



# Diagnostic Exercise

## From The Davis-Thompson Foundation\*

Case #279; Month March; Year: 2026

### *Question sheet*

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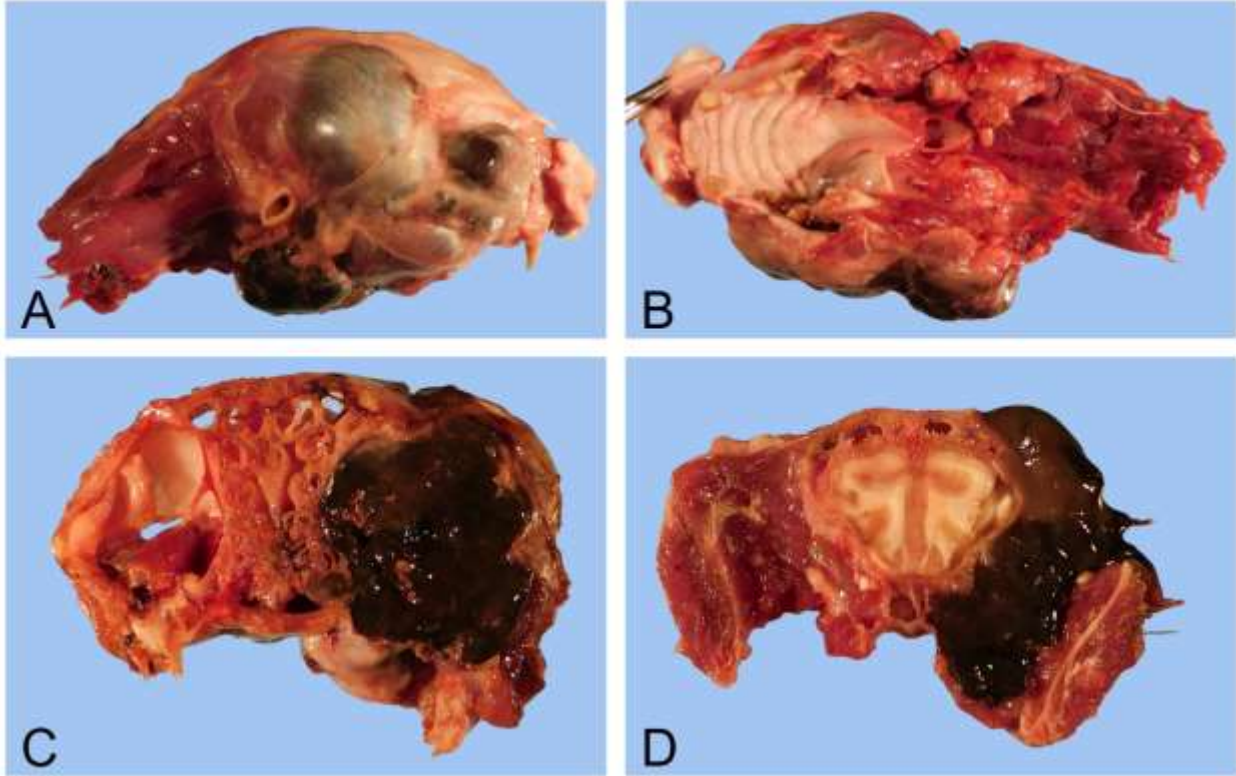
### **History:**

A 5-year-old spayed female domestic shorthair cat was initially presented to oncology services for a 4-month history of a subcutaneous mass on the right side of the mandible that extended into the mouth. The right eye had been previously enucleated one year prior due to an undisclosed reason. At presentation, the cat was having difficulty eating and breathing. Due to concerns for quality of life, euthanasia was elected.

### **Gross Findings (Fig. 1):**

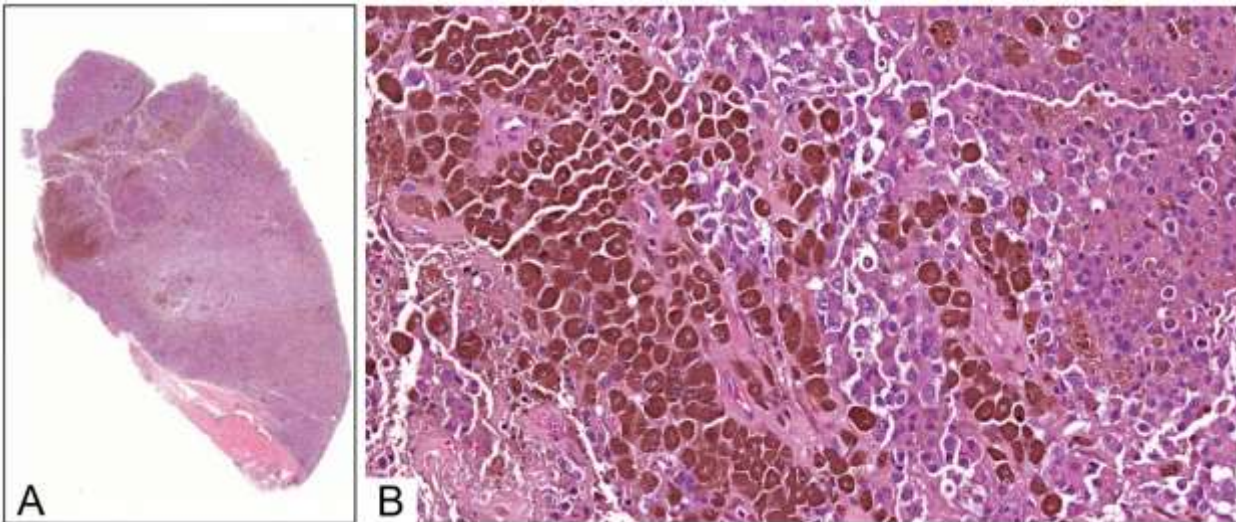
Within the lingual gingival margin of tooth 108 and extending into, infiltrating, and partially effacing the right temporalis muscle, the right pterygoid muscle, the right masseter muscle, the right digastricus muscle, and teeth 108 and 109 was an 8.5 cm x 7 cm x 4 cm, dark brown to black, well demarcated, firm mass. The mass filled the empty right orbit and partially invaded and contorted the right nasal conchae and frontal bone towards the midline. On cut section, the mass was dark brown to black with a friable center.

Additional necropsy findings included pale white mucous membranes, mild to moderate left ventricular hypertrophy, and chronic passive hepatic congestion.

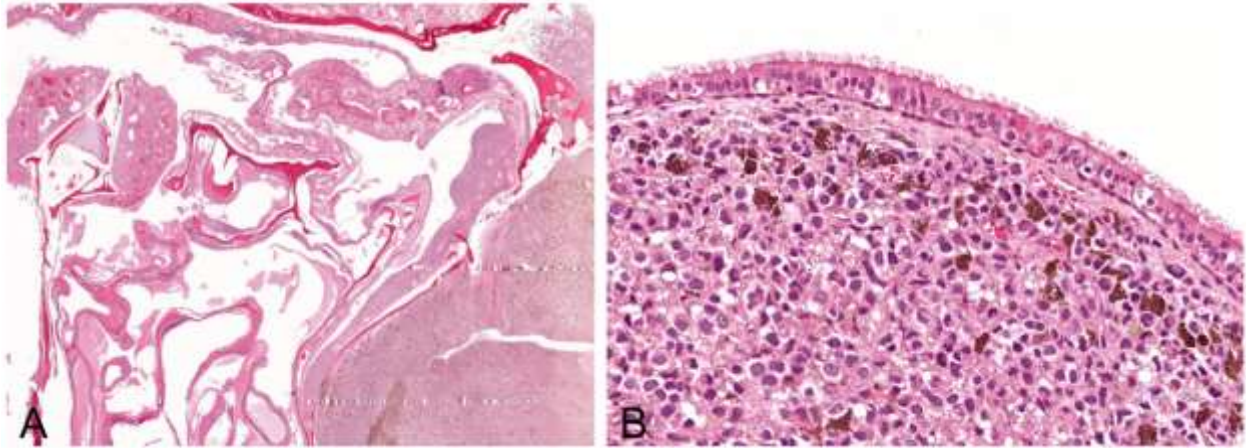


**Figure 1**

**Histopathology:**



**Figure 2**



**Figure 3**

**Follow-up questions:**

- *Histologic Description:*
- *Diagnosis:*

\*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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