



Diagnostic Exercise

From The Davis-Thompson Foundation*

Question Sheet

Case #: **187**; Month: **April**; Year: **2022**

Contributors: Christina Middendorf, Veterinary student; Fabio Rosa, DVM, MS, PhD, DACVP. Long Island University College of Veterinary Medicine, NY.

Clinical History:

The owner brought a 9-year-old male neutered Boxer dog to a veterinary clinic with a complaint of acute onset of vomiting. The attending veterinarian sedated the dog with butorphanol to perform abdominal radiographs. The dog collapsed and died upon discharge, even though CPR was performed for more than 20 minutes after collapse.

Necropsy Findings: The patient had a good body level of nutrition. At the heart base near the aortic arch, there was a 5.0x4.0x3.0 cm, multilobulated, pale brown, firm mass (Figure 1). The mass was partially attached to the tunica adventitia and compressed the lumen of the aorta, adjacent arteries, and esophagus. Multifocal, white, smooth nodules thickened the cusps of the mitral valve (Figure 2). Both atria were mildly dilated. The left ventricular free wall of the heart was mildly thickened with a 4:1 left:right ventricular free wall ratio. The lungs were heavy, wet, and diffusely dark red.

Gross Images:

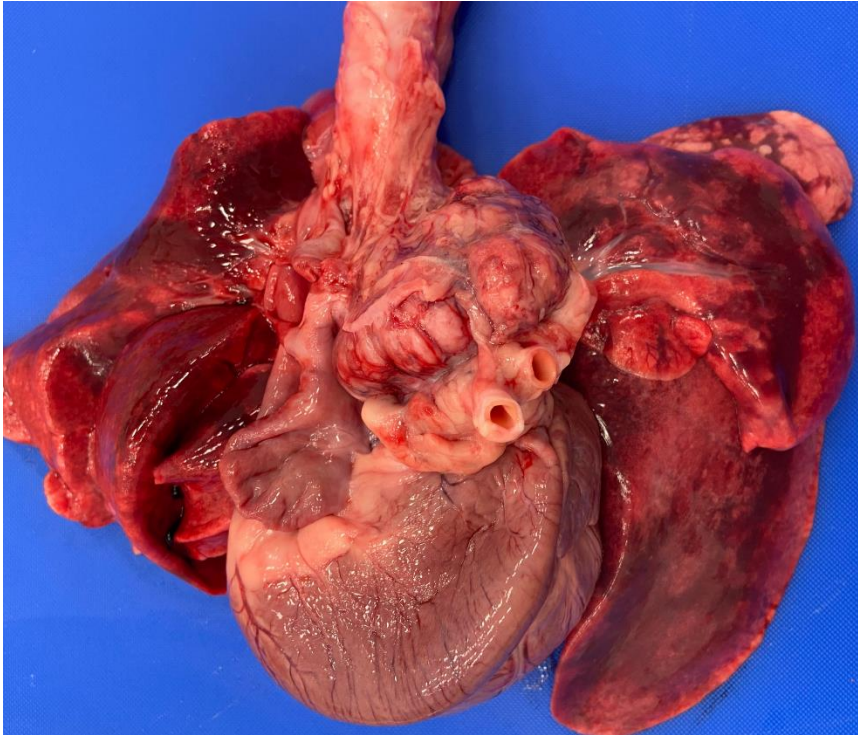


Figure 1.

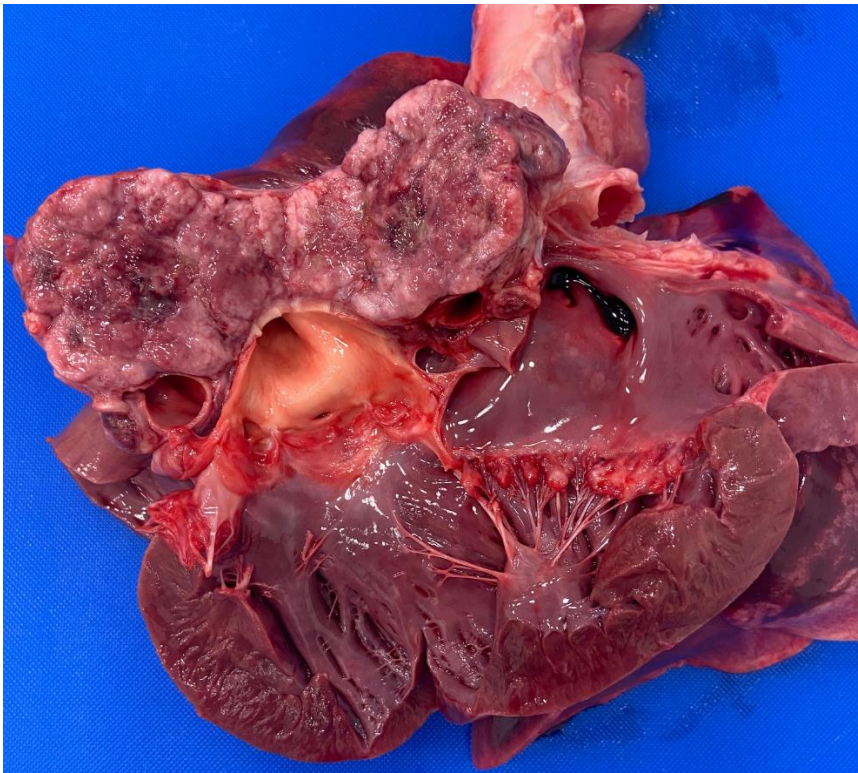


Figure 2.

Microscopic Images:

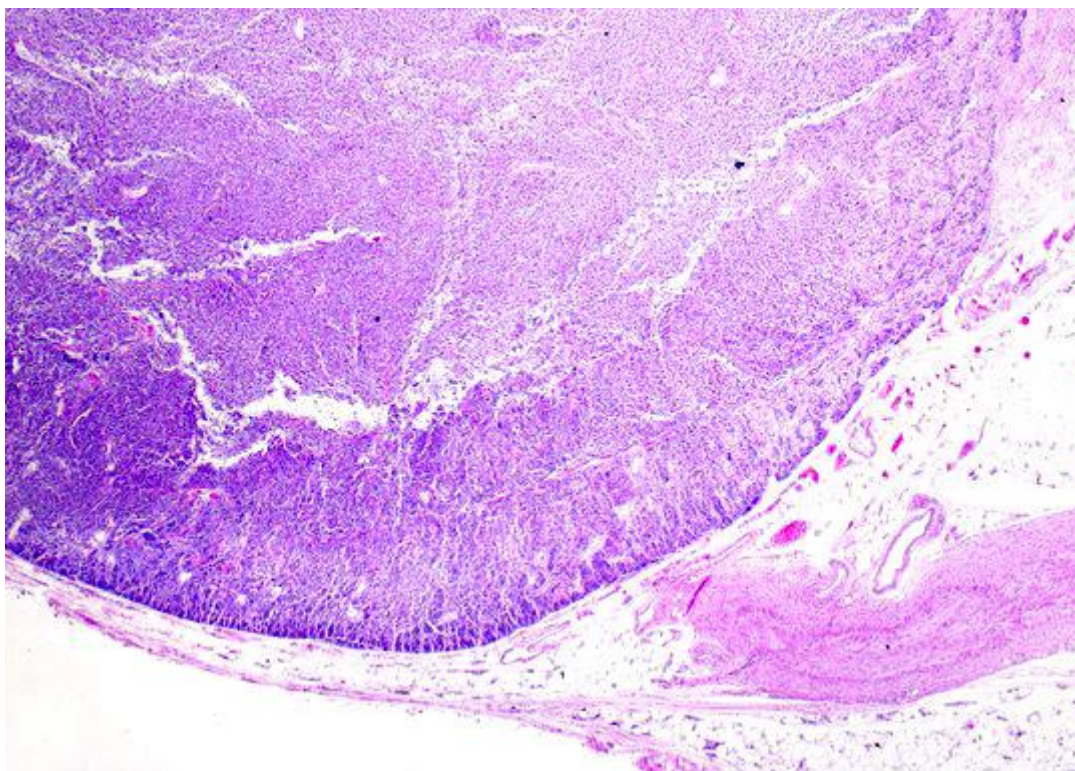


Figure 3.

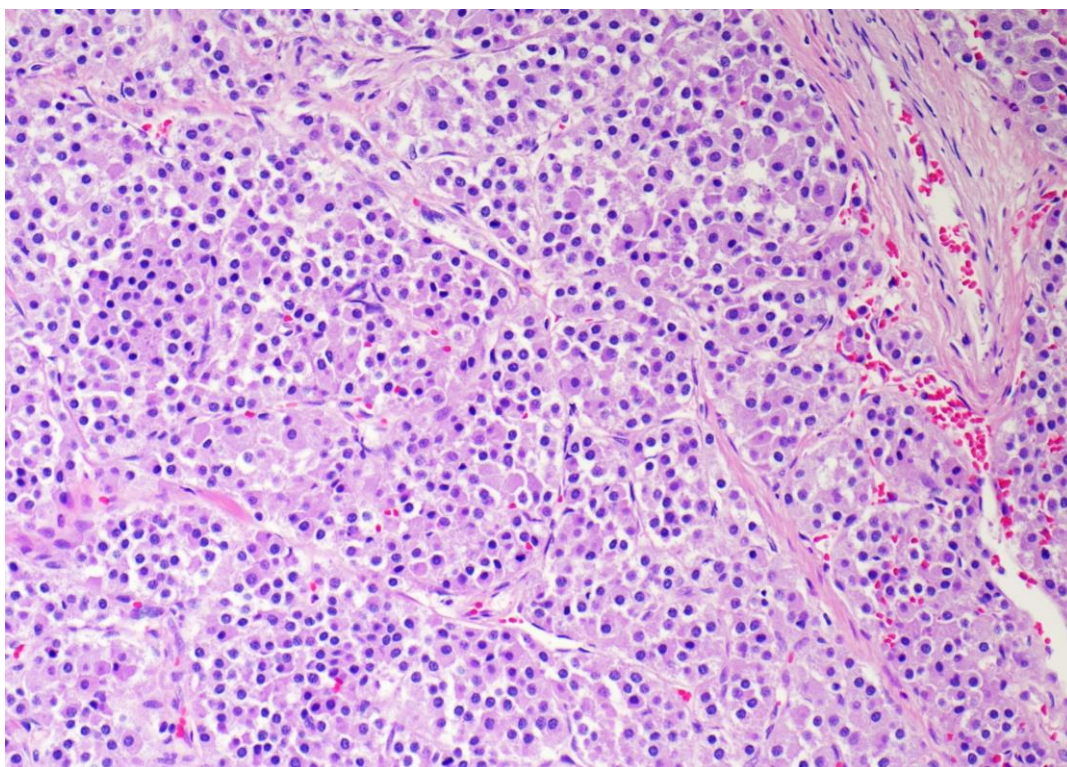


Figure 4.

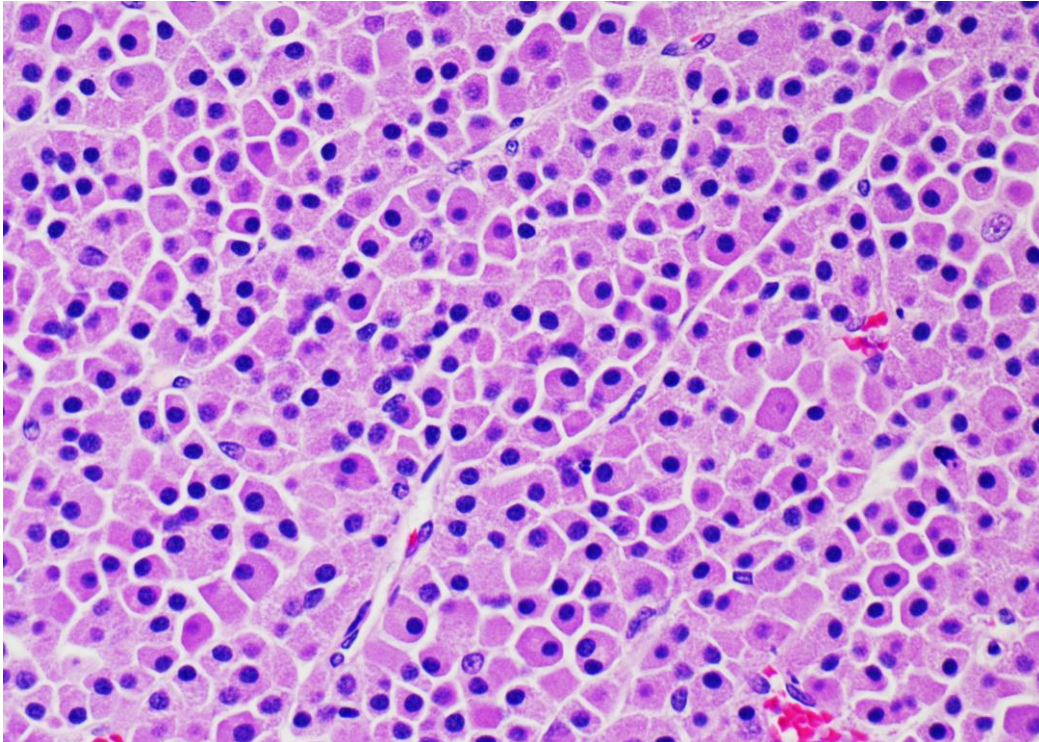


Figure 5.

Follow-Up Questions:

1. *Provide three macroscopic morphologic diagnosis.*
2. *Provide a histologic description of the mass.*
3. *Provide four differential diagnoses for heart base masses.*

*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: Ingeborg Langohr

Editor-in-chief: Claudio Barros