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Clinical History: 8-month-old, Aberdeen Angus cross, male castrated bovine (steer) with history of incoordination, muscle tremors, and prolonged recumbency of 3-day duration. No response to treatment with tilmicosin and vitamin B₁ (thiamin).

Laboratory Findings: *Salmonella* culture and Bovine coronavirus, Bovine viral diarrhea virus, Bovine respiratory syncytial virus, and Bovine Herpesvirus-1 PCR were all negative.

Necropsy Findings: The main necropsy findings are depicted in Figures 1, 2 and 3. Additionally, free within the pericardial sac, there were approximately 30 ml of yellowish/amber turbid serous fluid with fibrin strands adhered to the epicardium (moderate fibrinous peri- and epicarditis).

Gross and microscopic images:

Figures 1 and 2.
Figures 4-7; Hematoxylin and eosin (H&E) stain; 2x, 10x, 20x, and 20x, respectively.
Follow-up questions:

1- Gross description: provide a description for each one of the 3 gross images (Figures 1-3).

2- Morphologic diagnoses: provide 2 complete morphologic diagnoses (one for each organ), taking into consideration all the gross and microscopic images included in this exercise (Figures 1-11).

3- What is the cause of this condition?

4- Etiologic diagnoses: provide 2 etiologic diagnoses (one for each organ).

5- Name the disease

6- What ancillary diagnostic tests could be performed to confirm the 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 (http://www.cldavis.org/diagnostic_exercises.html).

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