



Diagnostic Exercise

From The Davis-Thompson Foundation*

Case #: **220**; Month: **September**; Year: **2023**
Question Sheet

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Clinical History: In a flock of approximately 180 peafowl, several were showing signs of a possible upper respiratory infection and had mouth gaping per the owner. They were also reported to be lethargic, to have excessive phlegm or mucus in the mouths, had trouble swallowing, and were losing weight. They were being treated with Baytril and Metronidazole with no improvement. Approximately eight had died. Five peafowl were submitted for necropsy and diagnostic work-up, including three peahens and two peacocks.

Gross Findings: In all five peafowl, the oral cavity contained excess mucus. The oral, crop, and esophageal mucosa had disseminated, smooth, raised, round nodules with a central pore. The proximal esophagus was the most severely affected site. The nodules measured on average ~2 mm in diameter. Upon squeezing some of these nodules, pale tan, caseous material could be expressed. In all five peafowl, the heart was diffusely coated by abundant white, chalky, urate material. Similar though lesser amounts of urates partially coated the surface of the liver and other coelomic membranes. In one peahen, the ureters were multifocally distended and contained consolidated accumulations of tan to pale yellow, caseous material. The kidneys in this bird were pale.

Gross and Histological Images:



Figure 1



Figure 2



Figure 3



Figure 4

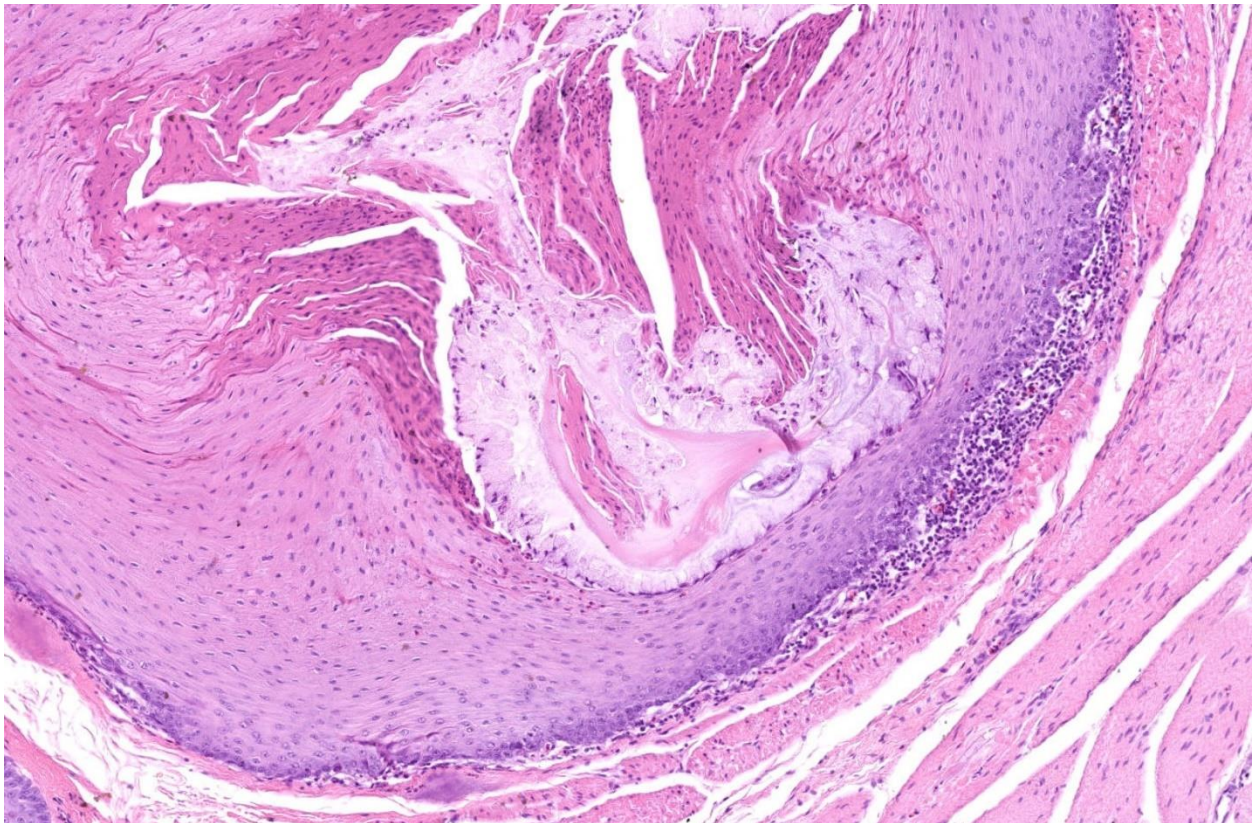


Figure 5

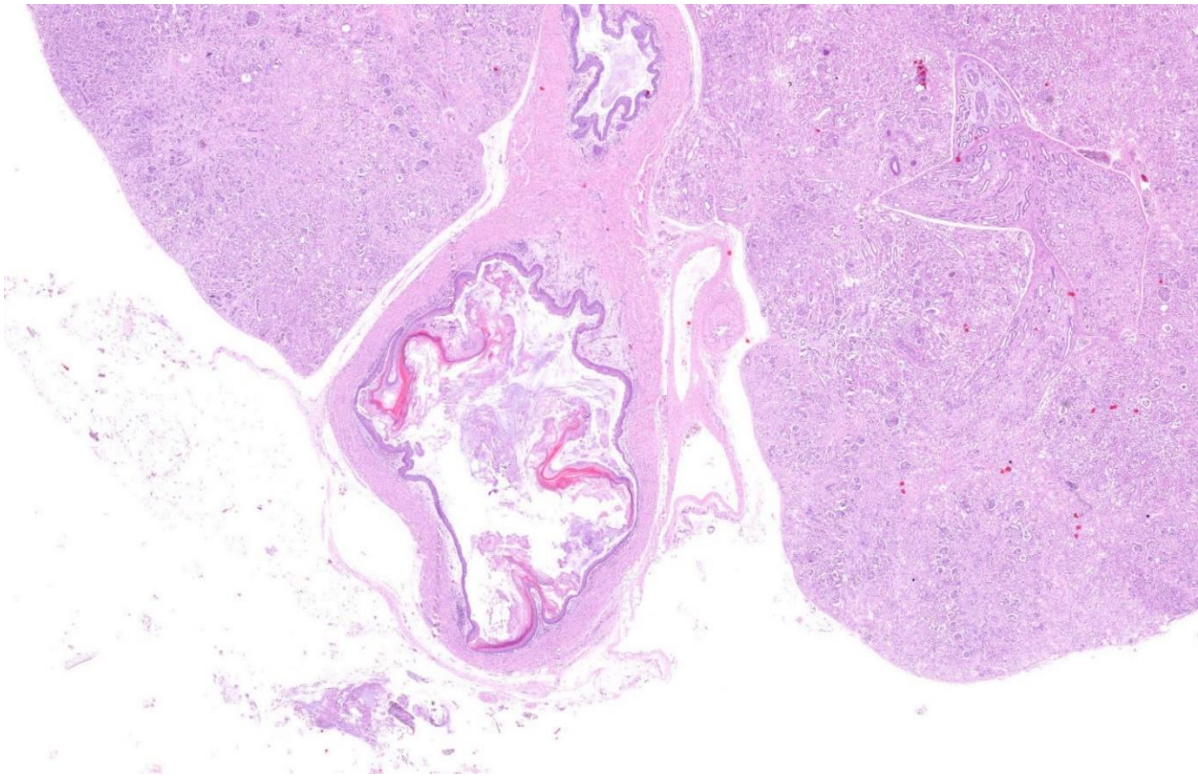


Figure 6

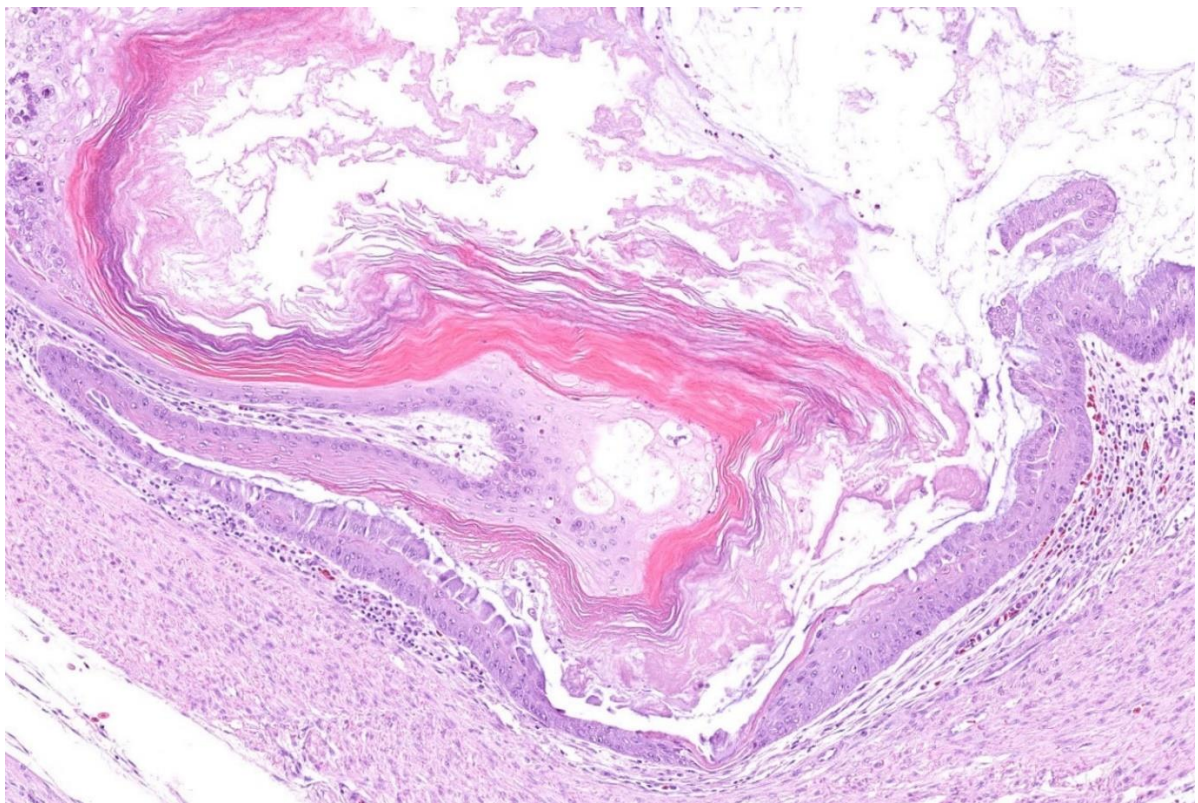


Figure 7

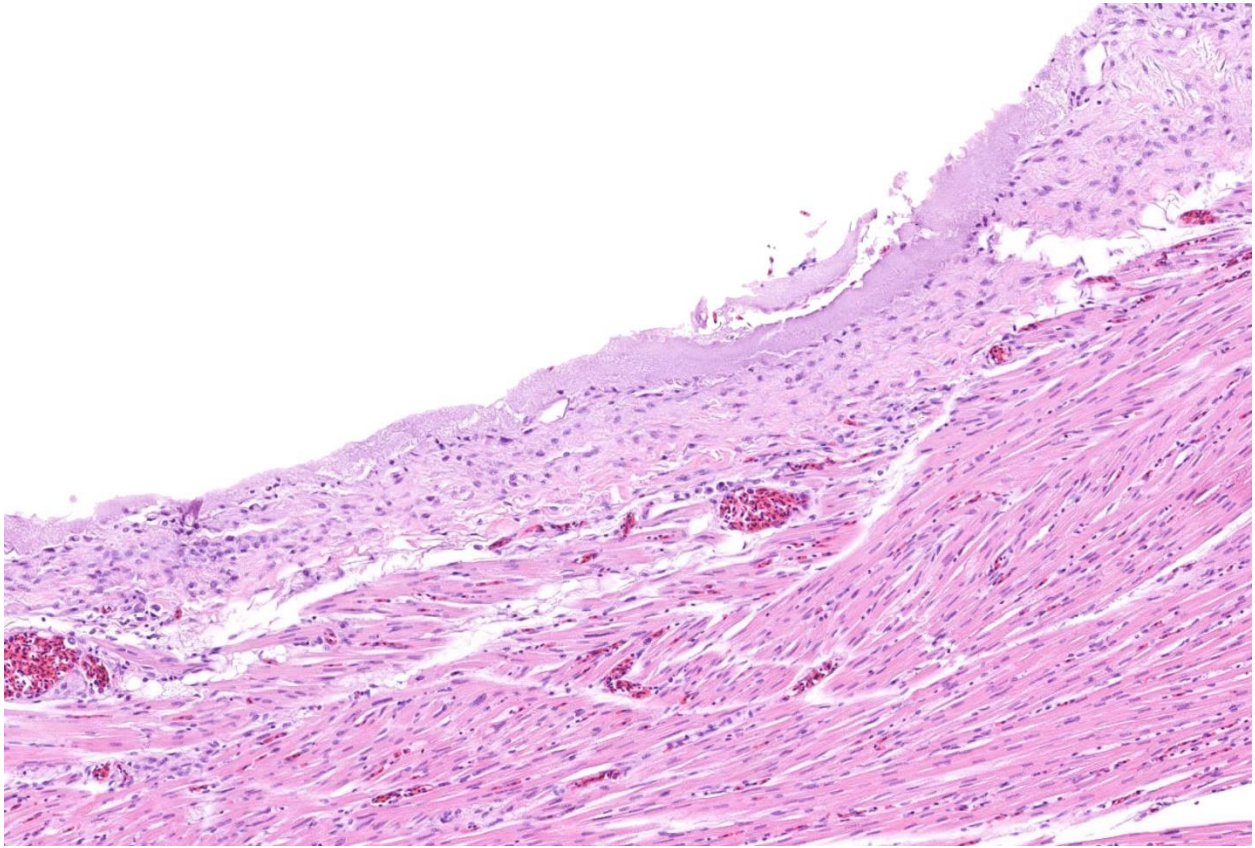


Figure 8

Follow-up questions:

- *Morphologic diagnoses*
- *Cause*
- *Pathogenesis*

*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/>).

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