of the Case

Ultrasonography revealed splenomegaly and a heterogeneous tissue structure in the spleen (Figure 2). No other organ involvement was observed in the evaluation of other organs in the abdominal cavity with suspicion of metastasis. With the support of clinical findings, laboratory results, and imaging techniques, the cat was diagnosed with splenic lymphoma and treatment was initiated.

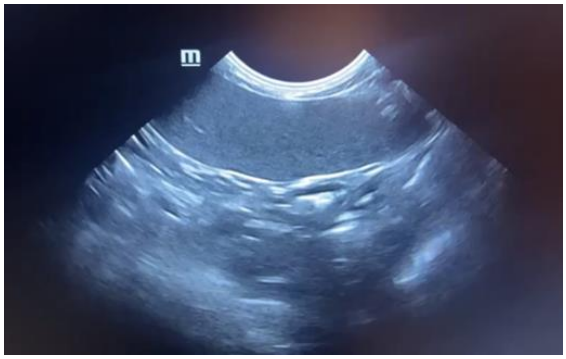

Figure 2. Abdominal USG image of the spleen of the case.

As part of the treatment, a surgical splenectomy was performed first. Postoperatively, iron supplements, Vitamin B12 injections, NSAIDs, opioids, and broad-spectrum antibiotics were administered.

Figure 3. Postoperative spleen specimen image of the case

In addition, high-calorie food and supplementary vitamins were given to increase appetite and improve nutritional status. As a result of the splenectomy operation, a 300-gram, 32-cm-long spleen was removed from the patient and sent for pathological examination for definitive diagnosis (Figure 3). The diagnosis of splenic lymphoma was confirmed as a result of the histopathological examination conducted by Kastamonu University Veterinary Pathology Diagnosis and Analysis Laboratory with report number N24/2066.

Discussion and Conclusion

Early diagnosis and rapid intervention in the treatment of malignant neoplasms such as lymphoma positively affect the prognosis. This case report demonstrates the importance of veterinarians considering splenic lymphoma in patients presenting with similar clinical symptoms. In complete blood counts of cats and dogs with lymphoma, nonregenerative anemia and leukocytosis are frequently encountered abnormalities (Gavazza, Lubas et al. 2008, Günay Uçmak, Koenhemsi et al. 2021, Alan, Bilgin et al. 2022).

Studies on cats and dogs with lymphoma report a decrease in RBC, MCHC, HCT, HGB, WBC, and MCH levels(Alan, Bilgin et al. 2022, Phillips, Naskou et al. 2022). In parallel with the literature, our study confirmed the presence of anemia by observing a decrease in red blood cel (RBC), Mean corpuscular hemoglobin concentration (MCHC), hematocrit test (HCT), hemoglobin test (HGB), white blood cells (WBCs), and mean corpuscular hemoglobin (MCH) levels. Thrombocytopenia has also been reported in cats and dogs with lymphoma (Grindem, Breitschwerdt et al. 1994, Graff, Spangler et al. 2014). In our study, similar to the literature, a mild thrombocytopenia was detected in our patient cat.

As a result; After the successful splenectomy performed on the patient, a significant improvement in general health status was observed. It has been observed that supportive treatments applied during the treatment process play an important role in preventing complications and accelerating recovery. Emphasizing the importance of early diagnosis and appropriate intervention in order to diagnose and effectively treat splenic lymphoma in cats, it is thought to be vital for veterinarians to make a comprehensive assessment and create a correct diagnosis and treatment plan in similar cases.

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