

# Diagnostic Exercise

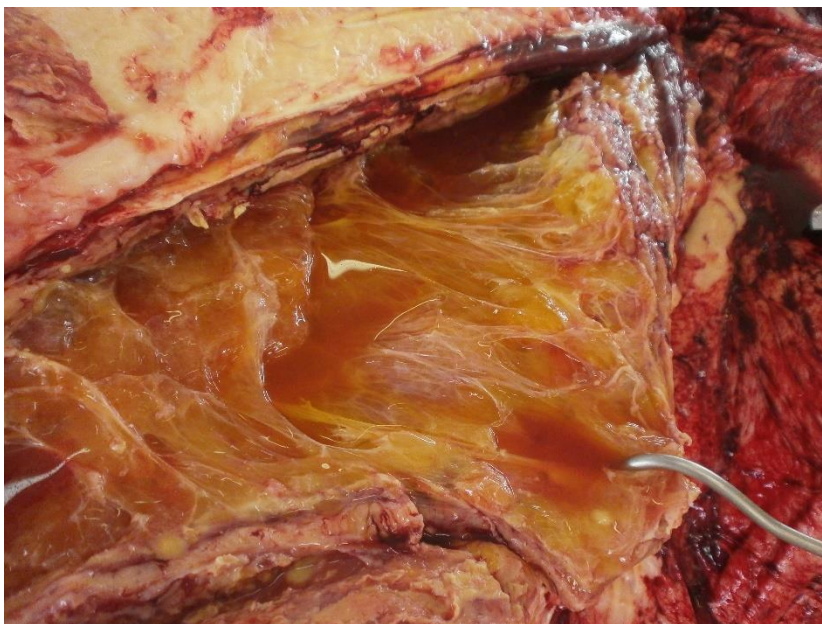
## From The Davis-Thompson Foundation\*

Case #: **176**; Month: **November**; Year: **2021**  
Question Sheet

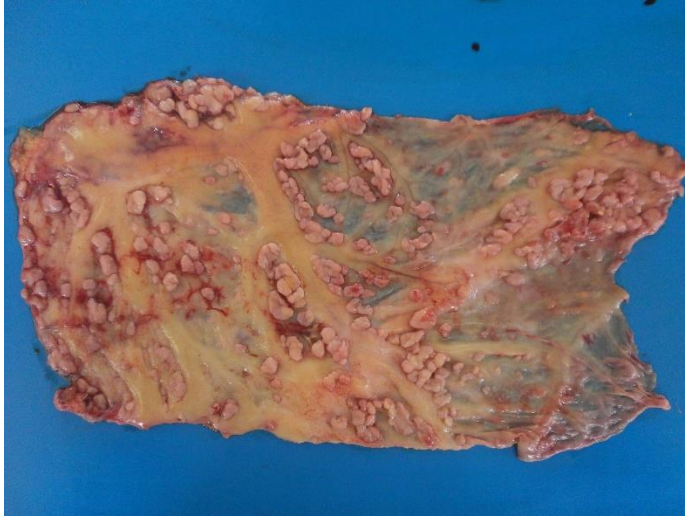
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**Clinical History:** An 11-year-old, Nelore cow (*Bos indicus*) presented apathy, anorexia, and dry feces. The cow went through follicular aspiration 18 previous to death. Abdominocentesis revealed 15ml of turbid yellow foul-smelling fluid, which yielded the following lab results: protein: 4.7 g/dL (Ref. 1.2-6.3 g/dL), 2.300/ $\mu$ L of nucleated cell count (Ref. 2.000-5.000 cells/ $\mu$ L)(Dirksen, 1993) with approximately 85% of neutrophils plus mesothelial cells and bacteria. Due to poor prognosis, the owner opted for euthanasia.

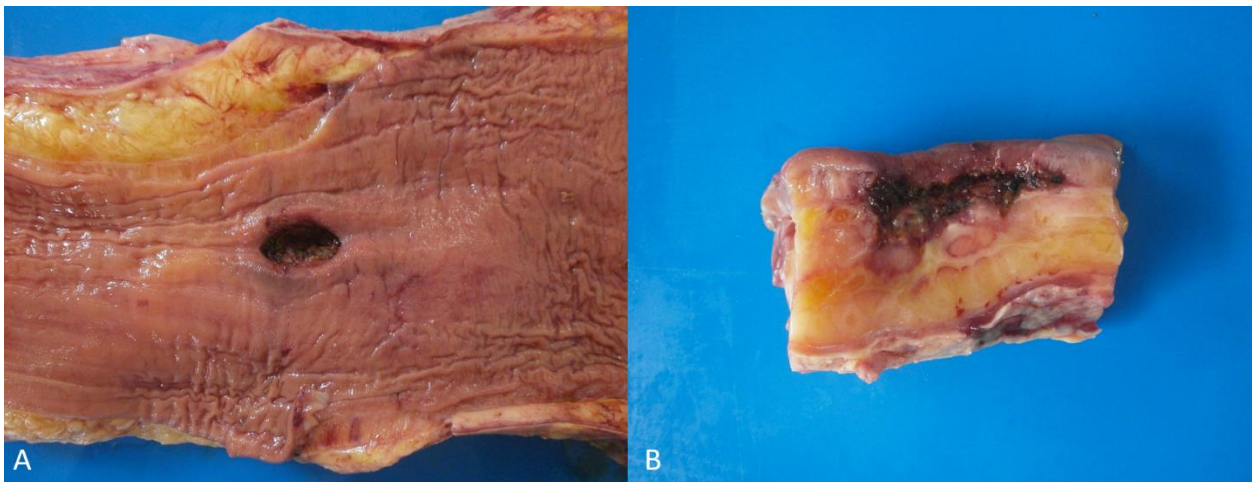
**Necropsy findings:** There was abundant fibrinous exudate (Figure 1) in the abdominal cavity, predominantly at the ventral portion. This exudate was focally extensively adhered on parietal peritoneum, hepatic capsule, and serosa of the gastrointestinal serosa, with a moderate amount of free blood-tinged fluid. Throughout the surface of the omentum there was multifocal to coalescent red and firm, well-demarcated, digitiform to multilobulated nodules. The size of the nodules was 1-5cm in diameter, and their cut surface was homogeneously red. In the rectal mucosa, there was a well-defined 5x3cm focal depression with slightly elevated borders. The longitudinal cut section revealed a focally extensive transmural fissure.



**Figure 1.** Abdominal cavity. Abundant fibrinous exudate



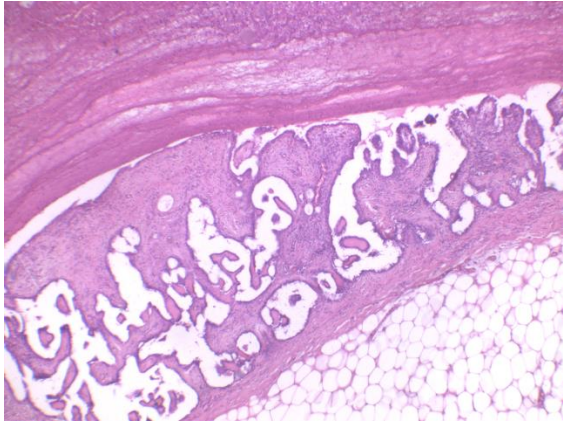
**Figure 2.** Omentum. Throughout the surface of the omentum there was multifocal to coalescent red and firm, well-demarcated, digitiform to multilobulated nodules.



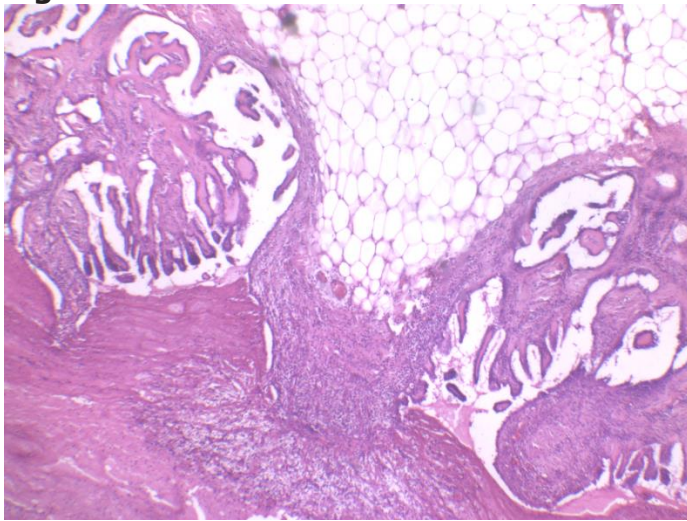
**Figure 3.** Rectal mucosa. **A.** There is a well-defined 5x3cm focal depression with slightly elevated borders. **B.** The longitudinal cut section revealed a focally extensive transmural fissure with adherence of fatty tissue in the serosal aspect (bottom)

### Histopathology (peritoneum)

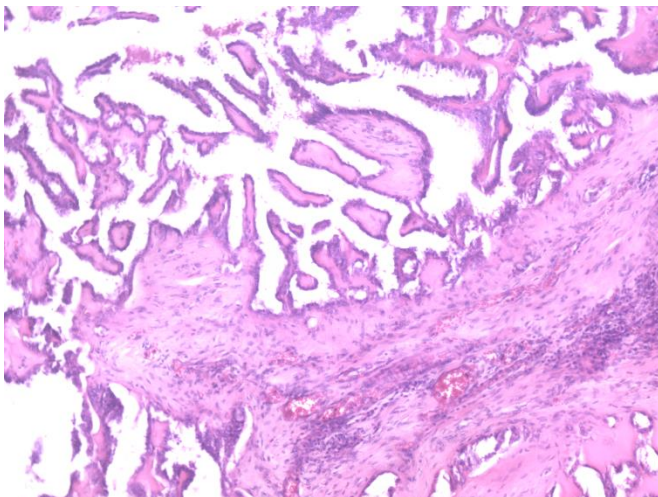




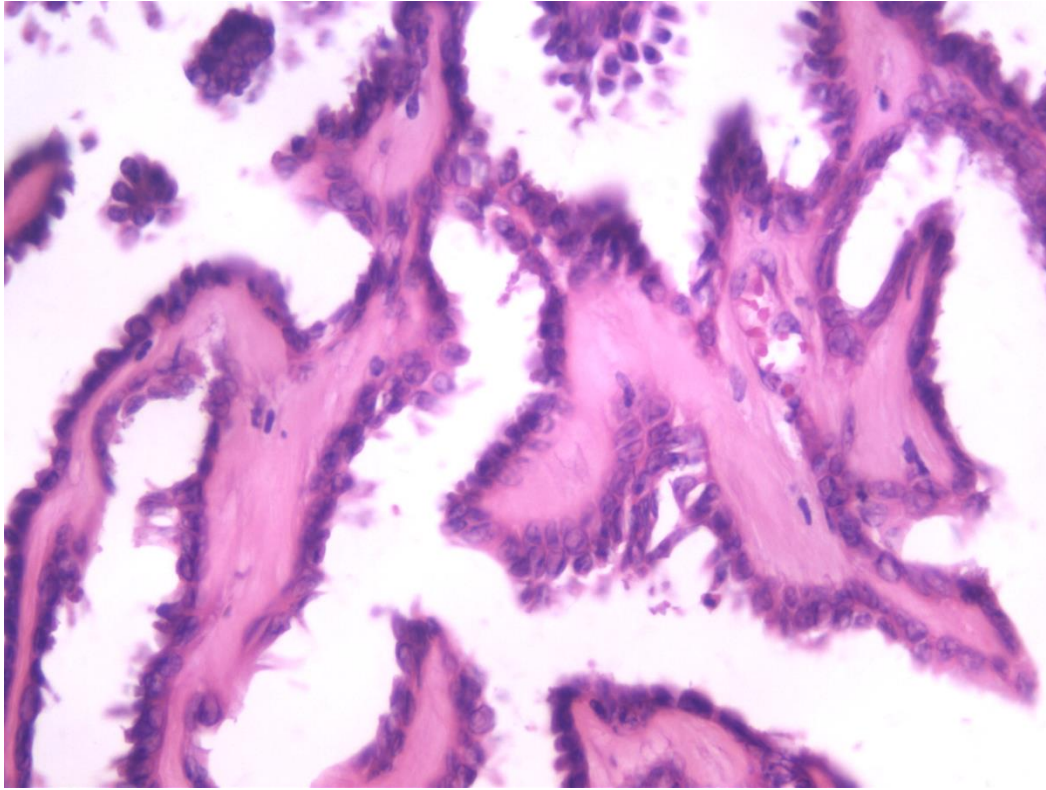
**Figure 4.**



**Figure 5.**



**Figure 6.**



**Figure 7.** 100x. H&E.

**Follow-Up Questions:**

- 1) *Give three morphologic diagnosis*
- 3) *Give three macroscopic differential diagnosis*

\*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](http://www.cldavis.org/diagnostic_exercises.html)).

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