

# Diagnostic Exercise

## From The Davis-Thompson Foundation\*

Case #: **222**; Month: **October**; Year: **2023**  
*Question Sheet*

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### Clinical history:

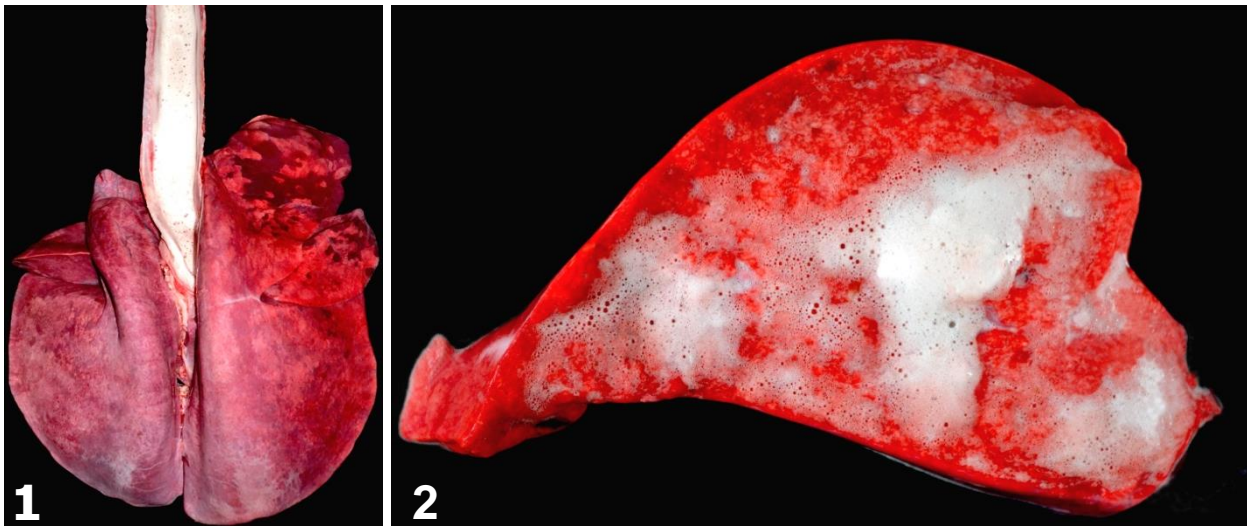
During a 2-week period between mid-October and November 2022, approximately 20 out of 470 Rambouillet sheep from a flock in southern California died; the flock had been moved into irrigated hay fields recently. Some of the affected animals were initially underweight and most had nasal discharge, labored breathing and frothy discharge from the mouth. Two adult sheep (1 and 2) were submitted to the San Bernardino laboratory of the California Animal Health and Food Safety laboratory system (CAHFS) for necropsy and diagnostic work up.

### Necropsy findings:

On necropsy, both carcasses were in fair nutritional condition, with scant fat reserves. Sheep 1 had severely swollen and congested lungs, abundant froth in the trachea and bronchi, hydrothorax, and hydropericardium (Figures 1-2). Sheep 2 had multifocal ulcers in the alimentary tract (Figures 3-6).

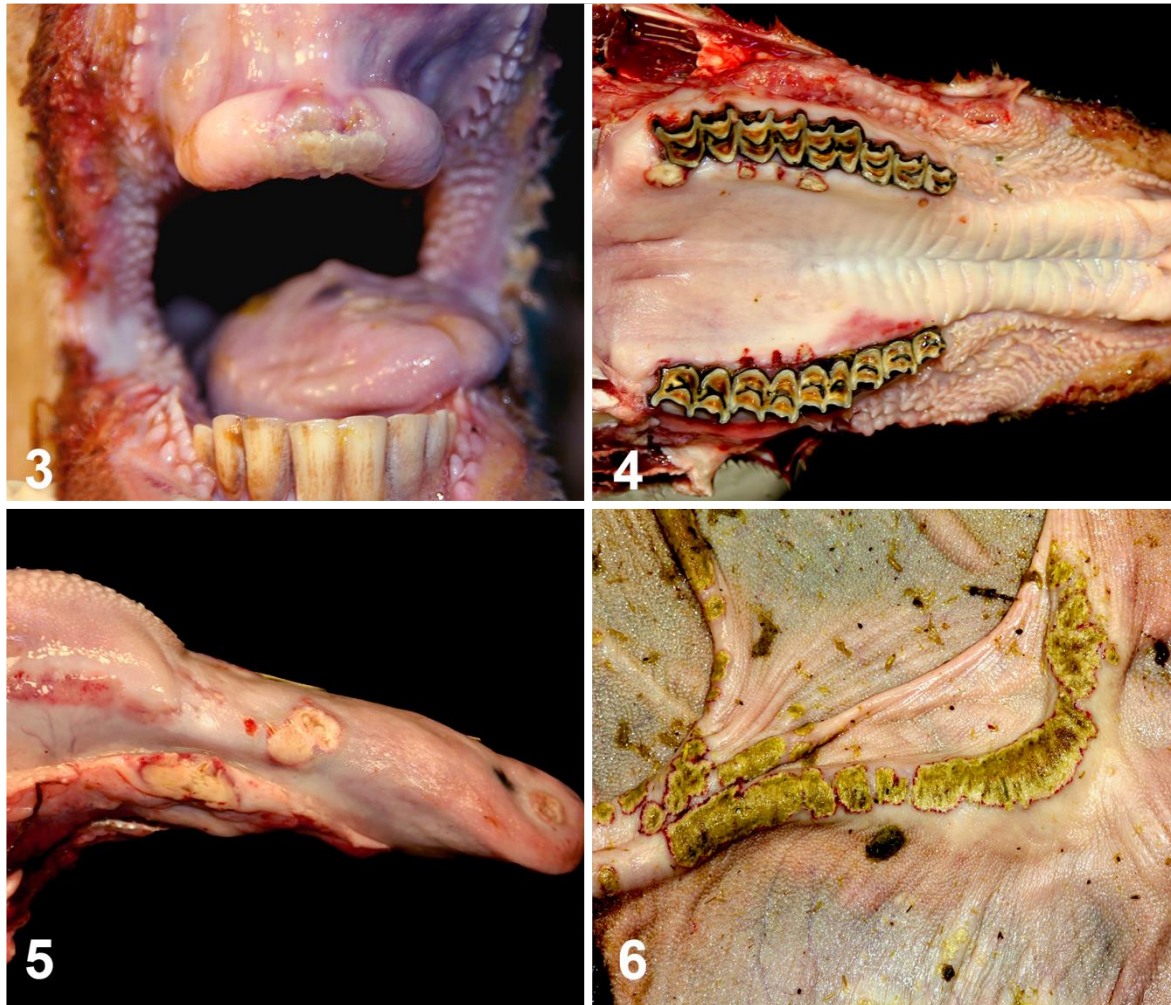
### Gross images:

#### Sheep 1:



**Figure 1 and Figure 2. Lung.**

## Sheep 2:



**Figure 3.** Dental pad. **Figure 4.** Hard palate and gums. **Figure 5.** Tongue. **Figure 6.** Rumen.

### Follow-up questions:

- (1) Morphological diagnoses for figures 1-6.
- (2) Most likely cause based on clinical history and necropsy findings
- (3) Name at least 1 other associated gross lesion you should expect in the hoof and other in the heart.
- (4) Name at least 1 associated microscopic lesion
- (5) Name 5 important differential diagnoses for figures 3-5.

\*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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