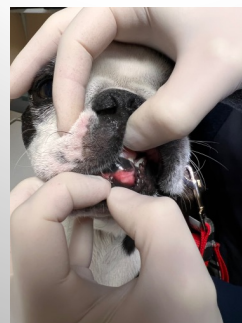


Canine and Feline Swellings and Masses

Dr. Angelica (Angie) Bebel, DVM, DAVDC
West Coast Veterinary Dental Services, Vancouver,
B.C
Email: tembo4444@gmail.com
Office Telephone: 604-473-3605

1

Examination – The Awake Patient



2

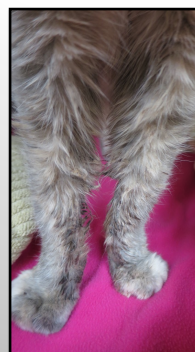
Examination – The Awake Patient

Examine the entire patient, not just the mouth



3

Examination – The Awake Patient



4

Examination – The Awake Patient

Examination from a distance



5

Examination – The Awake Patient

Examination from a distance



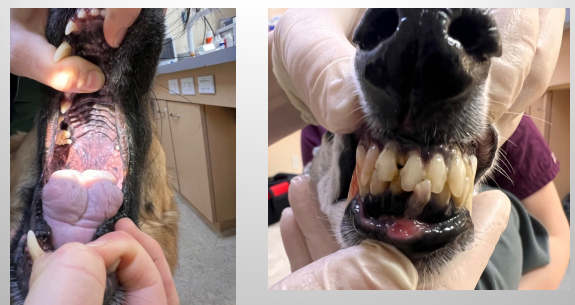
6

Examination – The Awake Patient



7

Examination – The Awake Patient



8

Examination – The Unconscious Patient

Sedation and/or anesthesia necessary in order to perform a thorough, in-depth oral examination

- Caudal oral cavity
- Lingual/palatal surfaces
- Base of tongue, ventral tongue
- Periodontal examination
- Intraoral, extraoral radiography
- Sample collection

9

Examination – The Unconscious Patient



10

Examination – The Unconscious Patient



11

Diagnostic Tools

Medical Imaging

- Intraoral/Extraoral dental radiographs
- Skull radiographs
- Computed tomography

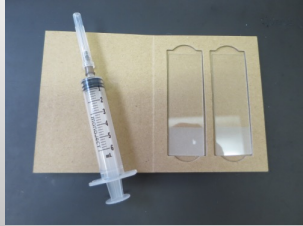


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Diagnostic Tools

Histopathology

- Closed Biopsies



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Diagnostic Tools

Histopathology

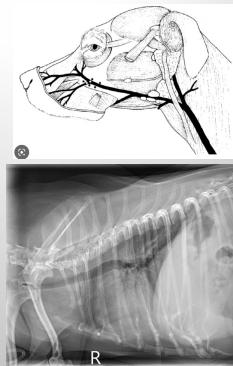
- Open Biopsy



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Staging

- Lymph node assessment
 - Fine needles aspirates
 - Lymph node biopsy (mandibular, medial retropharyngeal)
- Chest radiographs
- Abdominal Ultrasound



15

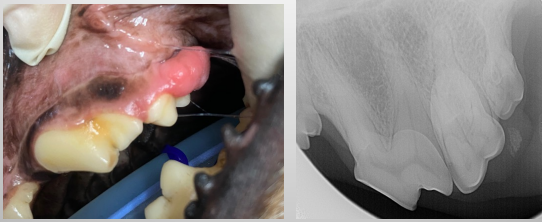
Types of Oral Lesions

- Non – neoplastic lesions
 - Reactive
 - Gingival hyperplasia (GH)
 - Do not use 'epulis' - only descriptive, no further implication on the nature of the lesion
 - a proliferation of the attached gingiva, often due to a chronic inflammatory response to the bacteria in plaque, food impaction, dental malposition and dental resorptive lesion
 - slowly progresses, if not complicated by trauma or secondary infection
 - it involves the marginal contour of the gingiva
 - evolves and it can almost completely cover the crowns of the teeth
 - slowly growing painless (usually) enlargements tend to appear most commonly in areas occupied by teeth, not in edentulous areas.

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Types of Oral Lesions

- Non – neoplastic lesions
 - Reactive (GH)
 - Can be firm, example has osseous metaplasia



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Types of Oral Lesions

- Non – neoplastic lesions
 - Reactive
 - Drug induced gingival enlargement/gingival overgrowth
 - histopathology - characterized by excessive accumulation of extracellular matrix proteins, such as collagen, or amorphous ground substance.
 - An inflammatory infiltrate dominated by plasmacytes and thickened keratinized epithelium is typically present.
 - There main types:
 - » phenytoin derivatives – anticonvulsant, 50% incidence in people
 - » calcium channel blockers
 - » cyclosporine.

18

Types of Oral Lesions

- Non – neoplastic lesions
 - Focal fibrous hyperplasia (FFH)
 - Aka fibrous or fibromatous epulis
 - different from the peripheral odontogenic fibroma, which is a benign neoplastic lesion of odontogenic origin
 - common in dogs; in one study it was found to account for 43.5% of all 'epulis'-like lesions in dogs
 - usually a sessile lesion, smooth and pink, and not inflamed or ulcerated
 - It consists of dense fibrous connective tissue covered by stratified squamous epithelium

19

Types of Oral Lesions

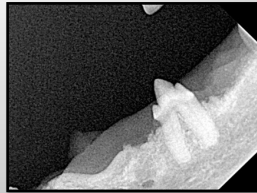
- Non – neoplastic lesions
 - Focal fibrous hyperplasia (FFH)



20

Types of Oral Lesions

- Non – neoplastic lesions
 - Pyogenic Granuloma



21

Types of Oral Lesions

- Non – neoplastic lesions
 - Reactive exostosis



22

Types of Oral Lesions

- Non – neoplastic lesions
 - Traumatic buccal or sublingual granuloma
 - Cheeking chewing lesions



23

Types of Oral Lesions

- Non – neoplastic lesions
 - Eosinophilic granuloma complex



24

Types of Oral Lesions

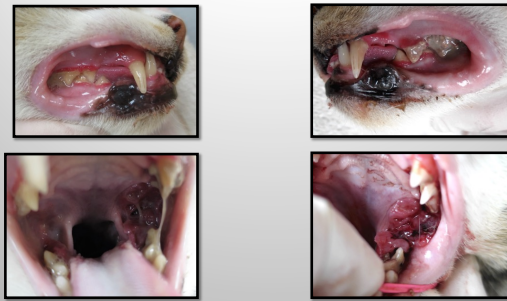
- Non – neoplastic lesions
 - Feline chronic gingivostomatitis



25

Types of Oral Lesions

- Non – neoplastic lesions
 - Feline chronic gingivostomatitis



26

Oral Neoplasia

- Odontogenic, Non-odontogenic
 - Inductive (effects on surrounding mesenchymal tissues), Non-inductive
- Malignant (non-odontogenic)
 - Oral neoplasms: ~ 5-6 % of all canine neoplasms.
 - Malignant melanoma (MM), Squamous cell carcinoma (SCC), fibrosarcoma

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Odontogenic Tumours

- Derived from epithelial, ectomesenchymal and/or mesenchymal elements that are involved in tooth development
- Can be further characterized as inductive or non-inductive
- Considered rare in domestic animals
- True incidence unknown due to constant changes in nomenclature

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Odontogenic Tumors

Canine Odontogenic Tumors

Epithelial Odontogenic Tumors

- Ameloblastoma (Central, Canine Acanthomatous Ameloblastoma or CAA)
- Amyloid-producing odontogenic tumors

Mesenchymal Tumors

- Peripheral odontogenic fibroma (POF)
 - » Many of the tumors previously described as fibromatous and ossifying epulides have been reclassified as peripheral odontogenic fibroma

Mixed Epithelial and Mesenchymal

- Odontoma

Odontogenic Cysts

- Dentigerous cyst
- Radicular cyst
- Keratogenic cyst

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Odontogenic Tumours

- Remain localized in the mandible or maxilla causing swelling and distortion
- Complete surgical excision, with 0.50 cm – 1cm (2 cm) margins recommended and is usually curative, depending on the tumour
- Malignant odontogenic tumors in cats and dogs are rare

30

Odontogenic Tumours

Epithelial Odontogenic Tumors: Canine Acanthomatous Ameloblastoma (CAA)



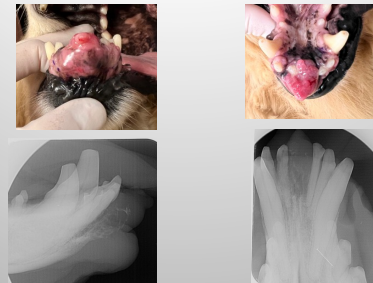
Treatment: surgical excision at least 1 cm, radiation therapy may be helpful

31

Odontogenic Tumours

Epithelial Odontogenic Tumors: Ameloblastoma, central/interosseous

- Uncommon, arises from bone, osteolytic, unilocular/multilocular, cystic lesions around roots with sclerotic margins
- owners note swelling, tooth displacement
- wide surgical excision recommended, maxillectomy/mandibulectomy



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Types of Oral Lesions

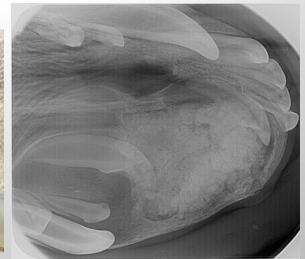
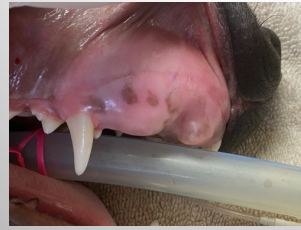
Epithelial Odontogenic Tumors: POF



33

Non-odontogenic Tumors

Odontoma



34

Odontogenic Cyst

Dentigerous Cyst



35

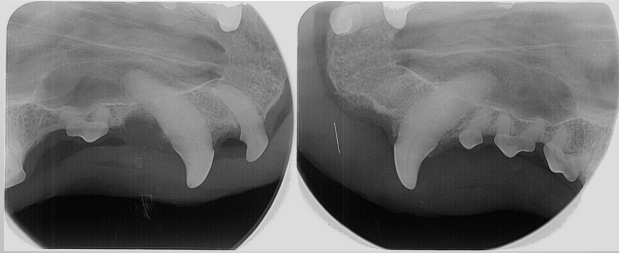
Odontogenic Cyst

Radicular Cyst



36

Odontogenic Cyst
Radicular Cyst



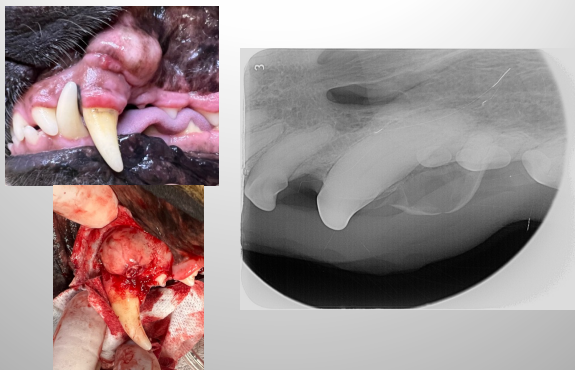
37

Odontogenic Cyst
Radicular Cyst



38

Odontogenic Cyst
Keratogenic Cyst



39

Non- Odontogenic Tumour
Squamous Cell Carcinoma



40

Non- Odontogenic Tumour

Squamous Cell Carcinoma



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Non- Odontogenic Tumour

Papillary Squamous Cell Carcinoma



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Non- Odontogenic Tumour

Papillary Squamous Cell Carcinoma



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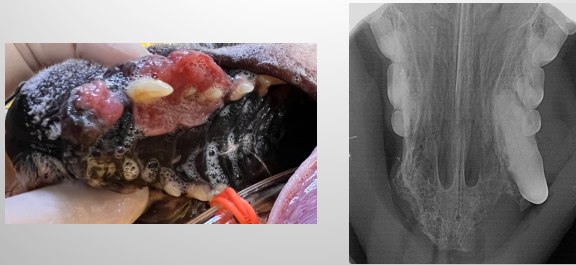
Non- Odontogenic Tumour

Papillary Squamous Cell Carcinoma



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Non- Odontogenic Tumour Malignant Melanoma



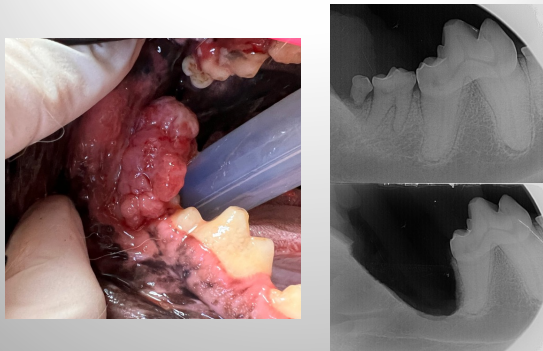
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Non- Odontogenic Tumour Malignant Melanoma



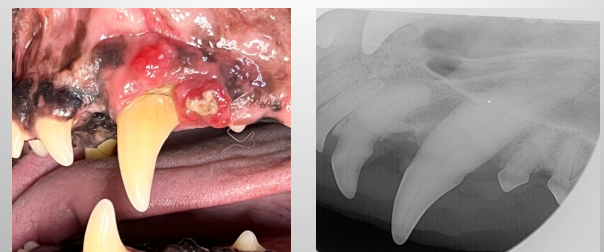
46

Non- Odontogenic Tumour Malignant Melanoma



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Non- Odontogenic Tumour Malignant Melanoma



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Non- Odontogenic Tumour

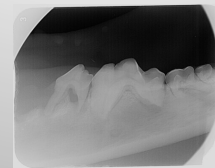
Malignant Melanoma



49

Non- Odontogenic Tumour

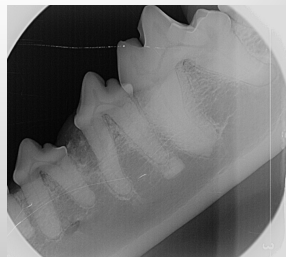
Fibrosarcoma



50

Non- Odontogenic Tumour

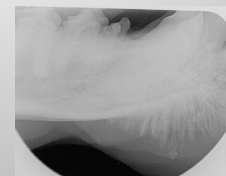
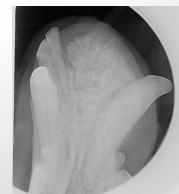
Osteosarcoma



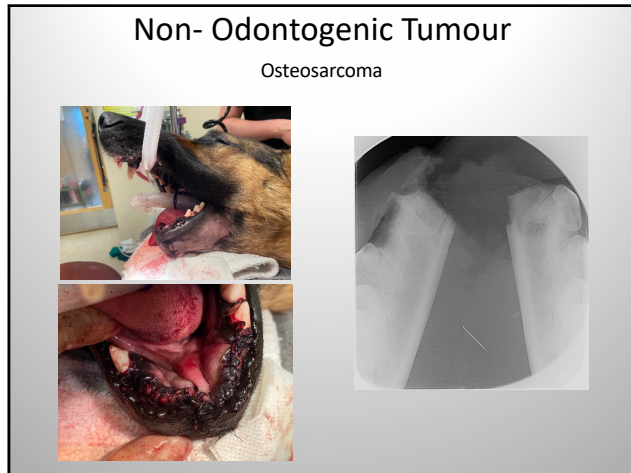
51

Non- Odontogenic Tumour

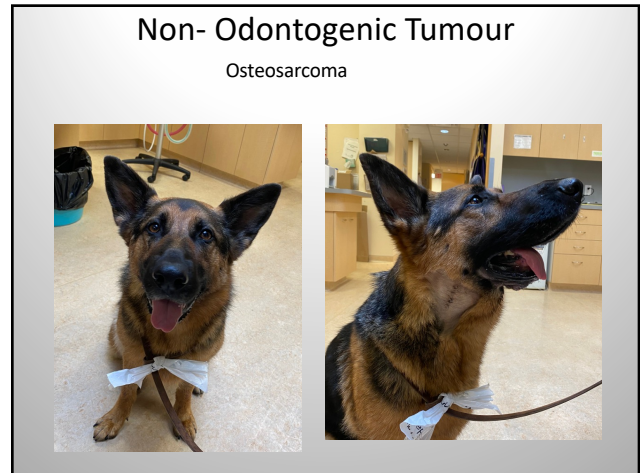
Osteosarcoma



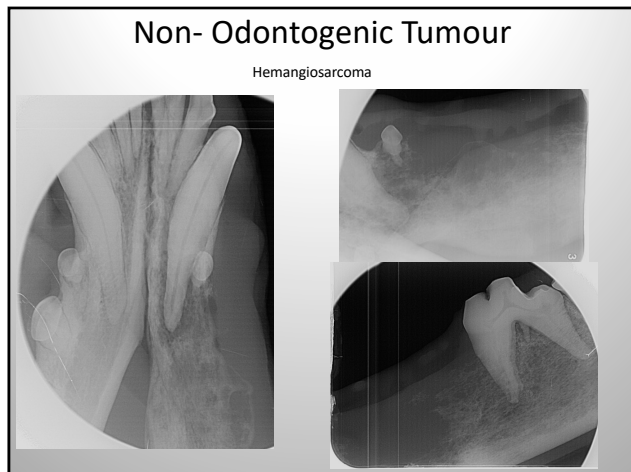
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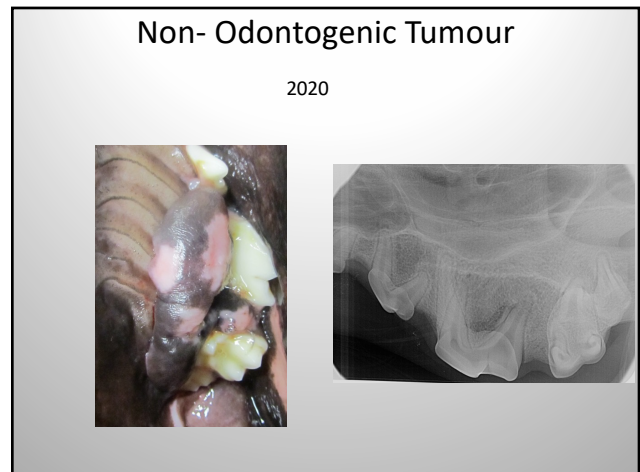
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54



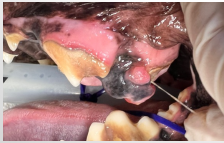
55



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Non- Odontogenic Tumour

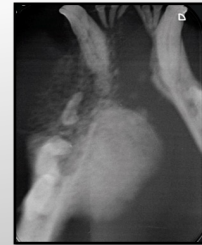
2022



Undifferentiated malignant tumor of young dogs

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Squamous Cell Carcinoma



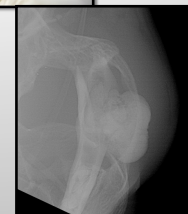
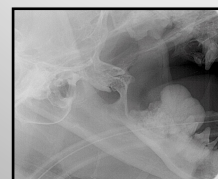
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Squamous Cell Carcinoma

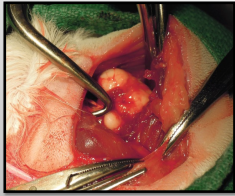


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Osteoma



60



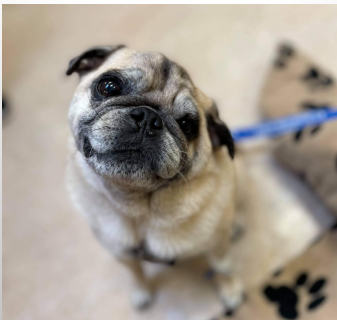
61

Summary

- Thorough history and complete physical and oral examination, both conscious and unconscious, are critical
- Oral examination should include dental radiographs
- Difficult to differentiate benign from malignant lesions – histopathology
- Any swelling/mass should be biopsied

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Questions?



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