

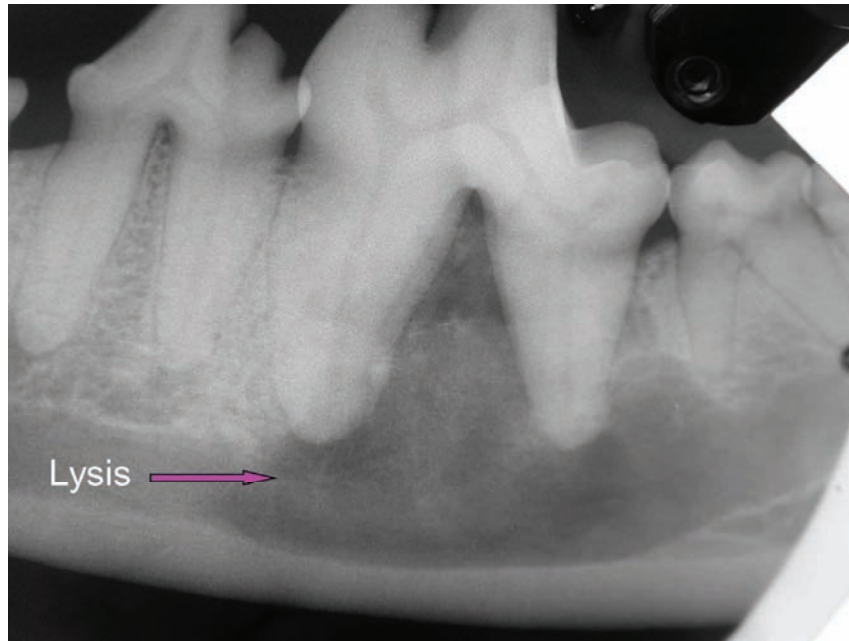
CASE OF THE MONTH (August 2011)

Signalment and History: A six year old neutered male Vizsla was referred for treatment of an oral mass located just apical to the left mandibular 1st molar (tooth 309). The referring veterinarian had biopsied the 2.5 cm mass and the histopathological diagnosis was acanthomatous ameloblastoma. I referred the client to another hospital for a CT scan of the affected mandible to accurately determine the extent of this tumor. The CT report indicated that the tumor occupied the furcational area of the molar and extended into the mandibular canal below the tooth. The mesial and distal borders of the mass closely resembled the dimensions of the tooth itself.

Procedures: The patient was placed under general anesthesia for surgical removal of the tumor via segmental mandibulectomy.



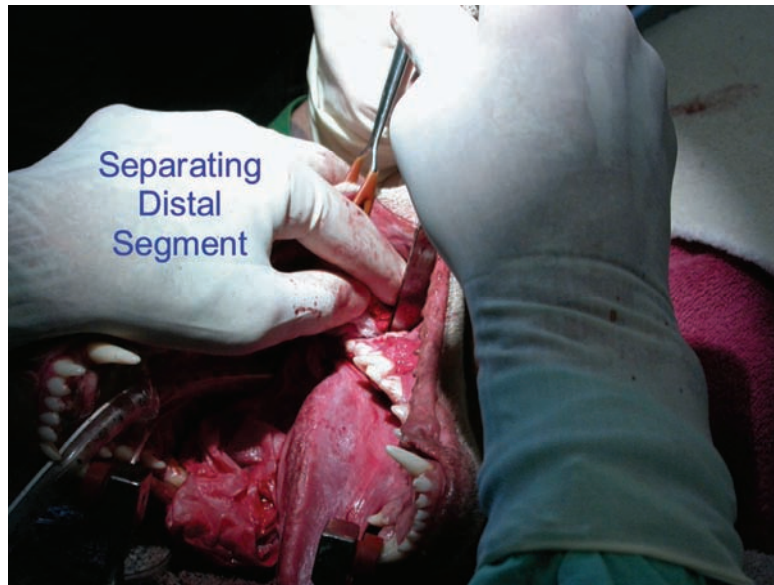
An intraoral radiograph was exposed to visually delineate the tumor borders. This radiograph illustrated bony lysis in the interradicular area with extension ventrally into the mandibular canal. This image closely coincided with the description in the CT report.

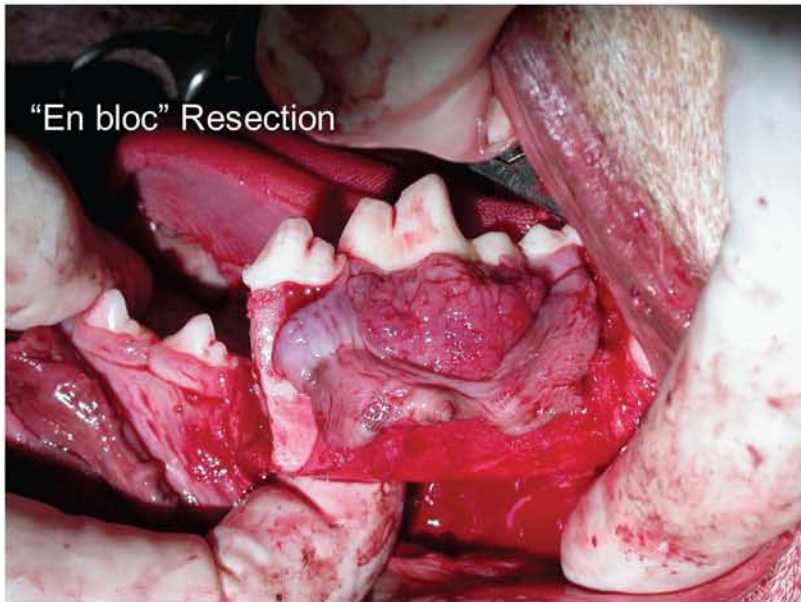
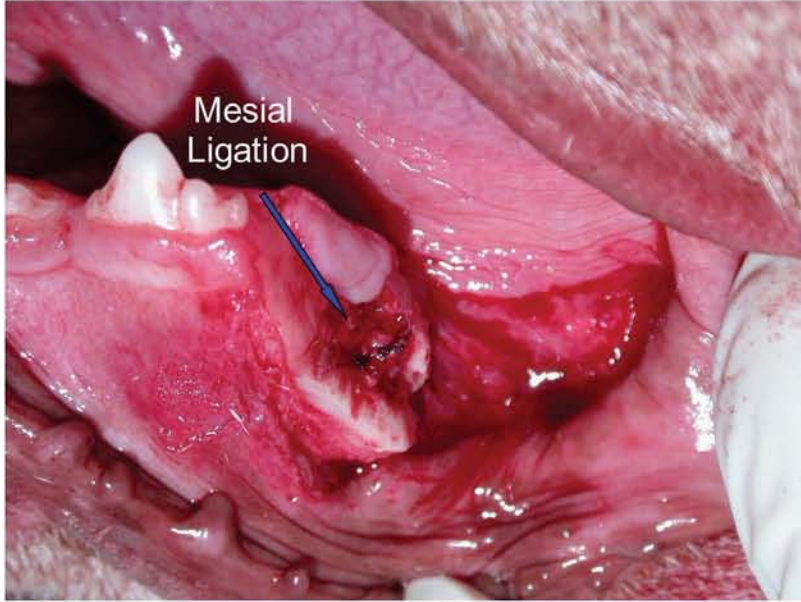


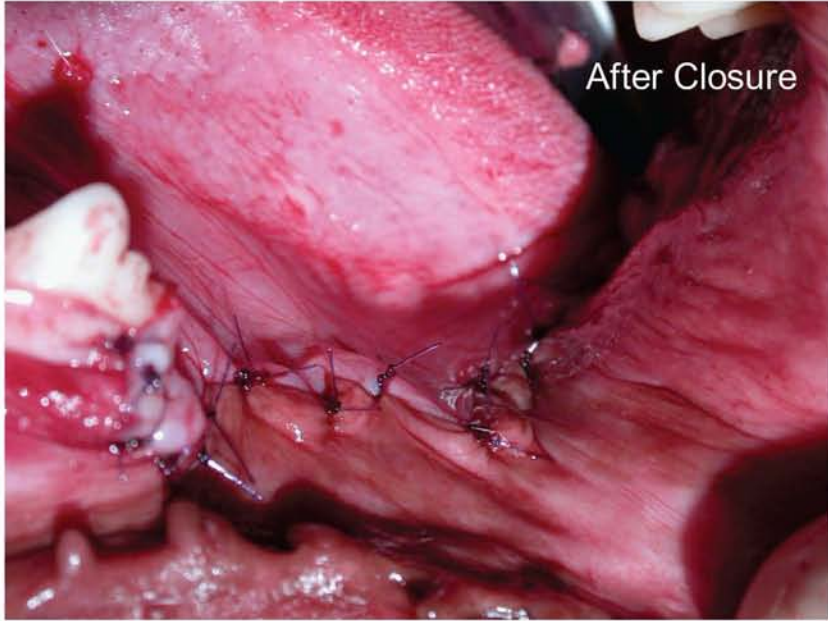
Successful removal of this type of tumor requires surgical margins of one centimeter of normal tissue surrounding the mass. We elected to create an “en bloc” resection from just mesial to the 4th premolar (tooth 308) to just distal to the 3rd molar (tooth 311). The incisions would extend from the gingival margin, ventrally through the ventral cortex of the mandible.

Incisions were made at the mesial and distal margins through the gingiva and alveolar mucosa in a full thickness fashion to expose the bone of the mandible. A 701L bur and a Lindemann bone bur were used with a high-speed handpiece to transect the mandible.

The neurovascular bundle of the mandible was located at each site of mandibular transection and ligated with 4-0 Monocryl. The “en bloc” section was removed. The soft tissue was closed with 4-0 Monocryl in a simple interrupted pattern.

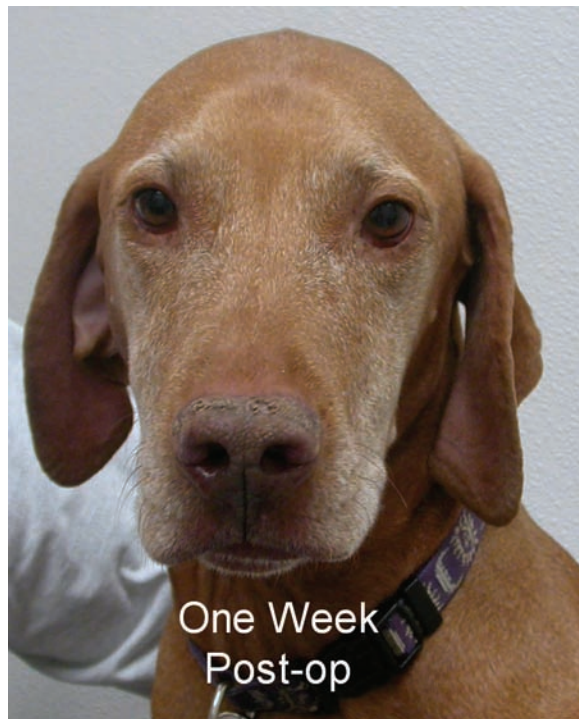






Discussion: An acanthomatous ameloblastoma is classified as a benign tumor in that it does not metastasize to distant locations within the body, such as the lungs or liver. It is often locally aggressive, however, and commonly invades nearby soft tissues and even bone, causing bony lysis. This may be seen on the pre-op radiograph. It is essential to take one centimeter margins of normal tissue surrounding the neoplastic mass to successfully treat the patient. This is most effectively accomplished with an “en bloc” resection.

Owners are often concerned about the post-op cosmetics and functionality of their pet, but these patients do surprisingly well and have an excellent cosmetic appearance.



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