



Diagnostic Exercise

From The Davis-Thompson Foundation*

Case #: **203**; Month: **December**; Year: **2022**
Question Sheet

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Clinical History:

Between December 2018 and February 2019, a farm owner recorded the death of five six-month-old Angus calves from a group of 117. The herd was kept in native pastures and was vaccinated against foot-and-mouth disease, rabies, and against pathogenic *Clostridium* spp. Affected calves presented similar clinical signs, including fever, apathy, severe respiratory distress, nasal discharge, and diarrhea. The clinical course lasted approximately three days, and calves died spontaneously, despite being treated with antibiotic therapy. One of the dead calves was submitted for postmortem examination.

Necropsy Findings:

The calf was in good body condition. The subcutaneous tissue, oral mucosa, and ocular conjunctiva showed mild icterus. The lung did not collapse at the thoracic cavity opening, presenting a rubbery texture, fleshy aspect, and interlobular edema. The spleen was severely enlarged. The liver was markedly enlarged with diffuse orange discoloration. The gallbladder was distended and filled with grumous bile and fibrin deposition on the mucosa. No alterations were observed in other organs.

Macroscopic Images:

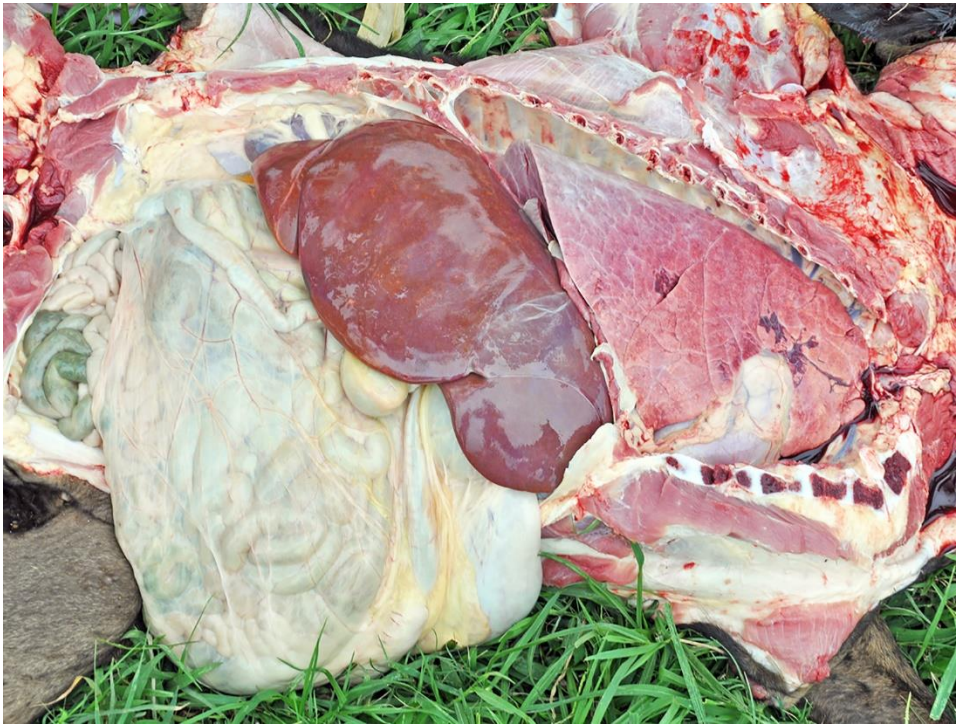


Figure 1



Figure 2



Figure 3

Microscopic Images:

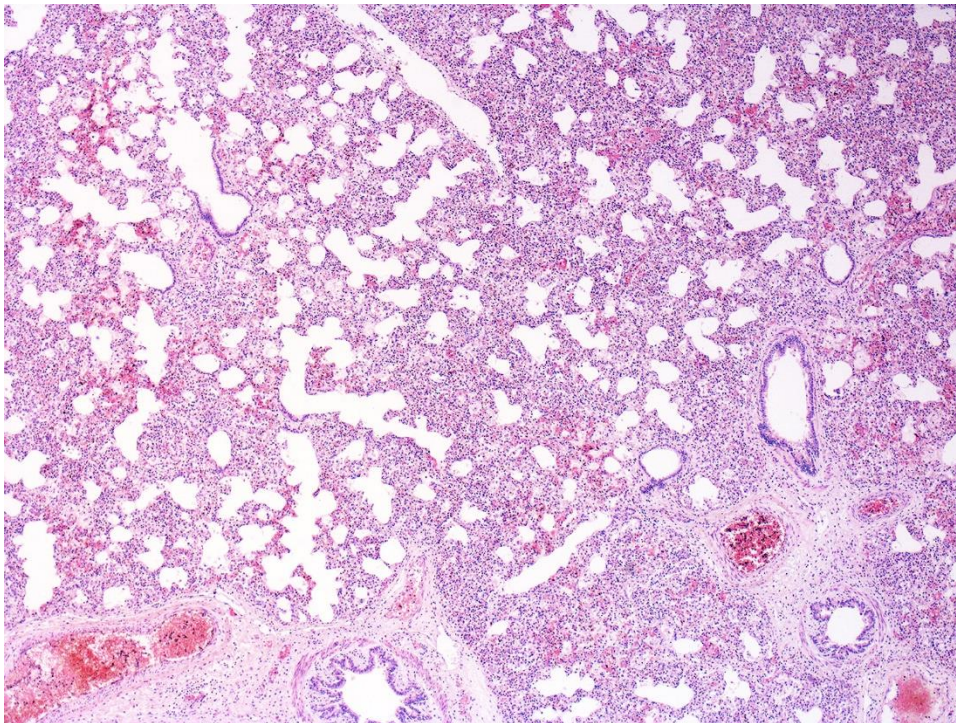


Figure 4: H&E, 40x.

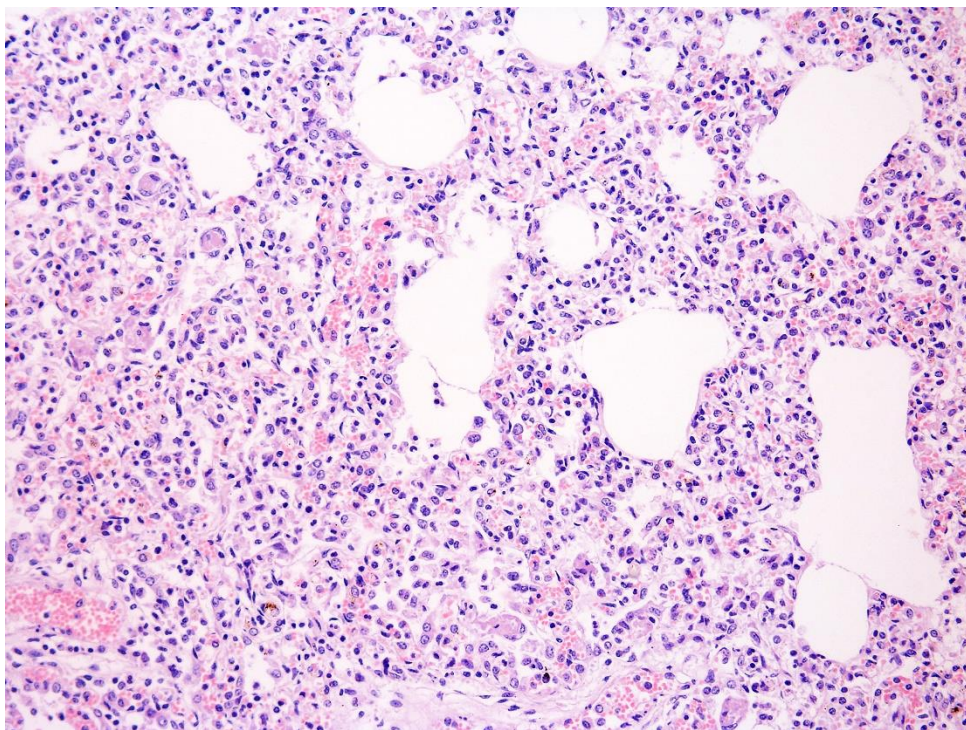


Figure 5: H&E, 200x.

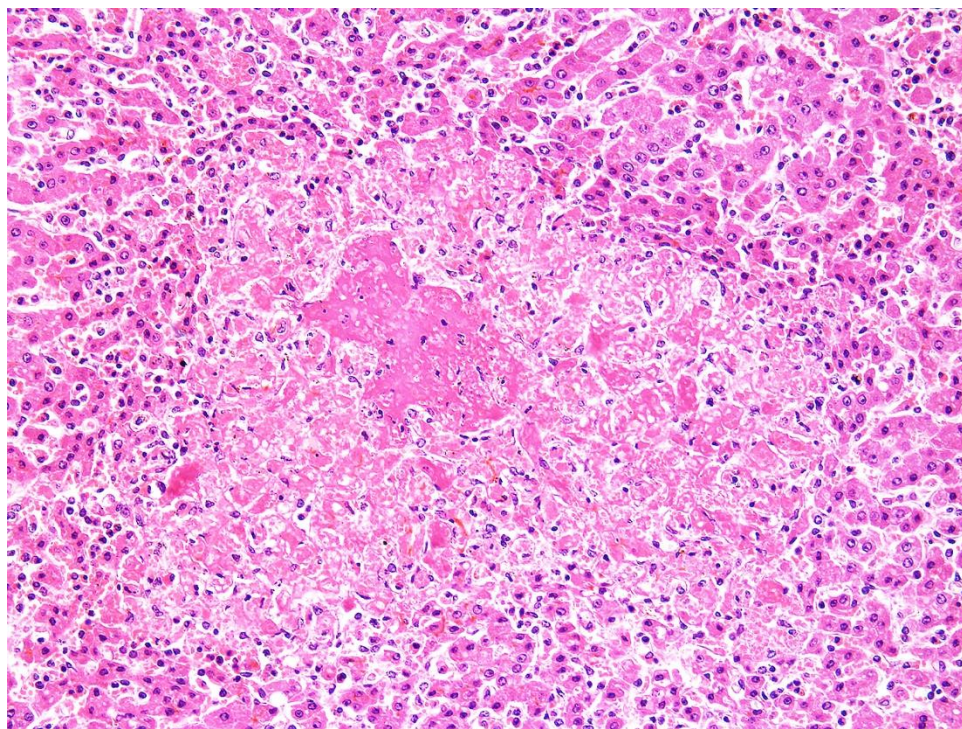


Figure 6: H&E, 200x.

Follow-up questions:

- *Morphologic diagnosis:*
- *Etiological diagnosis:*
- *Etiology:*

*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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