ULCERATIVE LESIONS OF THE ORAL CAVITY

SAM J. CUNNINGHAM, MD, PhD
Faculty Advisor: FRANCIS B. QUINN, JR., MD, FACS
The University of Texas Medical Branch
Department of Otolaryngology
Grand Rounds Presentation
October 16, 2002
ORAL CAVITY

- LIPS
- TEETH
- GINGIVA
- ORAL MUCOUS MEMBRANES
- PALATE
- TONGUE
- ORAL LYMPHOID TISSUES
Acute: small, recent onset, short duration, recurrent

- Trauma
- Recurrent Aphthous Stomatitis
- Behcet’s
- Herpesvirus Infection
- Herpangina
Trauma:

- Cheek Biting
Trauma:

- Ill-Fitting dentures
Trauma:

- Chemical Burns
Trauma:

* Abrasions from Teeth
Recurrent Aphthous Stomatitis (RAS)

- Most common ulcerative lesion of oral cavity
- Recurrent, painful ulcers
- Confined to soft mucosa
- Subdivided into three types:
  - Minor aphthae
  - Major aphthae
  - Herpetiform aphthae
Recurrent Aphthous Stomatitis (RAS)

- Minor aphthae:
  - Less than 1 cm
  - Heal completely in 7-10 days without scarring
  - Painful
  - Prodromal stage
  - Shallow and round to oval
  - Gray to yellow membrane
  - Clusters of up to 5 ulcers
  - Steroids
Recurrent Aphthous Stomatitis (RAS)

- Minor apthae
Recurrent Aphthous Stomatitis (RAS)

- Major Aphthae
  - Uncommon
  - Irregular, deep ulcers
  - 1-3 cm in size
  - Raised borders
  - Heal in 4-6 weeks
  - Extensive scarring and distortion
  - BIOPSY!!
  - Steroids
Recurrent Aphthous Stomatitis (RAS)

- Major apthae
Recurrent Aphthous Stomatitis (RAS)

- Herpetiform Aphthae
  - Uncommon
  - Crops of up to 150 very small (<3mm) ulcers
  - Heal completely in 7-10 days
  - COMPLETELY UNRELATED TO HERPESVIRUS
Recurrent Aphthous Stomatitis (RAS)

- Herpetiform aphthae
Behcet’s

- Symptom complex of:
  - Recurrent aphthous ulcers of the mouth
  - Painful genital ulcers
  - Uveitis or conjunctivitis
Behcet’s

- Affects persons of Mediterranean, Middle Eastern, or Japanese decent
- Easily confused with Stevens-Johnson syndrome or Reiter’s disease
- Need referral for systemic treatment
Behcet’s
Herpesvirus Infection

- HSV-1 and/or HSV-2
  - Primary Infection
  - Secondary Infection
- Varicella zoster virus (HHV-3)
Herpesvirus Infection

- Primary Infection
  - Herpetic gingivostomatitis
  - Younger patients
  - Often asymptomatic
  - May be associated with fever, chills, malaise
  - Vesicles-ulcers-crusting
  - Anywhere in the oral cavity
Herpesvirus Infection

🌟 Primary Infection
Herpesvirus Infection

🌟 Primary Infection
Herpesvirus Infection

- Secondary Infection
  - Reactivation of latent virus
  - Not associated with systemic symptoms
  - Small vesicles
  - Occur only on the hard palate and gingiva
  - Prodromal signs
Herpesvirus Infection

- Secondary infection
Herpesvirus Infection

- Varicella zoster virus (HHV-3)
  - Latent infection
  - Oral ulcers
  - Dermatomal distribution
Herpesvirus Infection

- Varicella zoster virus
Herpesvirus Infection

- Varicella zoster virus
Herpangina

- NOT caused by Herpesvirus
- Coxsackie A virus
- Children < 10 years of age
- Common in summer and fall
- Often subclinical presentation
- Headache/Abdominal pain 48hrs prior to papulovesicular lesions on tonsils and uvula.
- Sore throat
Herpangina
Chronic: longer duration, well circumscribed, raised borders, indurated base with crater

- Trauma
- Infection
- Neoplasm
- Necrotizing sialometaplasia
Trauma:

- Ill-Fitting dentures
Infection

- Rare
- HIV/AIDS patients
- Bacterial
- Deep mycotic infection
- Candida
Infection

- Bacterial
  - Usually secondary infection
  - Primary infection: syphilis, tuberculous, or actinomycosis
Infection

- Bacterial-Syphilis
Infection

- Bacterial-Syphilis
Infection

- Mycotic
  - Blastomycosis
  - Histoplasmosis
Infection

- Histoplasmosis
Infection

* Candida
  * *Candida albicans*
  * Most common
  * Normal flora
  * Predisposing factors
  * White creamy patches
  * KOH prep
  * Nystatin oral suspension
Infection

🌟 Candida
Neoplasm

- Squamous cell carcinoma (SCC)
  - Most common
  - Irregular ulcers with raised margins
  - May be exophytic, infiltrative or verrucoid
  - Mimic benign lesions grossly
Neoplasm

- Squamous cell carcinoma
Neoplasm

- Squamous cell carcinoma
Neoplasm

* Squamous cell carcinoma
Necrotizing Sialometaplasia

- Inflammatory condition
- Ischemia to minor salivary glands
- Deep ulcers of the hard palate
- Resolves in 6 weeks
Sialometaplasia
Sialometaplasia
Generalized: broad classification encompassing a wide variety of causative agents or conditions

- Contact stomatitis
- Radiation mucositis
- Cancer chemotherapy
Dermatologic Disorders: cutaneous and oral manifestations

- Erythema multiforme
- Lichen planus
- Benign mucous membrane pemphigoid
- Bullous pemphigoid
- Pemphigus vulgaris
Dermatologic Disorders

- Erythema multiforme
  - Rapidly progressive
  - Antigen-antibody complex deposition in vessels of the dermis
  - Target lesions of the skin
  - Diffuse ulceration, crusting of lips, tongue, buccal mucosa
  - Self-limited, heal without scarring
Dermatologic Disorders

- Erythema multiforme
Dermatologic Disorders

- **Lichen planus**
  - Chronic disease of skin and mucous membranes
  - Destruction of basal cell layer by activated lymphocytes
  - Reticular: fine, lacy appearance on buccal mucosa (Wickman’s striae)
  - Hypertrophic: resembles leukoplakia
  - Atrophic or erosive: painful
Dermatologic Disorders

- Lichen planus
Dermatologic Disorders

- Lichen planus
Dermatologic Disorders

- Lichen planus
Dermatologic Disorders

- **Benign mucous membrane pemphigoid**
  - Tense subepithelial bullae of skin and mucous membranes
  - Rupture, large erosions, heal without scarring
  - Sloughing (Nikolsky sign)

- **Bullous pemphigoid**
  - Cutaneous lesions more common

- **Both show subepithelial clefting with dissolution of the basement membrane**
  - IgG in basement membrane
Dermatologic Disorders

- Benign mucous membrane pemphigoid
Dermatologic Disorders

- Benign mucous membrane pemphigoid
Dermatologic Disorders

- Pemphigus vulgaris
  - Severe, potentially fatal
  - Jewish and Italians
  - Intraepithelial bullae and acantholysis
  - Nikolsky’s sign
  - Loss of intracellular bridges
  - Autoimmune response to desmoglein 3
  - Intraepithelial clefting
Dermatologic Disorders

- Pemphigus vulgaris
Dermatologic Disorders

[*] Pemphigus vulgaris