Facial swelling in a horse.

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http://www.sachsfamilyfarm.com/gaited-horses/spotted-saddle-horse
**Signalment:**
Dave, a 9-year-old Spotted Saddle horse gelding

**History:**
- Several month history of facial swelling with periods of bilateral epistaxis.
- No response to antibiotic treatment.
Diagnostics:

- Physical exam
- Rhinoscopy
- Radiographs
Outcome:
- Euthanasia elected due to lack of resectability and poor long-term prognosis.
Necropsy:

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Permission granted only for viewing on SEVPAC website.
Vimentin

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Our morphologic diagnosis:

Poorly differentiated odontogenic tumor
Joint Pathology Center (AFIP)
Consultation:
- Additional IHC’s:
  - Salivary origin ruled out.
  - Calponin negative
  - Smooth muscle actin negative
- Squamous cell carcinoma ruled out:
  - Lack of cellular atypia.
  - Lack of dyskeratosis.
  - Lack of inflammation.
- Dx of odontogenic carcinoma favored
ODONTOGENIC CARCINOMAS

- Metastasizing (malignant) ameloblastoma
- Ameloblastic carcinoma-primary type*
- Ameloblastic carcinoma-secondary type (dedifferentiated), intraosseous*
- Ameloblastic carcinoma-secondary type (dedifferentiated), peripheral.
- Primary intraosseous SCC-solid type.
- Primary intraosseous SCC derived from keratocystic odontogenic tumor.
- Primary intraosseous SCC derived from odontogenic cysts.
- Clear cell odontogenic carcinoma.
- Ghost cell odontogenic carcinoma.
Ameloblastic carcinoma:
- One report in a 30-year-old Quarter Horse mare.
- One report in a 3-year-old Alaskan Malamute.
- Both were maxillary.
- Fewer than 60 cases in people. Mandibular more common.
- Diagnosis based on histologic features of malignancy in an ameloblastic population.
References:
4.) Barnes, L., et al. WHO Classification of Tumors: Pathology and Genetics of Head and Neck Tumors. 2005 (p.288)
Acknowledgements:

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Histology lab

And all of my resident mates!