



Diagnostic Exercise

From The Davis-Thompson Foundation*

Case #: **179** Month: **December** Year: **2021**

Question Sheet

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Clinical History: This heifer came from a group of cattle with chronic diarrhea and emaciation. Some of the animals also had neurological signs, predominantly aggressiveness. Two animals had already died spontaneously after worsening of the clinical signs. The farmer had kept these animals on native pasture during the winter, and he reported that the vegetation had been scarce in that period. On clinical exam, the animals were in bad body condition, with some presenting dyspnea, subcutaneous edema mainly affecting the dewlap, and abdominal distention.

Necropsy Findings: There was marked subcutaneous edema, and the abdominal and thoracic cavities were filled with abundant translucent and slightly yellow effusion (Fig. 1). Additionally, there was mesenteric edema, and the liver was reduced in size, with a diffusely grayish capsular surface and firm consistency (Fig. 2). Histologically, multiple chronic alterations were seen in the liver (Figs. 3-5).

Gross and Microscopic Images:



Figure 1



Figure 2

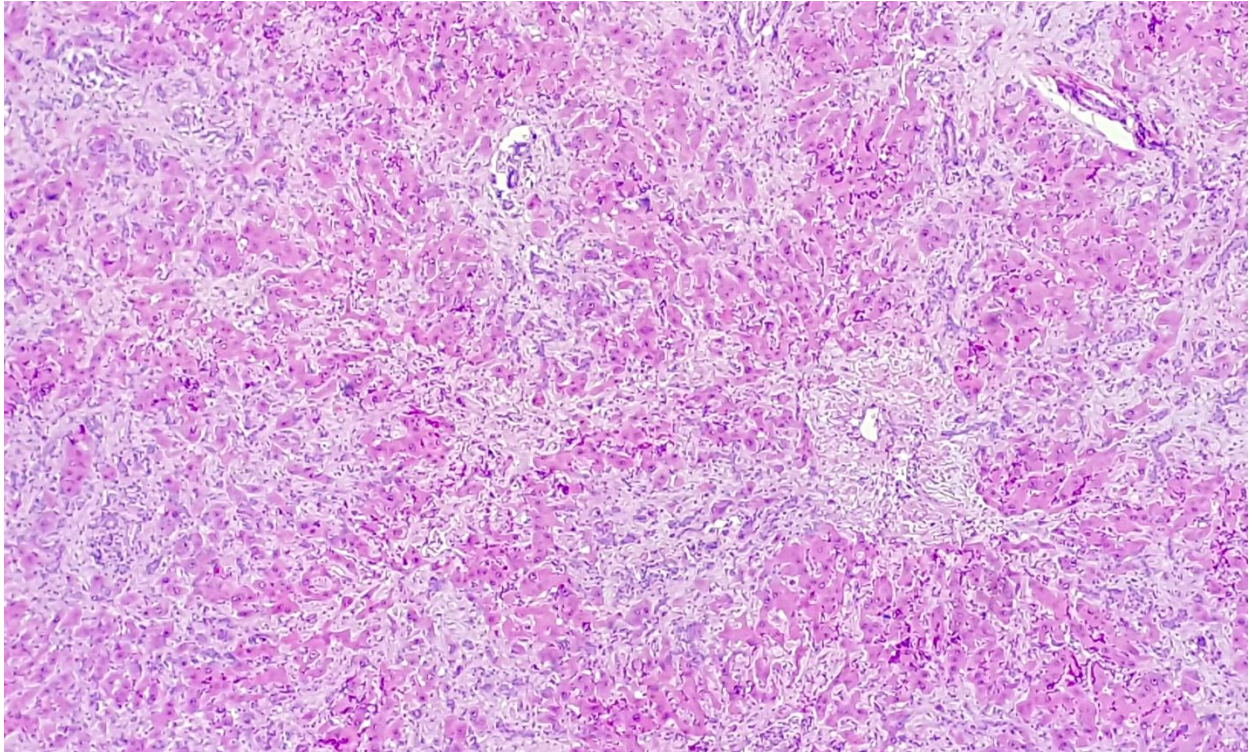


Figure 3

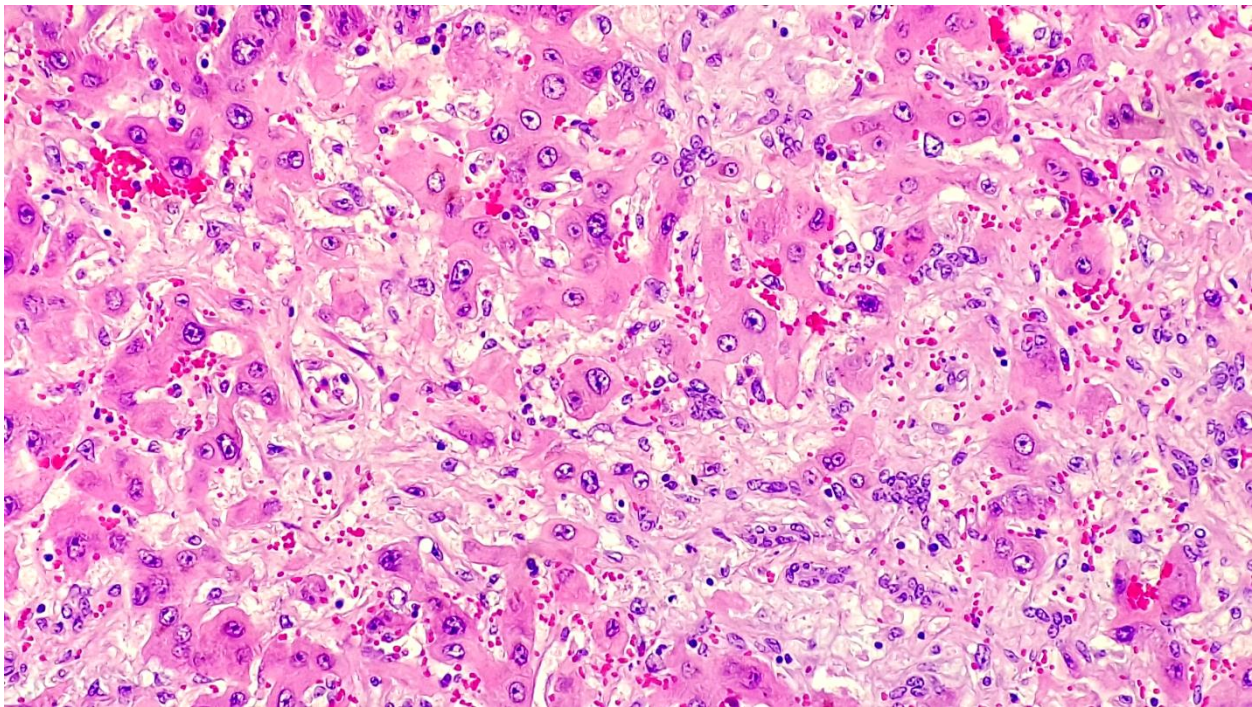


Figure 4

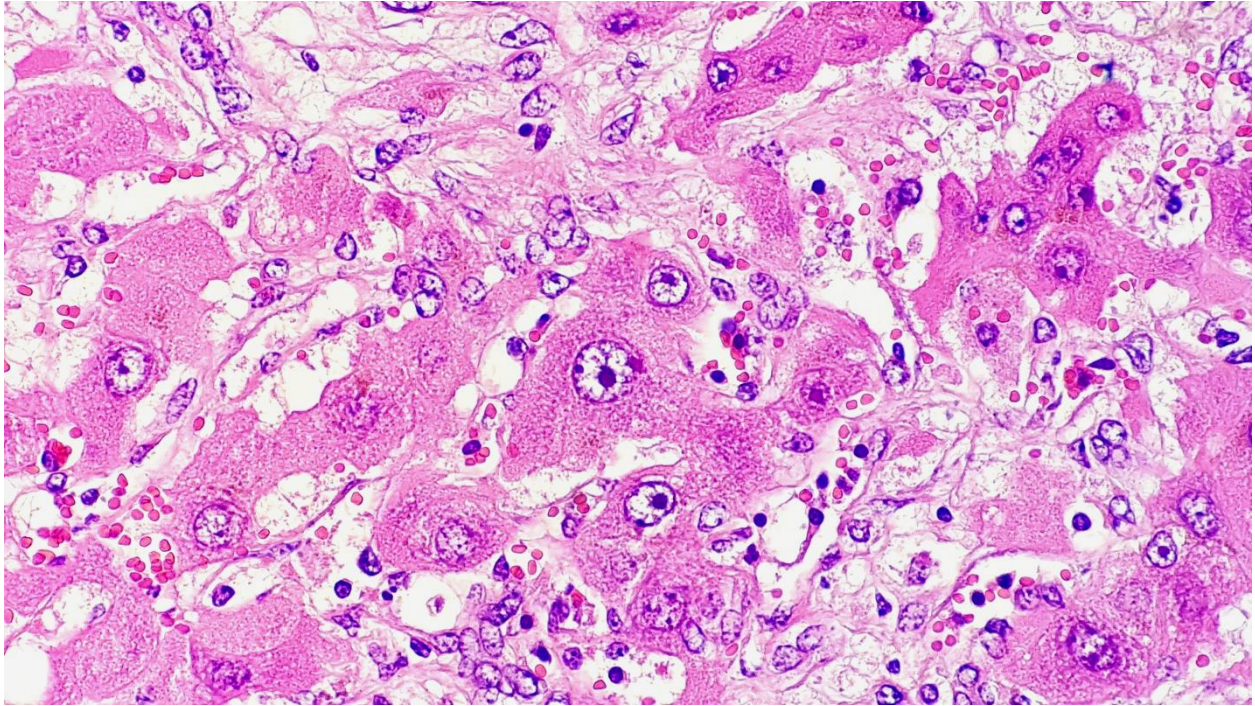


Figure 5

Follow-up Questions:

- *What is your morphologic diagnosis?*
- *What is the mechanism for the cavitory effusions?*
- *What histologic lesions would you expect to see in the CNS?*
- *Can you name three possible causes of liver fibrosis in cattle?*

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