



# Diagnostic Exercise

## From The Davis-Thompson Foundation\*

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*Question Sheet*

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**Clinical History:** Five-year-old, spayed, stray brown cow with generalized cutaneous nodules present for a week.

**Necropsy Findings:** The animal is in good nutritional condition. Several ticks are present on the ventrum and withers. Multifocally and widespread, affecting all areas of skin in a random distribution, there are variably sized (1-4 cm in diameter) cutaneous and/or subcutaneous nodules, sometimes with a targetoid appearance. A few nodules are ulcerated, and others have a central dense crust. On cut section, many nodules are well demarcated, with a light pink center delineated by a dark red haemorrhagic/hyperaemic line (acute infarcts). Similar nodules and ulcers are also present over the teats.

Skinning reveals extensive subcutaneous thickening with yellowish gelatinous material (oedema) as well as multifocal areas of dark red discoloration (haemorrhages). Multiple superficial lymph nodes are enlarged and haemorrhagic, with the right pre-scapular lymph node most severely affected, measuring 16x7x8 cm.

**Gross Images:**



**Figure 1**



**Figure 2**

**Follow-up Questions:**

1. *What is your morphologic diagnosis?*
2. *What is the most likely etiologic diagnosis?*
3. *What are the expected histologic findings?*

\*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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