

# DIAGNOSTIC EXERCISE

## From The Davis-Thompson Foundation\*

Case #: 249; Month: November; Year: 2024

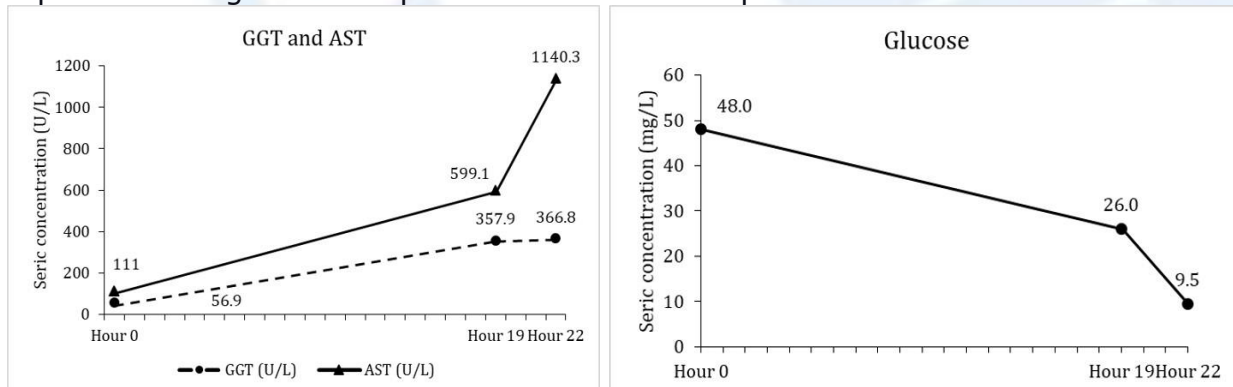
### Question Sheet

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**Clinical History:** Ten 2-year-old female mixed breed sheep were held on a 3-hectare pasture consisting of *Brachiaria brizantha* for six months. The weed *Vernonia rubricaulis* heavily infested the pasture. After the weed was raked and mowed (in September), it regrew luxuriously following the first rains. Three sheep died after an acute disease lasting 24-48 hours characterized by tremors, colic, and incoordination of pelvic limbs; after decubitus, the sheep executed paddling movements and opisthotonos. Blood from one sheep was sampled to evaluate the hepatic function at Hour 0 (onset of clinical signs), Hour 19, and immediately before the sheep was euthanized (Hour 22). The results are in Figures 1 and 2. All reported findings in this report are from this sheep.



**Figures 1 and 2.** Sheep, 2-year-old, female, mixed breed. Seric concentration of gamma glutamyl transferase (GGT; reference values: 20-52 U/L), aspartate aminotransferase (AST; reference values: 60-280 U/L), and glucose (reference values: 50-80 mg/L) at the onset of clinical signs (Hour 0) and after 19 and 22 hours.

**Autopsy Findings:** There were mild ascites and serosal hemorrhages. The most striking lesions were in the liver. It was swollen and had a marked increase in the lobular pattern that was more evident at the cut surface and consisted of a red and depressed area in the center of the lobule surrounded by a thin rim of a clearer perilobular parenchyma (Fig.3). Two abscesses (2 and 0.5 cm in diameter) were observed in the hepatic parenchyma. Three abscesses ranging from 1-3 cm in

diameter were observed in the lungs; all contained inspissated pus that yielded *Trueperella pyogenes* upon culture. The abscesses from the liver and lung were considered lesions without clinical significance.



**Figure 3.** Sheep, 2-year-old, female, mixed breed. Liver, cut section. There is marked accentuation of the lobular pattern.

**Follow-up questions:**

- *Morphologic diagnosis*
- *Etiologic diagnosis*
- *Differential diagnoses*

The Diagnostic Exercises are an initiative of the Latin Comparative Pathology Group (LCPG), the Latin American subdivision of The Davis-Thompson Foundation (DTF). 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 DTF website (<https://davisthompsonfoundation.org/diagnostic-exercise/>)

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