



## **Diagnostic Exercise** From The Davis-Thompson Foundation\*

## Case #: 82 Month: July Year: 2017

**Contributors:** Simona Zoppi, DVM; Katia Varello, DVM, PhD; Alessia Di Blasio, DVM, Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d'Aosta; via Bologna 148, Turin (Italy), 10154.

**Clinical History:** An adult, female donkey was found dead during mountain pasture (1500 meters above sea level) and brought for evaluation if the cause of death was due to mishandling. The animal was left in the mountain pasture together with other approximately 20 donkeys; during this period snowfall and unavailability of feed occurred. Physical examination of the carcass identified poor condition, thinned fur, pale mucous membranes, and absent left eye due to post mortem predation.

**Necropsy Findings:** Along the visceral serosa, there were innumerable coalescing, raised, well demarcated, yellowish, smooth and generally firm nodules protruding from the surface, each approximately 3–5 mm to 1 cm in diameter; amorphous and less dense material oozed on cut surface. An approximately 1 cm diameter abscess was attached to the colon surface, causing narrowing of the intestinal lumen due to scarring. Several disseminated yellowish and lardaceous nodules were also present in the liver. Chronic catarrhal gastritis due to *Gasterophilus* sp. was present. Severe catarrhal bronchopneumonia was accompanied by focal, well-demarcated, bilateral pulmonary consolidation of the caudal lobes. The tracheobronchial lymph nodes had the normal architecture replaced by multifocal to coalescing and more or less sharply delineated, grayish-white to yellow areas of caseous necrosis.

## Gross and microscopic images:



Figure 1. Mesenteric/Omental serosa

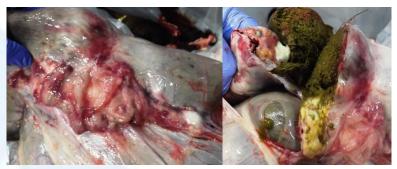


Figure 2. Colon abscess (closed/sectioned)

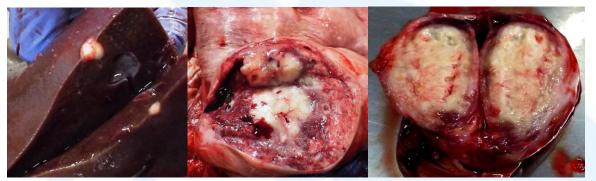


Figure 3. Liver (left), lung (middle), and tracheobronchial lymph node (right).

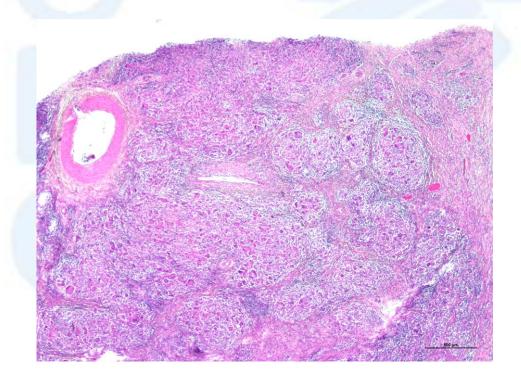


Figure 4. Donkey, tracheobronchial lymph node. Hematoxylin & eosin (H&E), 2x.

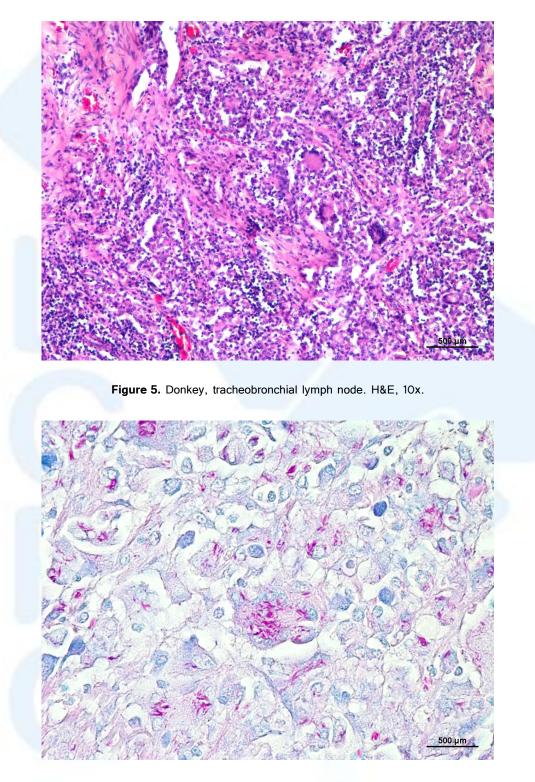


Figure 6. Donkey, tracheobronchial lymph node. Ziehl-Neelsen (ZN), 40x.

**Follow-up questions:** Please provide a histological description (including of histochemical findings) and morphological diagnosis; etiology and etiological diagnosis; differential diagnoses; and name of diagnostic techniques to confirm the diagnosis.

\*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).

## Associate Editor for this Diagnostic Exercise: Ingeborg Langohr

Editor-in-Chief: Vinicius Carreira