# RED AND PURPLE LESIONS

## VASODILATION

## VASCULAR PROLIFERATION

### CLINICAL CATEGORIES

• FOCAL

· DIFFUSE/MULTIFOCAL

• PETECHIAL

#### FOCAL RED/PURPLE LESIONS

- Nonspecific mucositis
- Ecchymosis/Hematoma
- Hemorrhagic Mucocele
- Erythroplakia
- Hemangioma
- Varix
- Reactive Proliferations
- Kaposi's sarcoma

### NONSPECIFIC MUCOSITIS

- A nonspecific focus of inflammation due to trauma, chemical injury, thermal injury
- Cause/Effect relationship
- White sloughing component may be present
- Microscopically: nonspecific chronic or subacute inflammation in the mucosal connective tissue, increased vascularity with vasodilation
- Diascopy is positive

### NonSpecific Mucositis

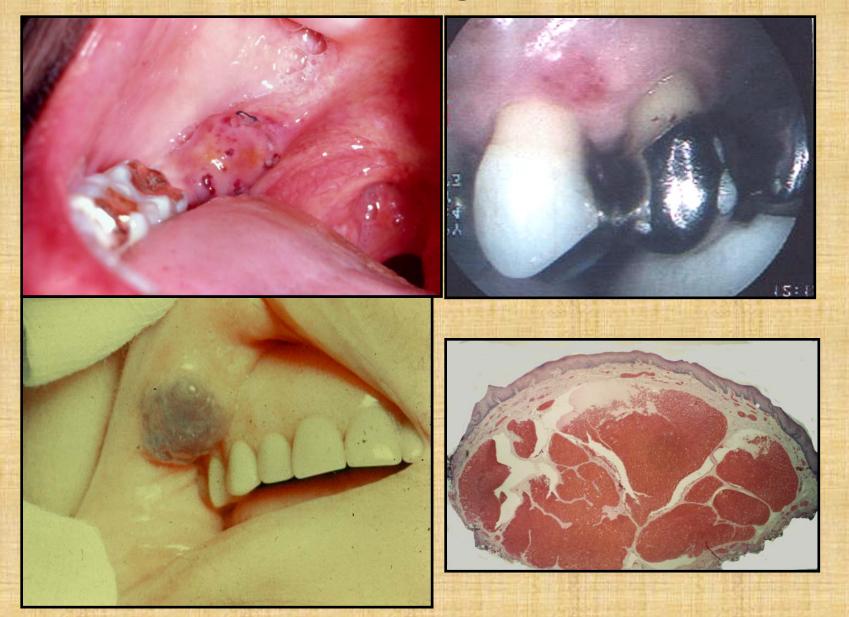


TRAUMA, BURNS, IRRITATION, ETC.

### Macular Hemangioma

- Macular vrs Nodular (Racemos)
- Childhood onset
- Spontaneous resolution during second decade for the majority
- Tongue, lips, buccal mucosa
- Diascopy is positive unless thrombosis has become extensive
- May have thrombi and phleboliths
- Microscopic: Capillary, Cellular, Cavernous
- Tx: Tincture of Time, excision, laser, sclerosing agents, Tattooing

## Hemangiomas



#### Varix

- Adult Onset
- Precedent Trauma
- Lower Lip and Vestibule
- Red and Purple
- Micro: similar to hemangioma; many show thrombi and some have intravascular papillary proliferations akin to a pyogenic granuloma
- Tx: Excision, laser

### Varix



#### Reactive Lesions

- All are tumefactive
- Exuberant proliferations of granulation and/or fibrous tissues
- Pregnancy association
- Trauma and irritation
  - Pyogenic Granuloma (typically red)
  - Peripheral Ossifying Fibroma (pink or red)
  - Peripheral Giant Cell Granuloma (purple/red/blue)

### Reactive Proliferations



Peripheral Giant Cell Granuloma

### Ecchymosis/Hematoma

- Post-trauma, Post-injection into artery
- Flat or raised and nodular
- Variagated coloration red, blue, brown
- Rule out coagulopathy or platelet disorder
  - Prothrombin Time (INR), Partial Thromboplastin Time
  - Platelet count and function test
  - Bleeding/Clotting Times
- Tx: None. Resolution in 10 days

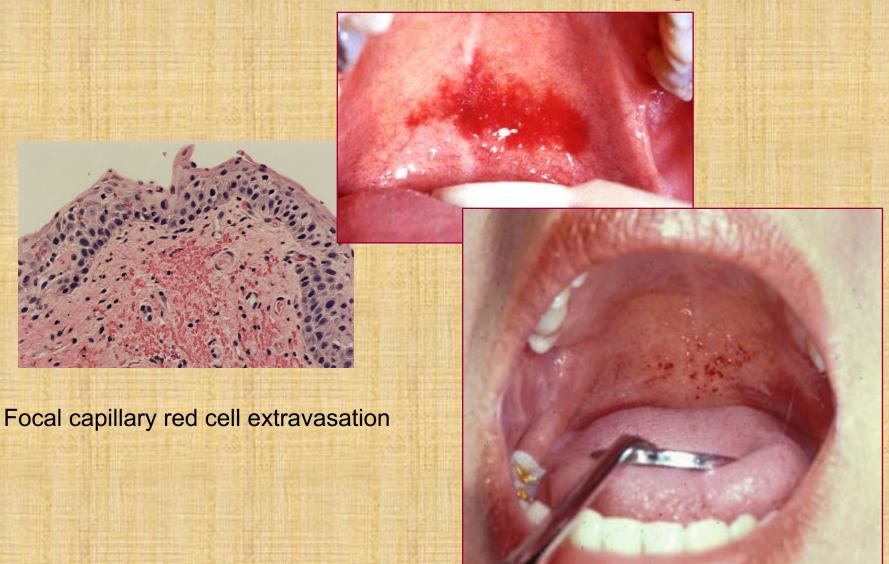
## Ecchymosis/Hematoma



### PETECHIAL HEMORRHAGE

- Traumatic (Suction) Petechia
  - Infectious Mononucleosis
- Thrombocytopenia
  - Idiopathic thrombocytopenic purpura
  - Leukemia
  - Pancytopenia
  - Chemotherapeutic drugs
- Thrombocytopathia
  - Hereditary Platelet adhesion molecule defects
  - Acquired, Antithrombotic drugs

### Petechial Hemorrhages



## (Idiopathic) Thrombocytopenic Purpura



ITP in HIV patient



TP of lips and skin in patient with leukemia and leukemic gingivitis

### Hereditary Hemorrhagic Telangiectasia

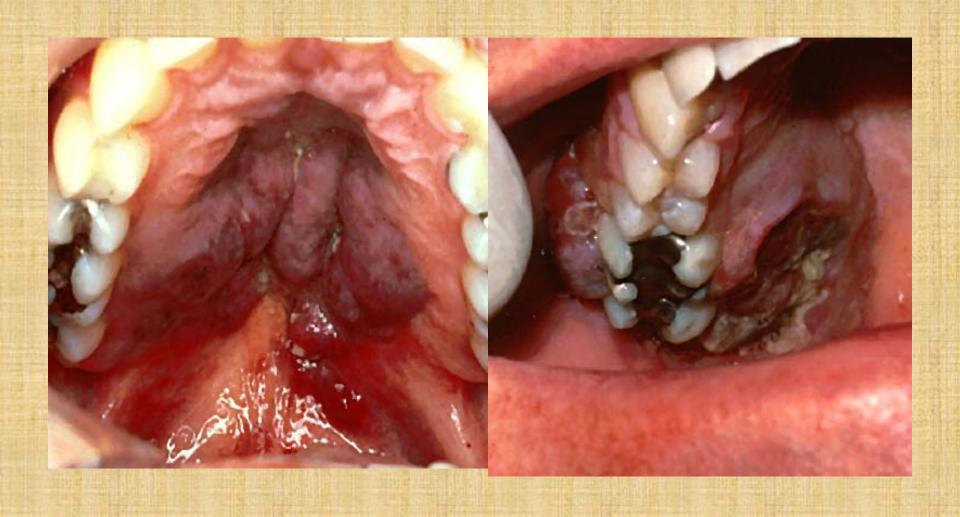
- An autosomal dominant disorder
- Vascular wall defect with vasodilation
- Nasal and oral mucosal petechial like lesions
- Epistaxis



### Kaposi's Sarcoma

- HIV infected males
- Extremely rare in nonimmuno-compromised patients (elderly males)
- Typically multifocal, yet may be a solitary red or purple macule
- Causative agent: Kaposi's Sarcoma Virus (Herpesvirus type 8)
- Microscopically and angiosarcoma
- Lesions are preventable when patients are taking HIV triple therapy

## Kaposi's Sarcoma



## MULTIFOCAL & DIFFUSE RED LESIONS

- Bullous/Erosive Disease
  - Lichen Planus
  - Mucous Membrane Pemphigoid
  - Lupus Erythematosus
  - Pemphigus Vulgaris
  - Erythema Multiforme
- Allergic Stomatitis
- Viral Vesicular Eruptions
- Candidiasis (erythematous)
- Nonspecific, puberty and pregnancy gingivitis
- Leukemic gingivitis
- Foreign body gingivitis
- HIV associated Gingivitis
- Benign Migratory Glossitis
- Erythema Migrans
- Radiation/Chemotherapy Mucositis
- HIV associated Kaposi's Sarcoma
- Blue Rubber Bleb Nevus Syndrome (angiomas)
- Trigeminal Angiomatosis & Sturge Weber syndrome

### **Bullous Desquamative Diseases**

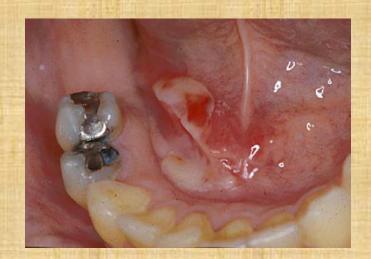


Erosive lichen planus





Mucous membrane pemphigoid



Pemphigus vulgaris

### Erythema Multiforme

Drug Allergens (e.g.: sulfa), post herpetic





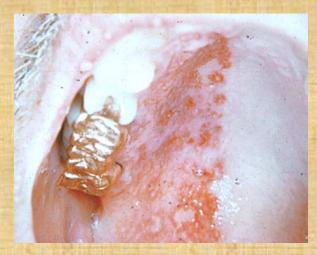
### Viral Vesicular Eruptions



**Primary herpes** 



Recurrent herpes



**Shingles** 

### Candidiasis

Denture Sore Mouth



PAS



### Gingivitis

- Nonspecific, plaque induced
- ANUG
- Pregnancy associated
- Puberty associated
- Foreign body (restorative abrasives)
- HIV associated
- Leukemic infiltrates

## Acute Necrotizing Ulcerative Gingivitis



## Gingivitis



Puberty gingivitis

Erythematous enlargement in leukemia

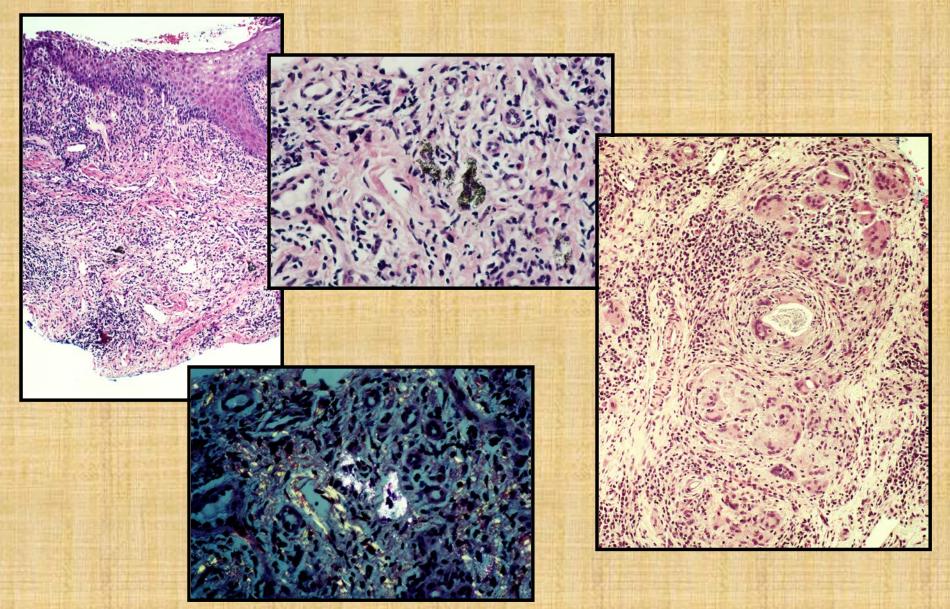
## Foreign Body Gingivitis

 Abrasives (finishing stones, discs)





## Foreign Body Gingivitis



## HIV Gingivitis



## Benign Migratory Glossitis



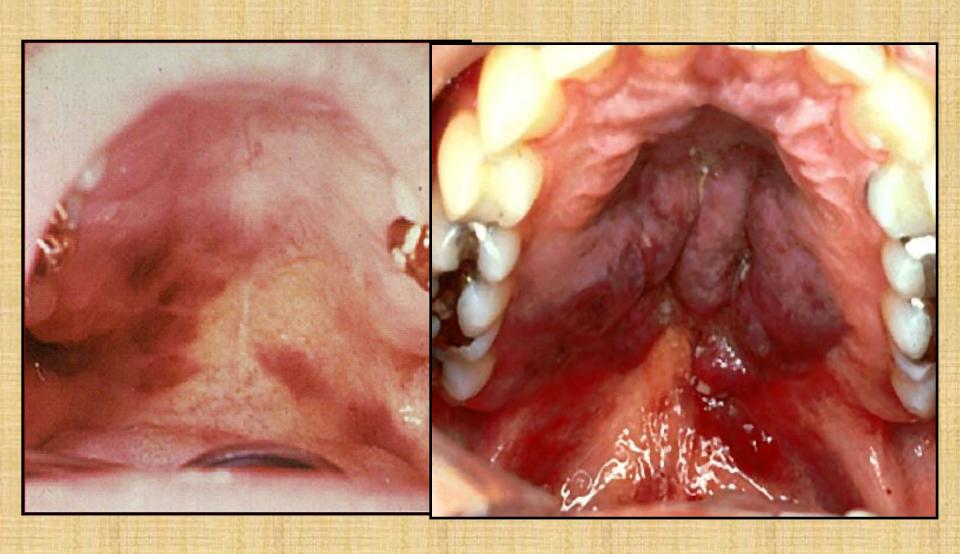
### Erythema Migrans



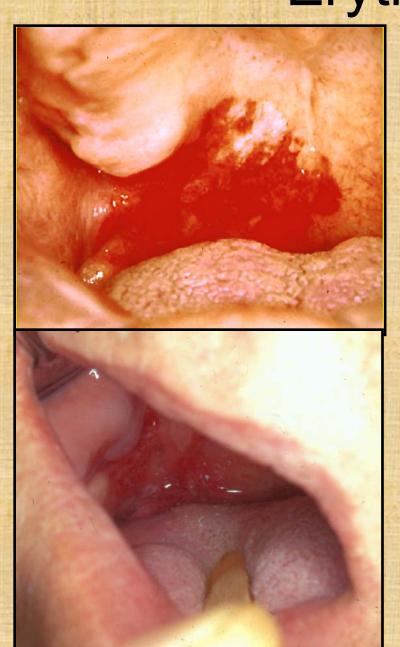
### Post Radiation Mucositis



## HIV - Kaposi's Sarcoma



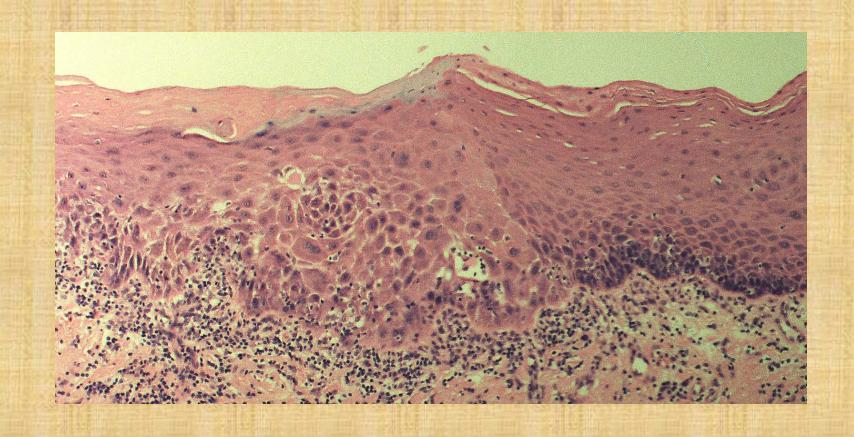
## Erythroplakia



Leukoerythroplakia



## Erythroplakia: Dysplasia



### Encephalotrigeminal Angiomatosis

- Sturge Weber Syndrome
- Facial, sometimes oral, "port wine stain"
- Angiomas are diffuse and macular, yet may have foci of nodularity
- Tram line calcifactions seen on skull films> represent vascular wall calcium deposits
- CNS angiomas
- Epilepsy

### **Encephalotrigeminal Angiomatosis**

Sturge Weber Syndrome