



# Diagnostic Exercise

## From The Davis-Thompson Foundation\*

Case #: **212** Month: **May**; Year: **2023**

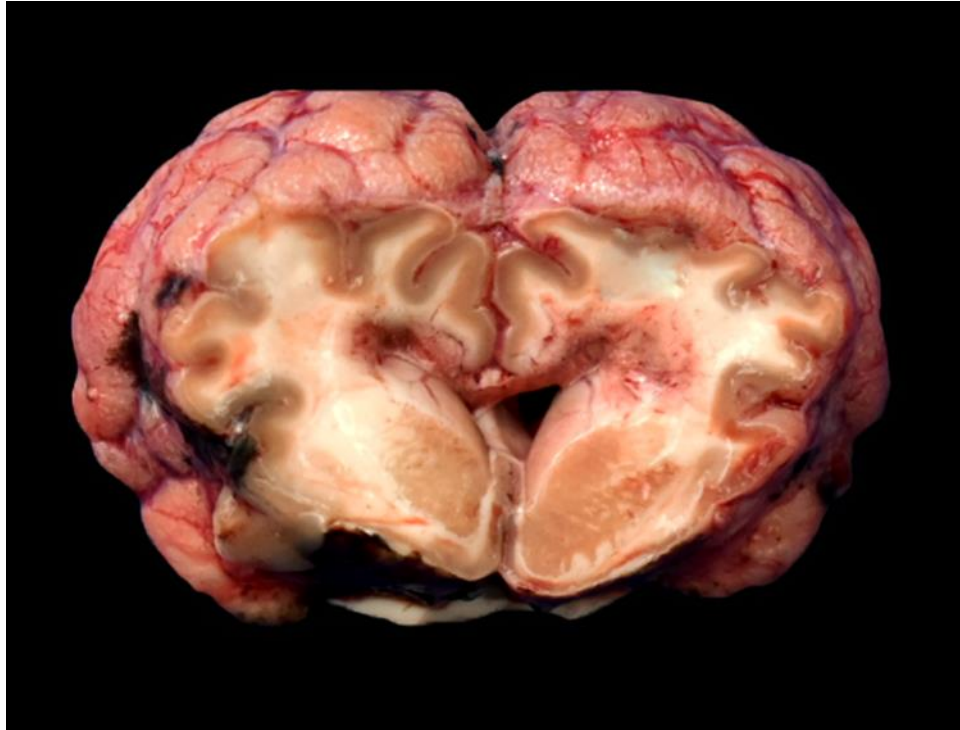
### *Question Sheet*

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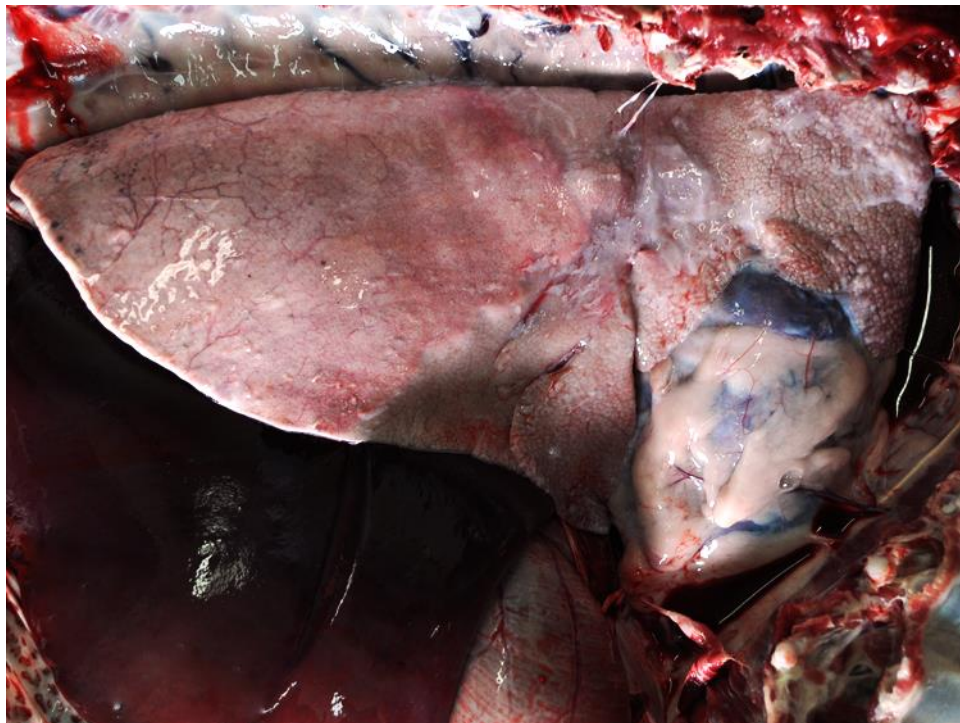
**Clinical History:** Within two months, three adult sheep fell ill in a 40-sheep flock (flock 1). Sheep 1 was a 3-year-old Texel ewe who developed neurological signs of ataxia, lethargy, recumbence, and difficulty in staying, dying one week after the onset of the clinical signs. Sheep 2 was a 2-year-old Texel ewe, and Sheep 3 was a 2-year-old Texel ram which both presented with anorexia, loss of body weight, and marked dyspnea for three weeks. The sheep were treated with antibiotics and antiparasitic drugs, however, they showed no health improvement and were later euthanized. In another sheep flock (flock 2) from the same municipality, for four months, it was reported that many sheep presented respiratory signs mainly characterized by marked dyspnea. Two Texel ewes from this herd, a 9-year-old (Sheep 4) and a 2-year-old (Sheep 5), were submitted for necropsy.

**Gross Findings:** The five sheep were in poor body condition. On the surface of the central nervous system of Sheep 1, blood vessels were moderately and diffusely engorged. In transverse sections of the brain, in the white matter at the level of the caudate nucleus, there was a focal area of softening of 1.5 cm in diameter. In Sheep 2, 3, 4, and 5, the lungs were pale to gray, rubbery, non-crepitant, markedly and diffusely noncollapsed, and heavy. Dark millimetric areas associated with white and slightly elevated nodules, up to 3 mm in diameter, were also seen at the pleural and cut surfaces of the lungs. Additionally, Sheep 4 presented significant and diffuse consolidation of the cranioventral lung lobes.

### **Gross and Histological Images:**



**Figure 1** - Brain

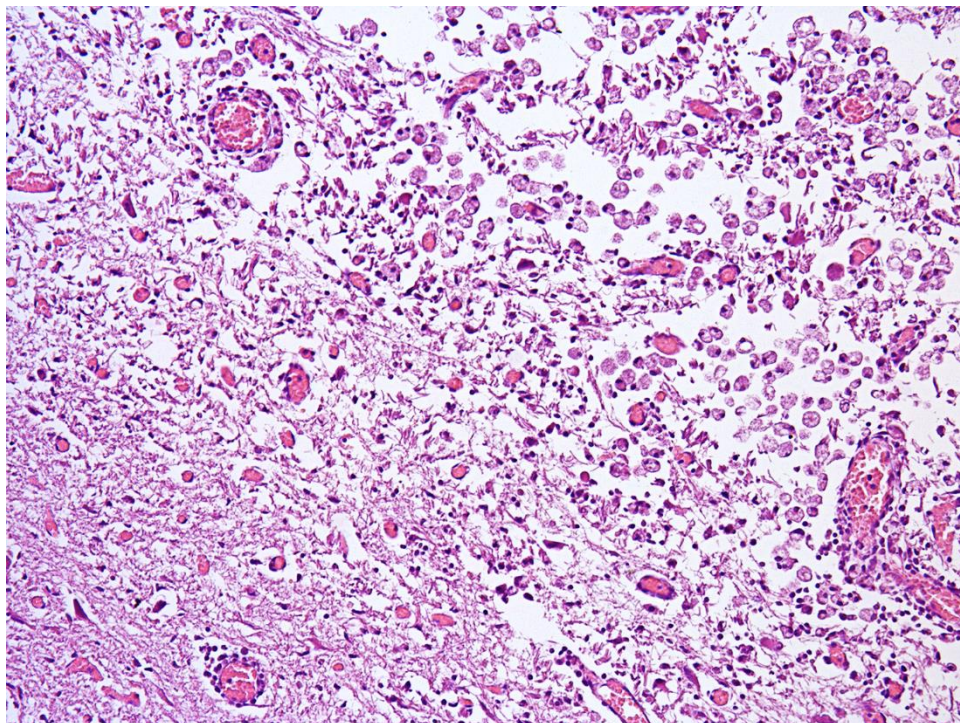


**Figure 2** - Lung



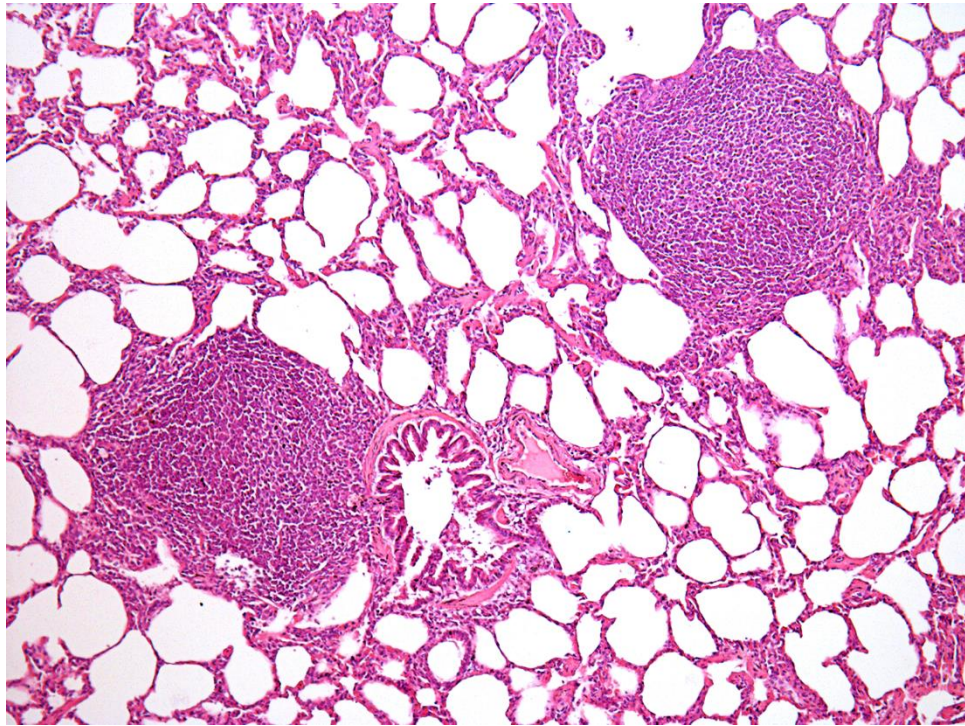


**Figure 3.** Lung, cut surface.

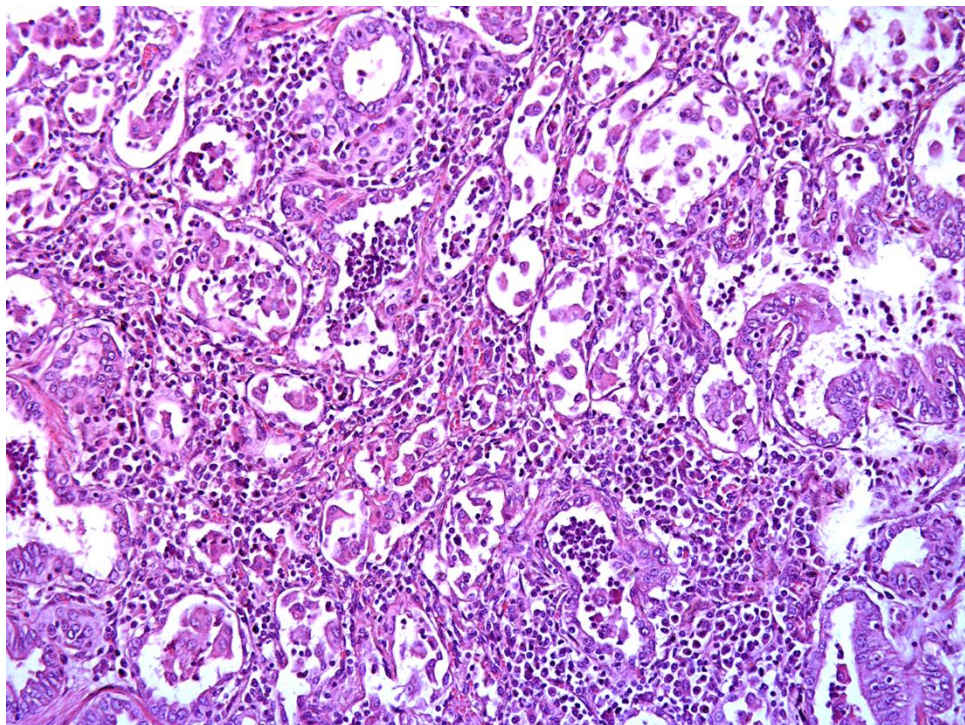


**Figure 4 - Brain**



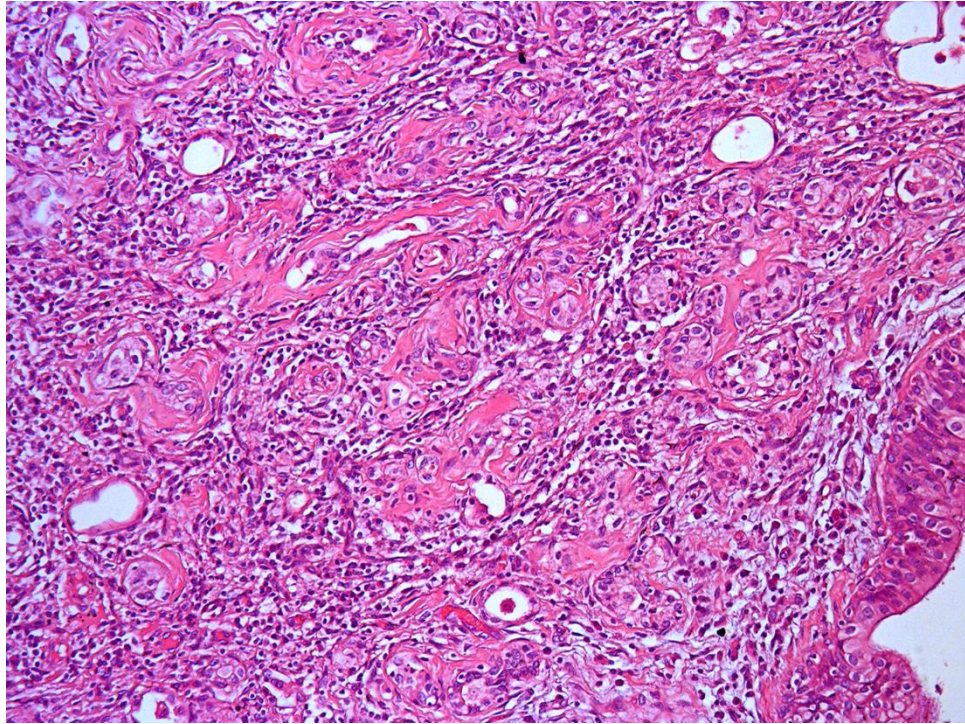


**Figure 5** - Lung

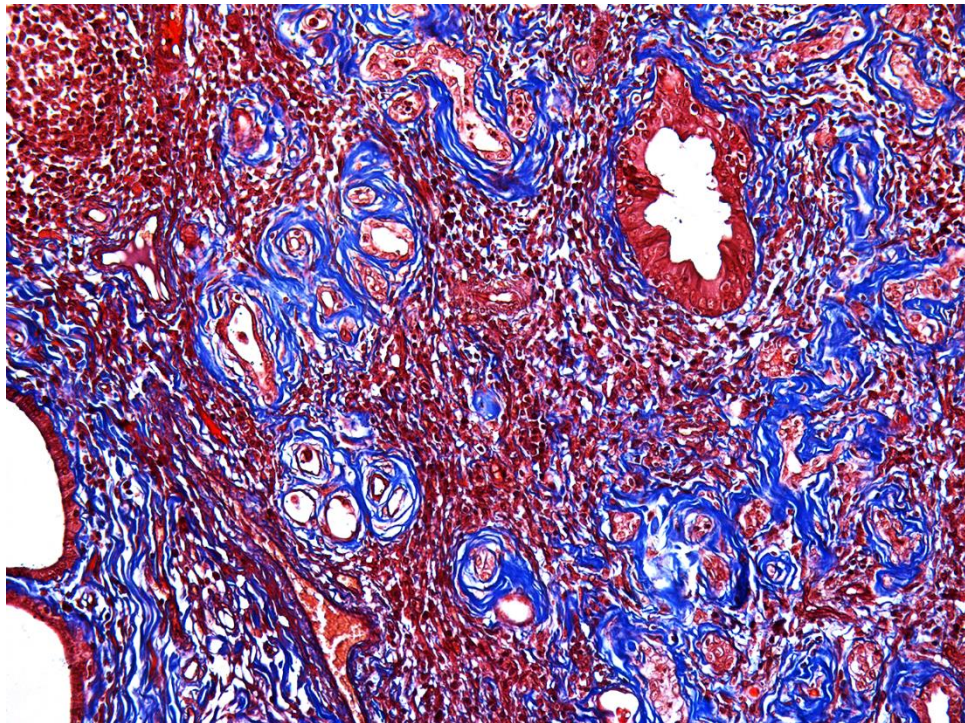


**Figure 6** - Lung





**Figure 7 - Lung**



**Figure 8 - Lung, Masson's Trichrome**

**Follow-up questions:**

- *Morphological diagnosis?*
- *Etiology?*

- *Name of condition?*

\*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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