Oral Tumours: Always Biopsy...the Right Way Atlantic Provinces Veterinary Conference 2025

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Any mass in the mouth has the potential to be a problem for your patient. Now some will only be a problem in the way a large benign mass leads to pseudo-pocketing around a tooth or teeth and lead to advanced periodontal disease.

However, when there is a chance the mass could be malignant or even locally aggressive knowing that information early can improve outcomes.

While it can be tempting to hypothesize what an oral or gingival mass could be – especially when the owner wants you to tell then WITHOUT the diagnostics, it is always best to get the definitive answer.

Right Way #1: biopsy early.

There is not benefit to waiting to see if something grows.

Right Way #2: NEVER call it an epulis.

This term is used incorrectly in veterinary medicine and has led to serious harm in some cases. **Epulis** = (Greek; pleural epulides) is ANY tumour-like enlargement (ie. lump) situated on gingiva or alveolar mucosa

This word literally means "growth on the gingiva" and described ONLY the location of the mass and has NO further implications on the nature of the lesion.

HOW can THIS lead to harm?

- a diagnosis of "epulis" is synonymous with "benign" and can lead to treatment not being pursued OR not being pursued in an appropriate timeline
- The "TOP HITS" on Google for epulis is: "a benign or non-cancerous mass"

This term had been previously used as a diagnosis:

- "Acanthomatous Epulis" = Canine Acanthomatous Ameloblastoma
- "Fibromatoys Epulis" = Peripheral Odontogenic Fibroma OR Hi/Lo Fibrosarcoma
- "Ossifying Epulis" = Peripheral Odontogenic Fibroma, Ossifying type

Right Way #3: take the dental radiograph.

While this cannot replace this histopathology, it can help with make the biopsy plan.

No changes to the underlying bone can favour benign OR minimal progression of a malignant or locally aggressive mass.

A cystic lesions would favour an Odontogenic (non-malignant/locally aggressive) mass.

"Floating bone" would favour an Ossifying Peripheral Odontogenic Fibroma

Right Way #4: stay away from the margins.

Unlike in dermatopathology where comparing the lesion and the surround tissue can be helpful with diagnosis, with oral masses this will lead to a larger definitive surgery.

Right Way #5: get a LARGE sample.

Pathologist recommend >4 mm: to ensure representative AND show architecture

Right Way #6: consider incisions over excisional

- Excisional of benign (+/- local aggressive) = CURE
- Excisional of Malignant = BIGGER definitive surgery**
- Incisional of benign = possible follow-up surgery needed
- Incisional of Malignant = margins preserved

Right Way #7: tissue preservation

- Place in formalin immediately
- Ensure appropriate ratio of formalin to tissue (10:1)
- IF in cold environments mix isopropyl alcohol into formalin
- Gentle tissue handling
- Avoid thermal injury

Right Way #8: Communicate with your pathologist

They only have what YOU give them

- Signalment
- Anatomic site sampled
- **Clinical signs** associated with lesion
- Duration & treatment history
- Diagnostic imaging findings and reports
- Previous cytology/biopsy results
- Any other pertinent clinical history
- Short list of clinical differentials
- Specific questions **you** would like answered
- CLINICAL & DIAGNOSTIC IMAGES