Diagnostic Exercise
From The Davis-Thompson Foundation*

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Contributors: Guillermo Rimoldi, DVM, DACVP, Douglas Smith DVM, Joe Hill DVM, PhD, DACVP. Clemson Veterinary Diagnostic Center, Clemson University, Columbia, SC.

Clinical History: A litter of eight 2-week-old Pit Bull mix puppies arrived at a shelter facility, in apparently good health and body condition. Approximately 4 weeks after arrival, 5 puppies developed clinical signs including lethargy, anorexia and diarrhea. Parvovirus infection was suspected but fecal samples from the animals tested negative (IDEXX SNAP Parvo test). Treatment with Cefazolin and Metronidazole and supportive parenteral care was unsuccessful and the puppies died or were euthanized due to poor prognosis. One of the 6-week old puppies was submitted for necropsy and diagnostic workup.

Laboratory Findings: Fecal samples negative for Parvovirus, no other laboratory tests performed.

Necropsy Findings: The puppy was severely underweight, with minimal body fat reserves. Mucous membranes, including gingiva, conjunctiva and tongue, as well as all internal organs were markedly pale, and the blood was very thin. The thymus was shrunken, and the lungs were congested. The liver was pale green-yellow and contained multiple 1 to 2 mm diameter, white to creamy foci. There was no ingesta in the stomach, the small intestine contained scant, thick, white mucus, and the colon contained small amount of blood-tinged feces. Intestinal walls were thin. Fecal flotation revealed no parasite or coccidia ova.
Microscopic Images:

Follow-up questions: 1) Histological description, 2) Morphologic diagnosis, 3) Cause. 4) Name the disease, 5) Immuno/Histochemical findings.
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 (http://www.cldavis.org/diagnostic_exercises.html).

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