



Diagnostic Exercise

From The Davis-Thompson Foundation*

Case #150; Month: **September**; Year: **2020**

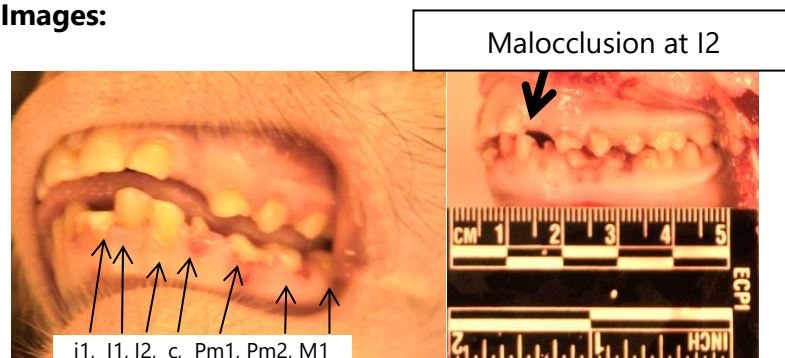
Question Sheet

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Clinical History: This 4-year-old female rhesus macaque, in good body condition, was euthanized and necropsied as a precautionary measure after receiving an “indeterminate” result when submitted for Herpes B virus status on serology, along with the presence of gingival ulcers on physical exam. The serum antibody status appeared positive by titration ELISA but could not be confirmed as positive or negative by Western Blot. PCR from swabs of oral ulcers were negative for Herpes B virus. There was no clinical history of oral pain or difficulty with eating.

Necropsy Findings: On the left buccal aspect of the mandibular arcade are multifocal to coalescing red to purple gingival erosions/ulcers up to 5 mm in diameter (Figure 1) starting at the deciduous canine (c) and involving the permanent premolars 1 and 2 (Pm1, Pm2) and the permanent molar 1 (M1). There is malocclusion of the permanent left upper and lower second incisor (I2) (Figure 2), associated with a 3-mm gap between the two permanent mandibular first incisors (I1), with two presumably retained deciduous teeth (i1) filling and projecting rostrally from the gap (Figure 3). The left lower deciduous canine (c) is markedly smaller compared to the right canine and upper canine (C). The left mandibular arcade involving premolars 1 and 2 (Pm1, Pm2) are markedly worn with complete loss of the cusps at a beveled angle from the lingual towards the buccal surface, with only 1-2 mm of visible crown above the gingiva. There are also multifocal exposed pulp chambers. Both left lower premolars are very mobile (loose) within the periodontal ligament.

Gross and Microscopic Images:



Figures 1 and 2. Gross photos. Mandibular gingiva showing ulcers and malocclusion.

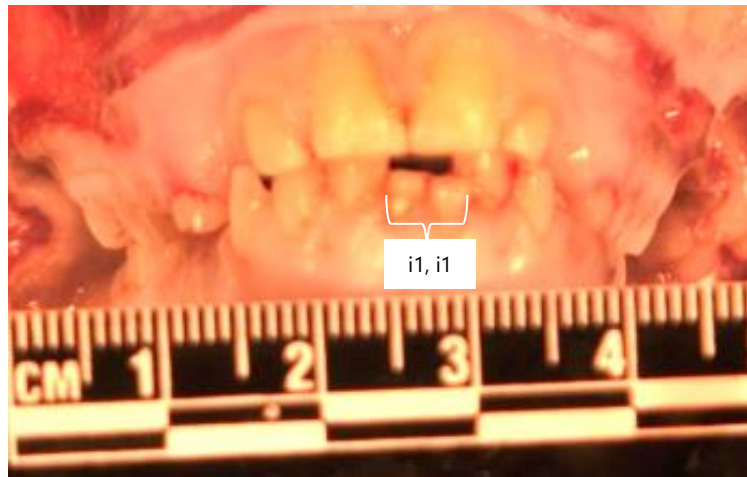


Figure 3. Gross photo. Retained mandibular incisors (i1).

Follow-Up Questions: Morphological diagnosis(es); possible cause(s).

*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).

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