

# Diagnostic Exercise

## From The Davis-Thompson Foundation\*

**Case #: 115 Month: February Year: 2019**

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**Clinical History:** An adult, intact male, mixed breed dog was submitted for necropsy. The dog showed neurological signs including lethargy, head tilt, tetraparesis, and falling. These clinical signs occurred 12 hours following intramuscular administration of an antiparasitic and persisted until spontaneous death. Other two dogs from the same owner had presented similar clinical disease. All three dogs died between 12 and 24 hours after the onset of clinical signs.

**Necropsy Findings:** The caudal cerebellar vermis and medulla oblongata were displaced caudally through the foramen magnum (Figure 1). The brain was moderately hyperemic (Figure 2). Prominent focal hemorrhage and malacia of the cerebellar medulla, thalamus and basal nuclei were present (Figure 3). The lungs failed to collapse (pulmonary edema) and the thymus and kidneys were diffusely dark red (congestion).

**Gross images:**



**Figure 1 (caudal view)**



**Figure 2**



**Figure 3 (tissue fixed in 10% formalin solution)**

**Follow-up Questions:** 1) Morphologic diagnosis, and 2) Differential diagnosis(es).

\*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](http://www.cldavis.org/diagnostic_exercises.html)).

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