Differential Diagnosis of Oral Masses

Palatal Lesions

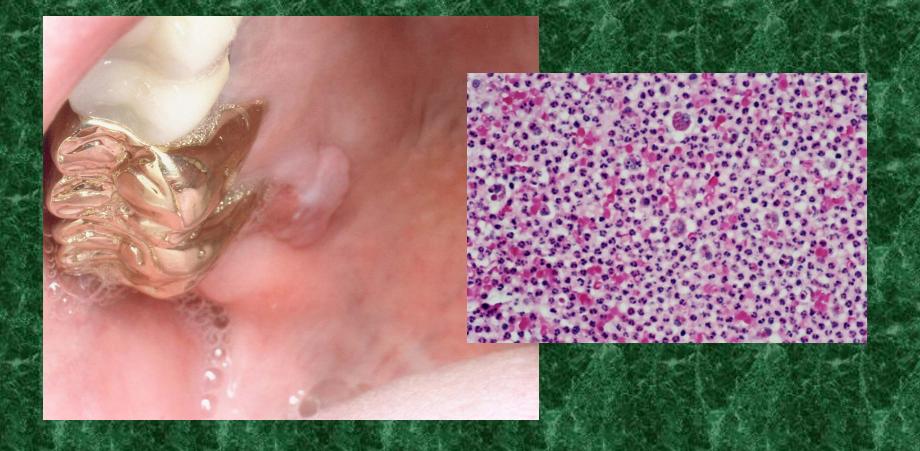
#### Palatal Masses

- Periapical Abscess
- Torus Palatinus
- Mucocele
- Lymphoid Hyperplasia
- Adenomatous Hyperplasia
- Benign Salivary Neoplasms
- Malignant Salivary Neoplasms
- Mesenchymal Neoplasms
- MALT Lymphoma
- Carinoma (Verrucous, Antral)

#### Apical Palatal Abscess

- Carious, nonvital tooth
- Spread of infection from palatal root
- Fluctuant or compressible
- Off midline
- Purulent aspirate
- Pain

## Palatal Abscess



#### Torus Palatinus

- Onset during adulthood
- Females>Males
- Quite variable in size
- Tendency for lobulation
- Midline localization
- Bone hard to palpation
- Other exostoses may be present
- Remove for Prosthetic reasons

## Torus Palatinus

#### • Midline Hard Palate



#### Reactive Lesions of Palatal Gingiva

- Pyogenic Granuloma
- Peripheral Fibroma
- Peripheral Ossifying Fibroma
- Peripheral Giant Cell Granuloma

## Pyogenic Granuloma



#### Mucocele Soft Palate, Fauces

### Hyperplastic Tonsillar Tissue



#### Adenomatous Hyperplasia

- Overgrowth of normal salivary tissue (acini and ducts)
- Soft to palpation
- Adults
- Mistaken for salivary tumor clinically
- Biopsy to confirm diagnosis

# Adenomatous Hyperplasia



#### Benign Salivary Tumors

Pleomorphic Adenoma
 –Myoepithelioma

Monomorphic Adenoma
 Basal Cell Adenoma

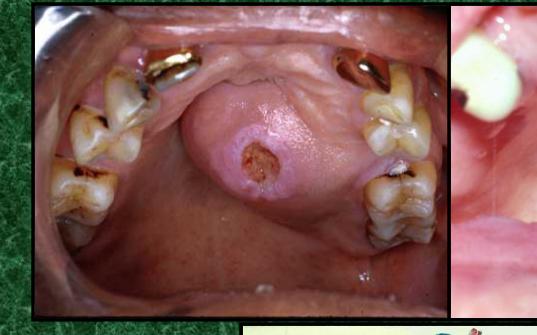
### Pleomorphic Adenoma

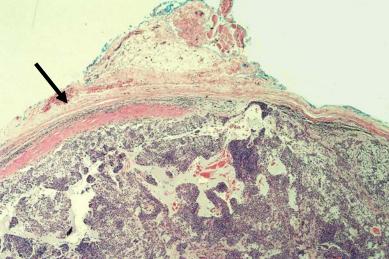
- Encapsulated
- Capsule may fuse to periostium
- Extracapsular invasion is common
- Wide histologic variation
  - Ductal and myoepithelial component
  - Heterogeneous "Pleomorphic" stroma
    - Myxoid, Cartilage, bone, fat
- Enucleation, subperiosteal dissection
- Low Recurrence in Palate

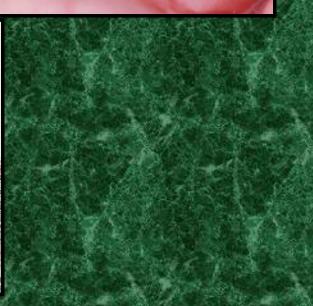
# Pleomorphic Adenoma



# Mixed Tumor



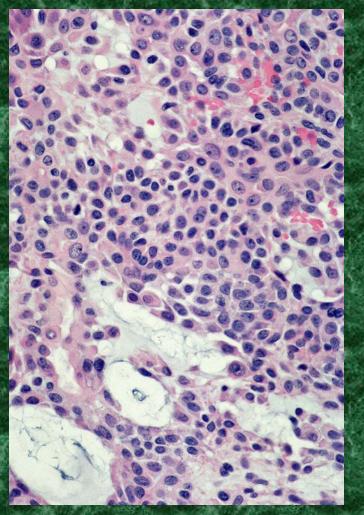




#### capsule

#### Pleomorphic adenoma

#### Plasmacytoid Myoepithelial Cells



Tyrosine Crystals

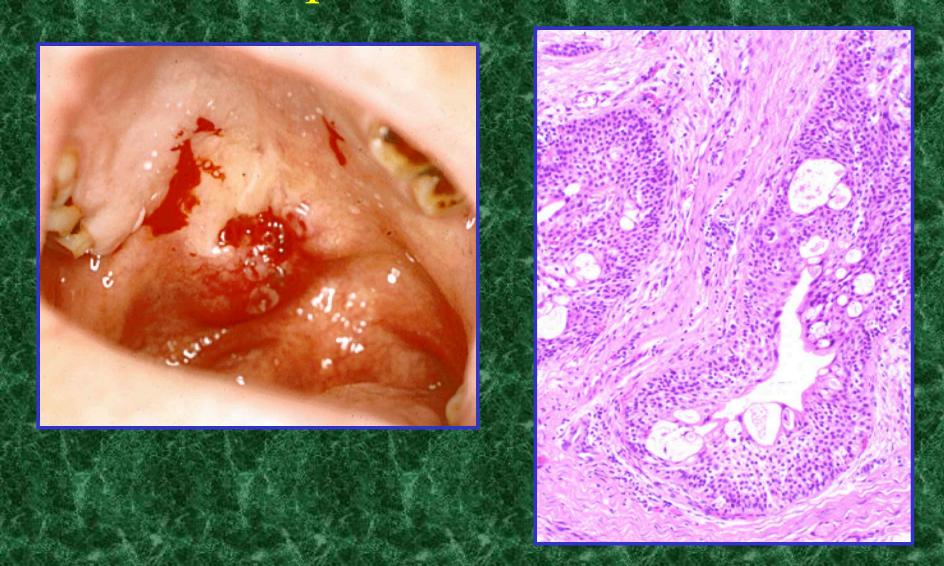
## Malignant Salivary Tumors

- Mucoepidermoid Carcinoma
- Polymorphous Low Grade Adenocarcinoma
- Adenoid Cystic Carcinoma
- Adenocarcinoma (NOS)
- Rare Adenocarcinomas
  - Epithelial-Myoepithelial Carcinoma
  - Carcinoma ex Mixed Tumor
  - Salivary Duct Carcinoma
  - Adenosquamous Carcinoma

#### Mucoepidermoid Carcinoma

- Midlife, yet may occur at young age
- Behavior varies with histologic grade
  - Low Grade: Nonmetastasizing
  - Intermediate Grade
  - High Grade: Behavior Similar to Squamous Cell CA
- Wide local excision including bone
- Evaluation of neck for metastasis
  - Clinical
  - MRI, nodes > 1.0 cm positive

## Mucoepidermoid Carcinoma



### Low Grade Polymorphous AdenoCA

- Nonencapsulated
- Often misdiagnosed as Adenoid Cystic Carcinoma
- Histologic variations
  - Solid nests, cribriform, perineural, Indian file, papillary cystic, tubular
- Wide local excision
- Metastases
  - Nodal, more common with papillary patterns histologically (15%)
  - Distant (8%)

#### Polymorphous Low Grade AdenoCA





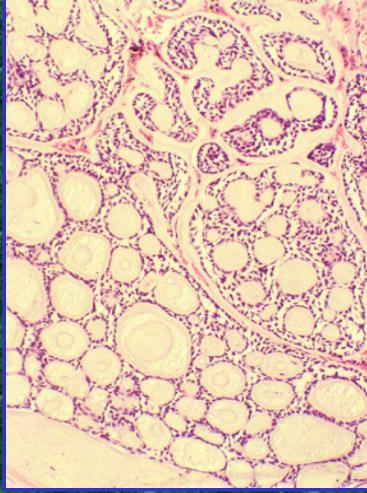
## Adenoid Cystic

- Similar histology to PLGA
- Recurrence and Metastasis
- Histology
  - Tubular, Solid, Cribriform
  - Stromal hyalinization
- Wide local excision
- Neck node assessment

   Clinical
  - MRI, nodes > 1.0 cm positive

## Adenoid Cystic Carcinoma





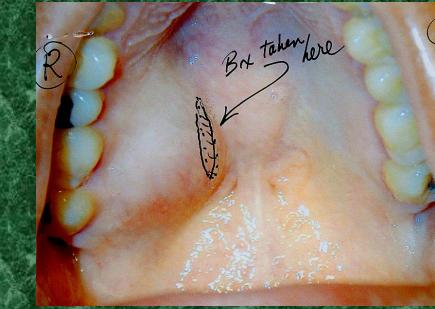
#### Adenocarcinoma, NOS

- Histologically not distinctive
  Ductal differentiation
- Most are intermediate to high grade
- Local and Distant Metastases
- Wide local excision, Radiation

#### Various Adenocarcinomas



#### Myoepithelial Carcinoma

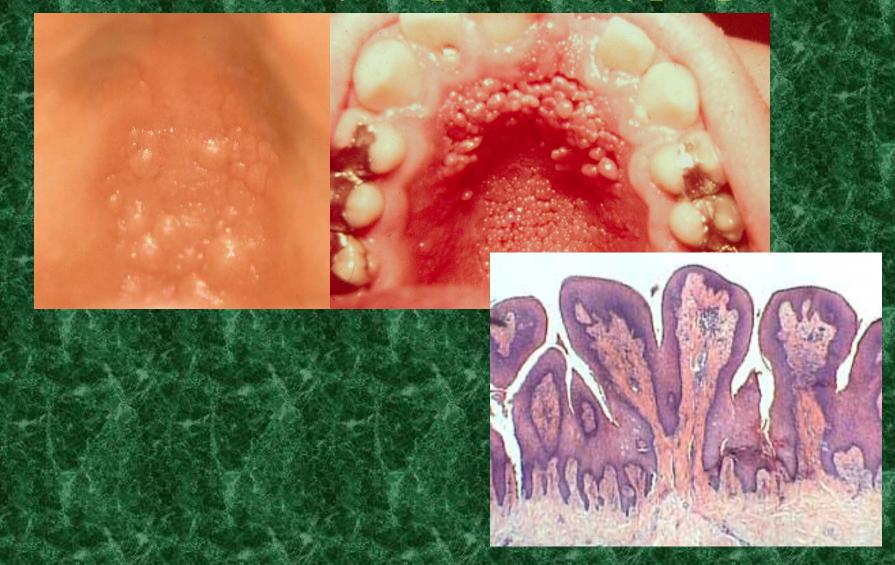


Polymorphous low grade adenocarcinoma

#### Mesenchymal Neoplasms

- Benign
  - Traumatic Fibroma (Fibrous Hyperplasia)
  - Nerve Sheath Tumors
  - Granular Cell Tumors (Soft Palate)
- Malignant
  - MALT Lymphoma
  - All sarcomas are very rare

## Inflammatory Papillary Hyperplasia)



## Fibroma, Pyogenic Granuloma



Atypical Lymphoreticular Disease of the Palate (MALT Lymphomas)

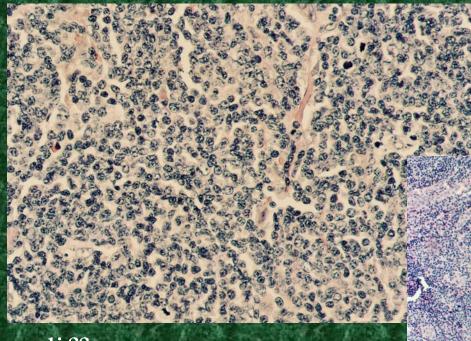
- Low Grade Malignancies
- Diffuse soft swelling hard and soft palate junction
- Histology
  - Diffuse or Nodular
  - Plasmacytoid/Histiocytoid
  - May show benign lymphoepithelial lesion
- Radiation Therapy

#### Atypical Lymphoproliferative Lesion





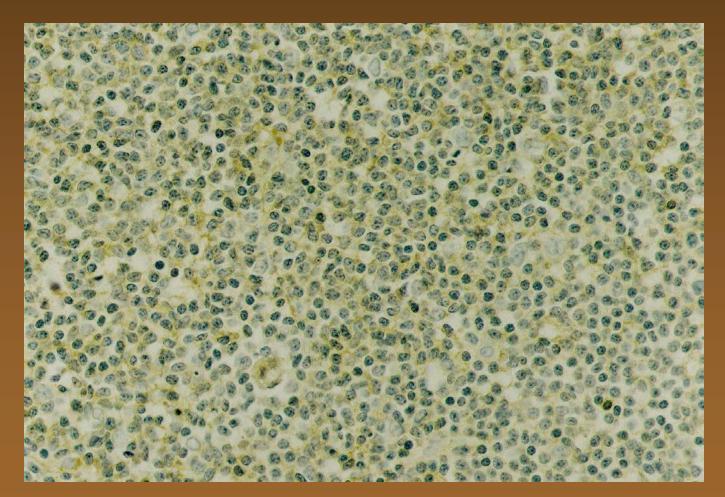
## **Atypical Lymphoreticular Lesion**





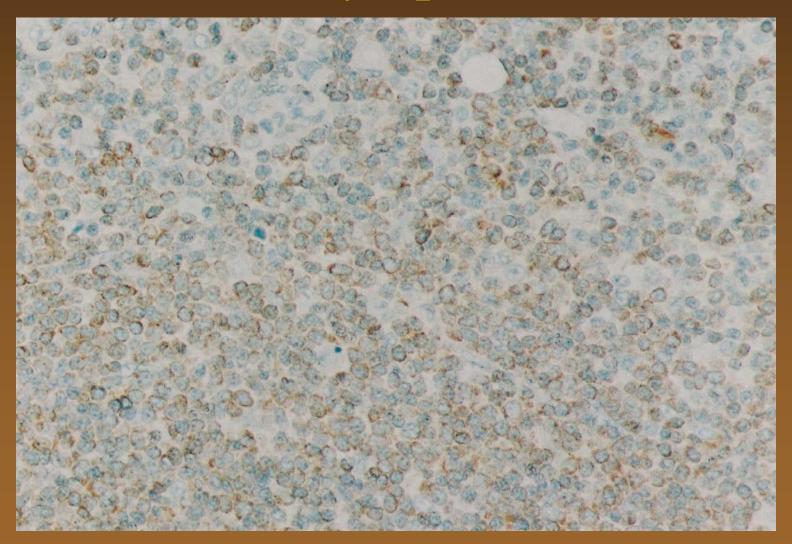


### IHC Markers Lymphoma



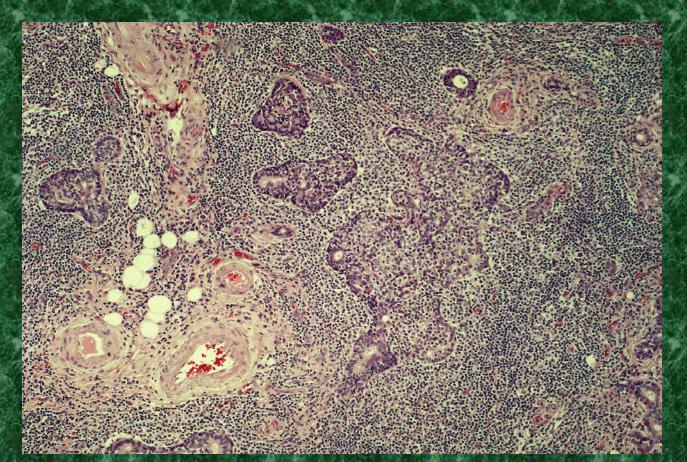
#### Bcl=2 oncogene

### IHC Lymphoma



CD 20 – B Lymphocytes

# MALT Lymphoma

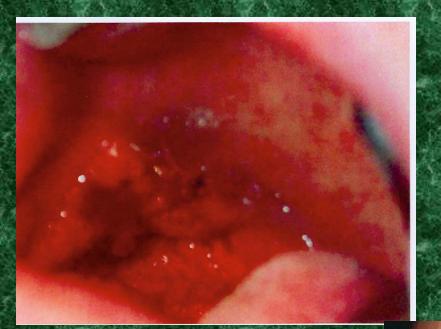


Lymphoepithelial Lesion Pattern

#### Carcinoma

- Squamous Cell CA is rare in palate
   Soft Palate>Hard Palate
- Verrucous Carcinoma
  - Palate, alveolar ridge
  - White or pink, verrucous or papillary
- Antral Carcinoma
  - Palatal perforation, oral mass
  - Often ulcerated
  - Most are Squamous Cell CAs or SNUC

## Squamous Cell CA





#### Moderately Differentiated, SCCA

#### Papillary Variant



Spindle Cell Carcinoma

# Antral Squamous Cell CA

