

# Diagnostic Exercise

## From The Davis-Thompson Foundation\*

Case # **247**; Month: **October**; Year: **2024**

*Question sheet*

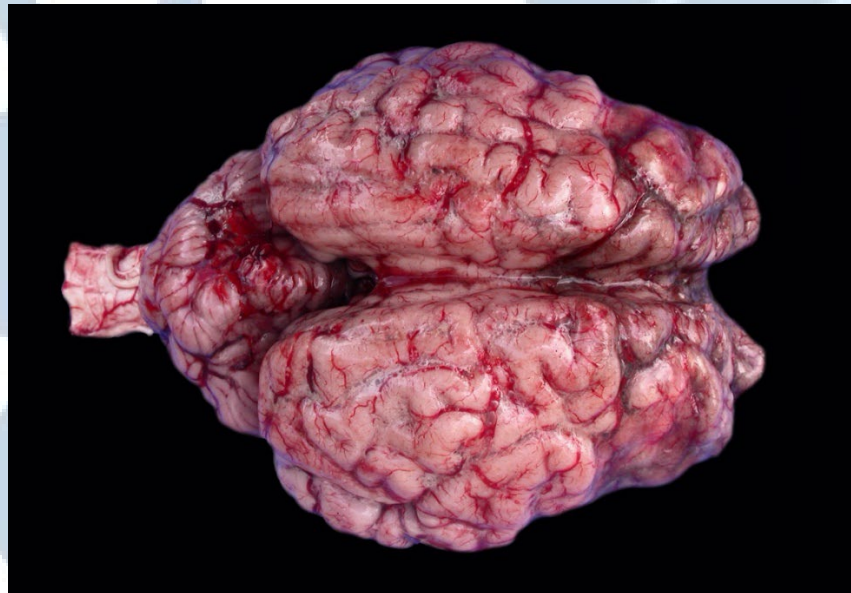
**Contributors:** Bethânia S. Santos<sup>1</sup>, Ricardo A.A. de Lemos<sup>2</sup>, and Daniel R. Rissi<sup>3</sup>  
Graduate Program in Veterinary Science<sup>1</sup>, Laboratory of Anatomic Pathology<sup>2</sup>,  
School of Veterinary Medicine and Animal Sciences, Federal University of Mato  
Grosso do Sul, Campo Grande, MS, Brazil.

<sup>3</sup>Athens Veterinary Diagnostic Laboratory, Department of Pathology, College of  
Veterinary Medicine, University of Georgia, Athens GA, USA

**Corresponding author:** [rissi@uga.edu](mailto:rissi@uga.edu)

**Clinical history:** A 6-month-old male Red Angus calf from São Vicente do Sul, Rio Grande do Sul (Brazil) died in August 2004 after an 8-day history of anorexia, dullness, blindness, aimless walking, and circling. The calf was part of a herd of 300 calves that had been weaned and placed on an oat pasture 20 days before the onset of clinical signs. Two additional calves had similar clinical signs and died during the same period.

**Autopsy findings:** Gross findings were restricted to the brain (Figs. 1, 2). There was widespread hyperemia of leptomeningeal vessels. The frontal telencephalic cortex was partially collapsed and distinctly depressed, with flattening of gyri, narrowing of sulci (edema), and dark red areas of hemorrhage.



**Figure 1.** Brain, calf.



**Figure 2.** Brain, calf.

**Follow-up questions:**

- *Most likely differential diagnoses*
- *Morphologic diagnosis*
- *Cause*
- *Diagnostic confirmation*

\*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/>).

**Associate Editor for this Diagnostic Exercise:** Daniel Rissi  
**Editor-in-chief:** Claudio Barros