



Diagnostic Exercise

From The Davis-Thompson Foundation*

Case #: **183** Month: **February** Year: **2022**

Question sheet

Contributors: Igor R. Santos¹, DVM, MS candidate; Franciéli A. Molossi¹, DVM, MS, PhD candidate; Tainah P. Dal Pont¹, DVM, Pathology resident; Marcele B. Bandinelli¹, DVM, MS, PhD; Cláudio W. Canal², DVM, MS, PhD; and Saulo P. Pavarini¹, DVM, MS, PhD.

¹Setor de Patologia Veterinária, Faculdade de Medicina Veterinária, Universidade Federal do Rio Grande do Sul (UFRGS), Porto Alegre, RS, Brazil. Corresponding author: igor.ozn@gmail.com ²Laboratório de Virologia Veterinária, Faculdade de Medicina Veterinária, UFRGS, Porto Alegre, RS, Brazil.

Clinical History: A 7-month-old female domestic shorthair cat was referred to a private veterinary hospital for a history of anorexia and prostration of unknown duration. The cat had no history of vaccination. Physical examination revealed diarrhea and pyrexia (rectal temperature of 40.7°C [105.2°F]). Results of complete blood count included evidence of thrombocytopenia (146×10^9 platelets/L; reference range [RR], 230 to 680×10^9 platelets/L) and leukopenia (1.3×10^9 WBCs/L; RR, 7.7 to 18.6×10^9 WBCs/L) characterized by lymphopenia (0.1×10^9 lymphocytes/L; RR, 1.3 to 7.4×10^9 lymphocytes/L) and neutropenia (1×10^9 neutrophils/L; RR, 3.1 to 12.5×10^9 neutrophils/L). Tests of circulant feline leukemia virus (FeLV) antigen and anti-feline immunodeficiency virus (FIV) antibody were negative. No significant abnormalities were observed in the serum biochemical profile, thoracic radiography, and abdominal ultrasonography. The cat was euthanized due to a poor prognosis and submitted for postmortem examination

Gross Findings: The cat was in poor body condition and markedly pale mucous membranes. The serosa of the small intestine, especially in segmental areas of the jejunum, was reddened. On the cut surface, the intestinal wall presented thickening and hose-like turgidity. Contents of the small intestine were yellow, scant, and watery. In addition, the mucosal surface was diffusely covered by strands of yellow fibrillar content, and the Peyer's patches were depressed. Other significant gross lesions were prominent mesenteric lymph nodes.

Gross and Histological Images:



Figure 1



Figure 2

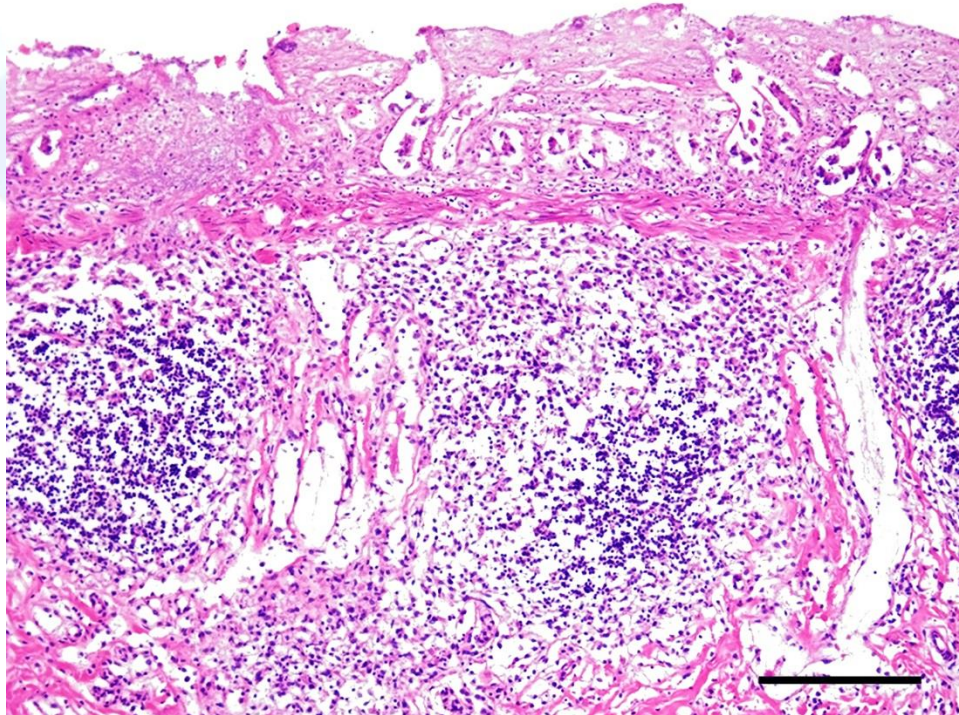


Figure 3

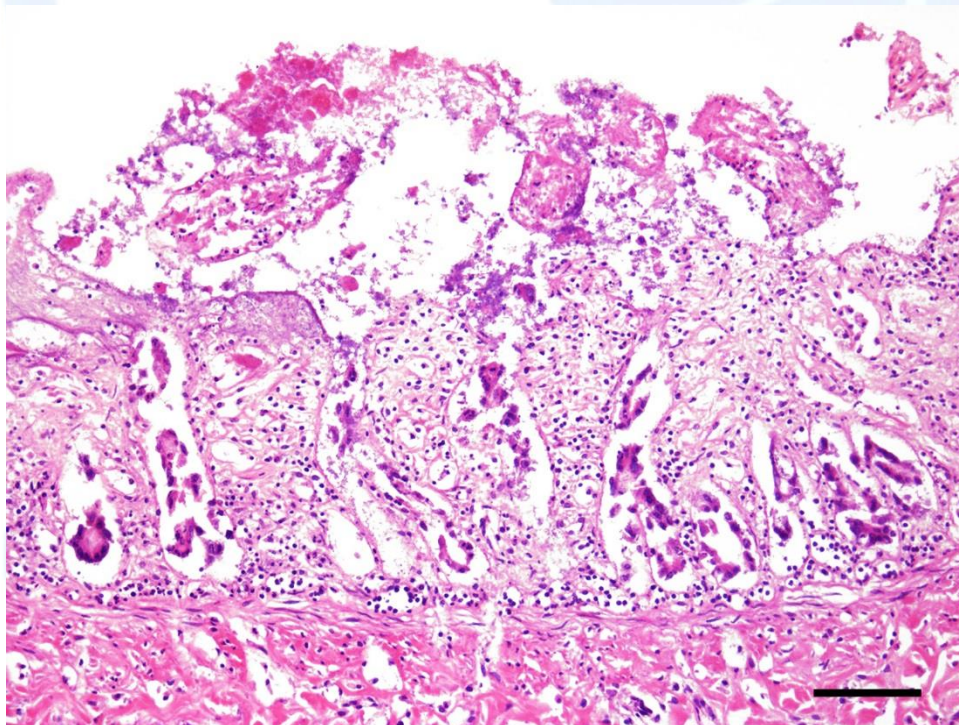


Figure 4

Follow-up questions:

- *Histological description*
- *Morphologic diagnosis*
- *Possible etiological agent(s)*
- *Name of the condition*

*The Diagnostic Exercises are an initiative of the **Latin Comparative Pathology Group (LCPG)**, the Latin American subdivision of The Davis-Thompson Foundation. These exercises are contributed by members and non-members from any country of residence. Consider submitting an exercise! A final document containing this material with answers and a brief discussion will be posted on the CL Davis website (<https://davisthompsonfoundation.org/diagnostic-exercise/>).

Associate Editor for this Diagnostic Exercise: Saulo Pavarini
Editor-in-chief: Claudio Barros