

Diagnostic Exercise

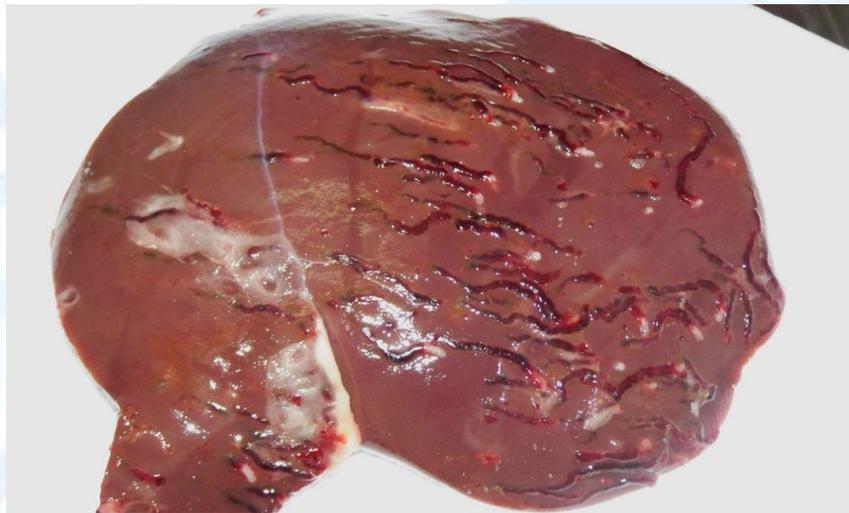
From The Davis-Thompson Foundation*

Case #: 68 Month: May Year: 2016

Answer Sheet

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Clinical History: Specimen from an 8-month-old lamb brought to the Lavington (New South Wales) district veterinarian by a farmer, who reported that a number in the flock were losing weight. This was the most ill animal; it was found moribund and was euthanized and submitted for necropsy.



Macroscopic Observations: The diaphragmatic surface of this portion of liver bears numerous randomly distributed, raised, red, serpentine tracks up to 2-3 mm wide and some as long as about 6-7 cm (no scale was provided, unfortunately). Most of these tracks are oriented in roughly the same direction, and many are narrow at one end and gradually widen toward the other. At the wide end of a few of the tracks, there are small pale smooth nodules of about the same diameter as the adjoining track. A couple of these lie apparently free on the capsular surface. Adjacent to what is presumably the remains of the falciform ligament, there are a couple of large irregular pale plaques of what appears to be fibrin.

Morphological diagnosis: Subacute linear haemorrhagic hepatitis, with intralesional cestode larvae.

Most likely etiology: Migratory stage of larval *Taenia hydatigena* (the larval stage was formerly known as *Cysticercus tenuicollis*). *Fasciola hepatica* larvae can produce similar damage and should be included in the differential diagnosis.

Steps you would follow to establish etiological diagnosis: In fresh specimens, using needles under a dissecting microscope, the small cysticerci can be teased from the ends of their tracks and squashed between glass slides and identified by the configuration of the hooks on their little scolices. In stained histological sections of fixed specimens, these cestode larvae can be differentiated from fluke larvae by the absence of digestive organs (as shown in the image below).



Liver, lamb. Hematoxylin and eosin stain.

*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/diag_exercise.html).

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