

Common Oral Pathology for the Physician

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Outline

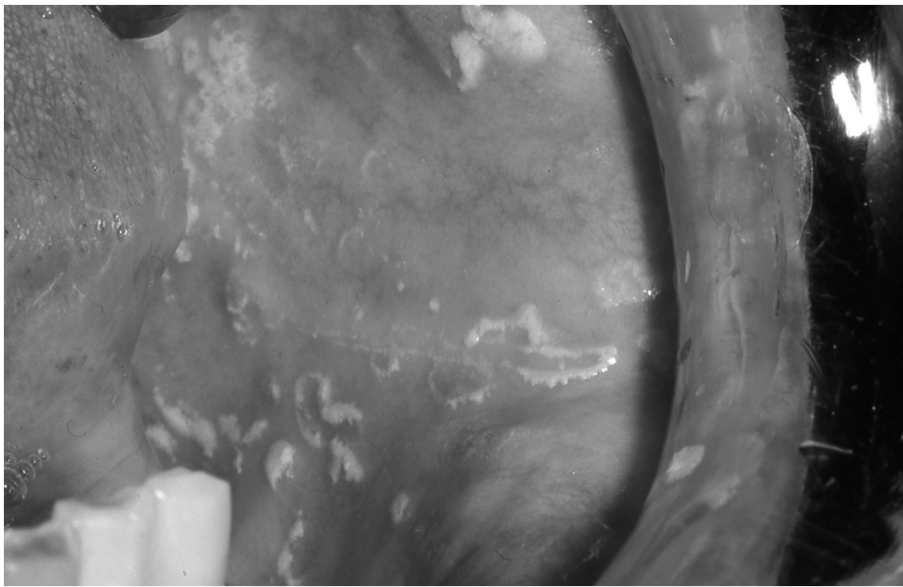
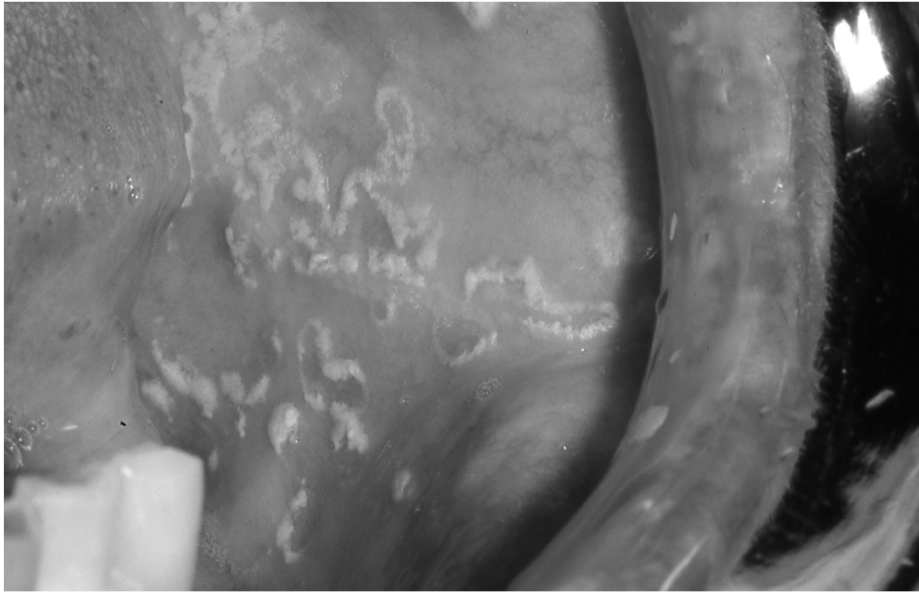
- **Oral infections**
 - **Candidiasis**
 - **HSV (HHV) I & II**
- **Oral ulcers**
 - **Aphthous (canker sores)**
 - **Traumatic**
 - **Potentially neoplastic/precancerous**

Candida albicans

- **Very common oral colonizer, may lead to infection**
- **Present in 30-50% of asymptomatic adults**
- **Presence in oral cavity increases with increasing patient age**

Acute Pseudomembranous Candidiasis

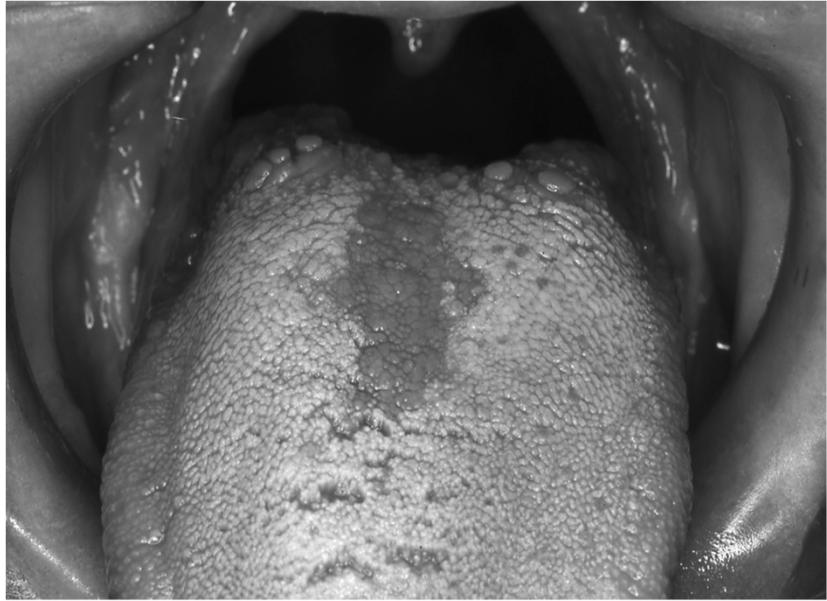
- **Also known as “thrush”**
- **White, cottage cheese-like plaques, readily dislodged or wiped off**
- **Buccal mucosa, palate or tongue**
- **Often asymptomatic**



Erythematous Candidiasis

- **more common than pseudomembranous candidiasis**
- **tongue frequently involved with focal or diffuse atrophy of dorsal filiform papillae**
- **diffuse change may follow use of broad-spectrum antibiotic with soreness/pain**

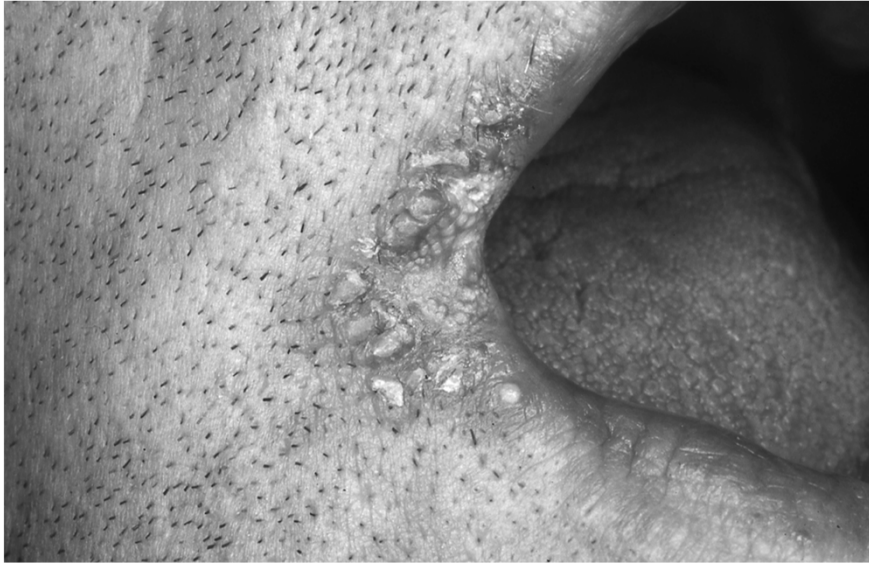




Angular Cheilitis

- Usually mixed infection; oral fungi & skin bacteria
- Often seen in patients with loss of posterior teeth; worn dentures or partials
- Redness, cracking of corners of mouth
- Responds to topical antibiotics, but any intraoral infection must also be treated





Candidiasis: diagnosis

Clinical signs and symptoms often sufficient

- culture or exfoliative cytology
- biopsy – often unnecessary

Candidiasis: treatment

- Topical or systemic antifungal therapy
 - Clotrimazole troches (Mycelex)
 - Fluconazole tabs 100mg (Diflucan)
 - Dermazine cream (angular cheilitis, treats both fungi & bacteria)
- Removable prostheses (dentures) must also be cleaned and treated

Herpes Simplex Virus (HSV, HHV)

- **DNA virus, human herpesvirus (HHV) family**
- **Two forms – HSV-1 (predominantly oral) and HSV-2 (predominantly genital)**
- **Initial contact with the virus produces primary infection; may/may not result in clinical disease**
- **HSV is neurotropic – transported via nerves to sensory ganglia**

Recurrent Herpes Labialis

- **Triggered by UV light, trauma, stress**
- **Affect vermilion zone, perioral skin or both**
- **Prodromal itching or tingling**

Recurrent Herpes Labialis

- **Erythema, followed by cluster of vesicles**
- **With no treatment, vesicles rupture, form a crust, lesions heal in 7-10 days**





Recurrent Herpes Labialis

- **Avoid excess sun exposure**
- **Sunblocks may be helpful to prevent lesion development**
- **Topical antiviral agents - *statistically* significant decrease in healing time**

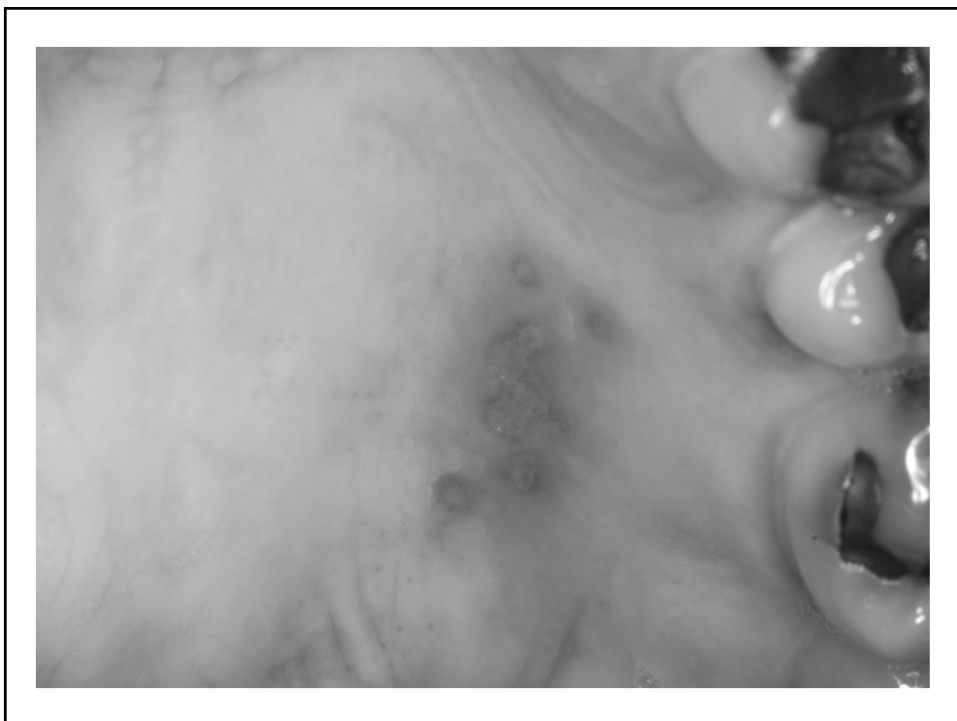
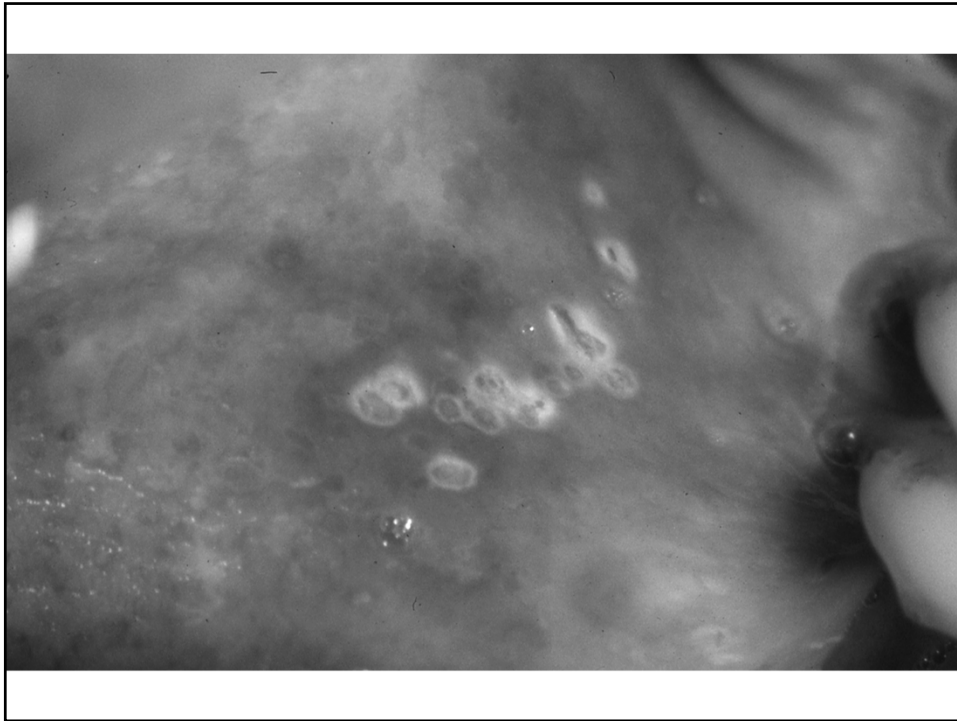
Recurrent Herpes Labialis

- **Systemic oral valacyclovir, started at the earliest prodrome, has given most encouraging results**
- **Combined use with topical antiviral may further improve lesional control**

Recurrent Intraoral Herpes

- **Relatively uncommon (or rarely noted)**
- **Usually few symptoms; irritation/roughness**
- **Cluster of shallow ulcers**
- **Confined to mucosa bound to periosteum (hard palate and attached gingiva)**
- **Heal in one week with no treatment**







Oral Ulcers

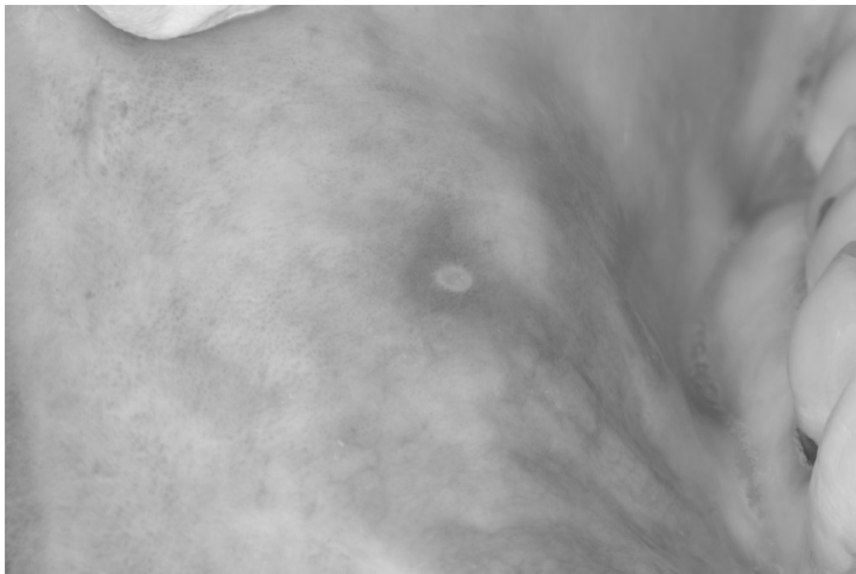
- **Immune-mediated (common to rare)**
- **Traumatic (common)**
- **Infectious (less common)**
- **Neoplastic (uncommon)**

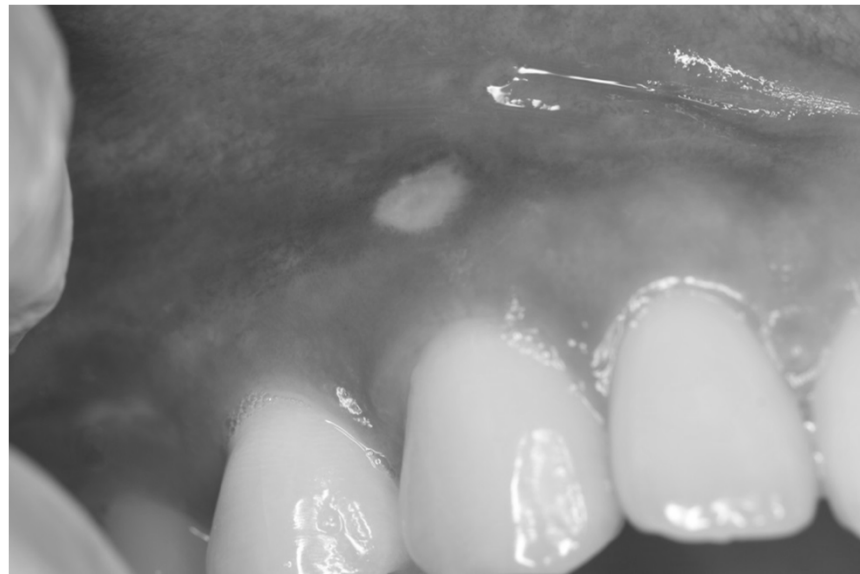
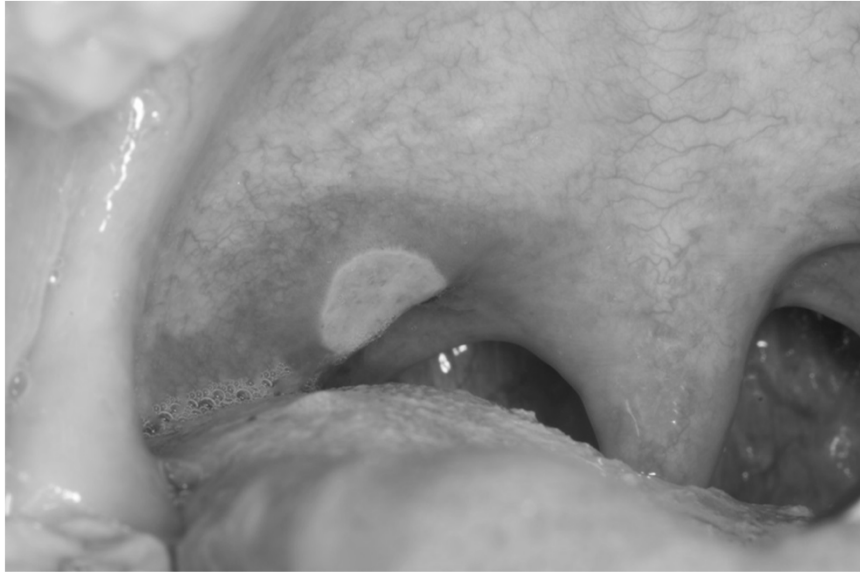
Recurrent Aphthous Ulcerations (canker sores)

- **Common (20% overall); familial relationship**
- **Most frequent in children and young adults**
- **Immune-mediated process; uncertain pathogenesis**

Recurrent Aphthous Ulcerations (canker sores)

- **Prodromal dyesthesia/tingling common**
- **Occur on loose, nonkeratinized mucosa**
- **Extremely painful, round to oval shallow ulcers**
- **Early, erythematous halo**







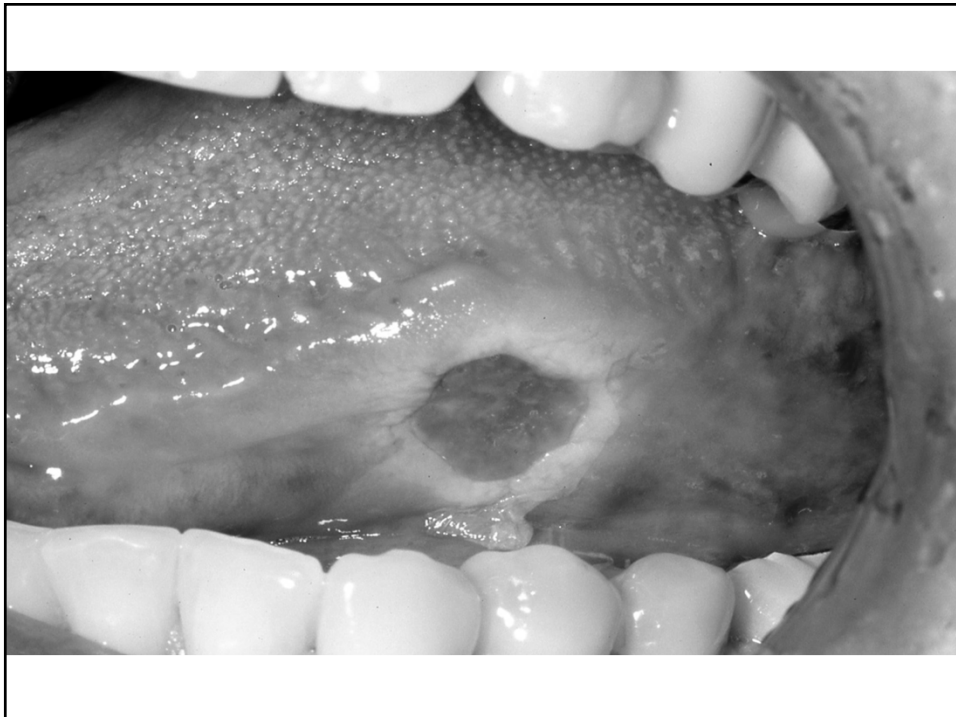
Recurrent Aphthous Ulcerations

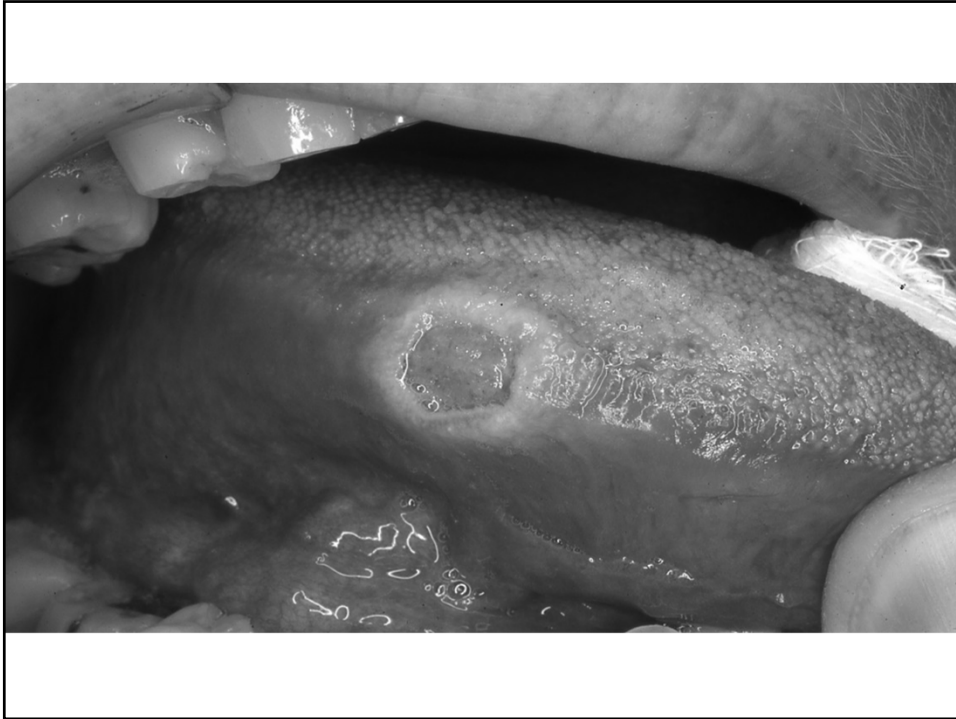
Treatment:

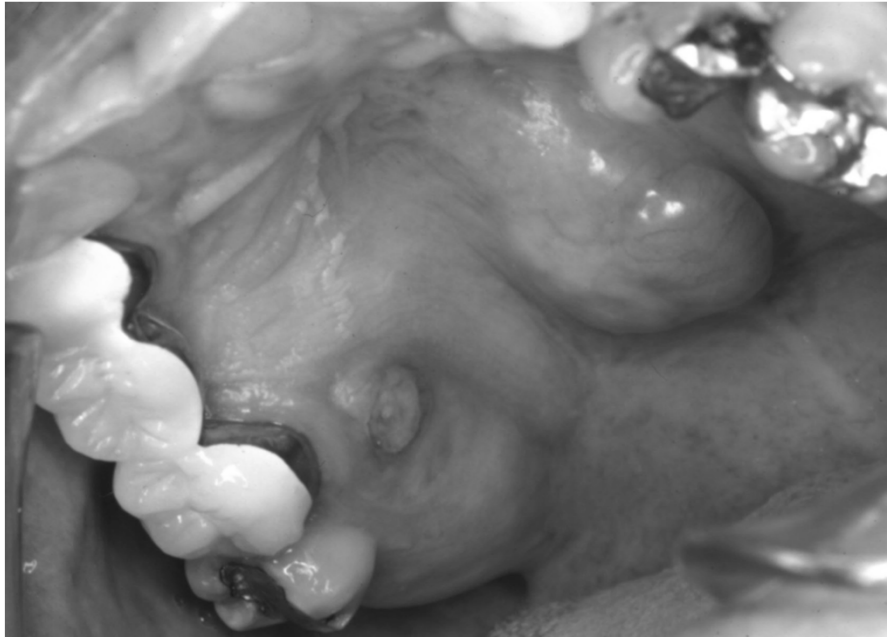
- Immune-basis responds well to topical high-potency corticosteroid gels
- Thin film, applied at earliest prodrome; multiple times (4X) per day

Traumatic Ulcers

- Most common form of oral ulcer
- Occur in areas susceptible to trauma, especially from the teeth, or thermal injury from food or drink
- More common in patients with dry mouths
- Often asymptomatic or only mildly symptomatic

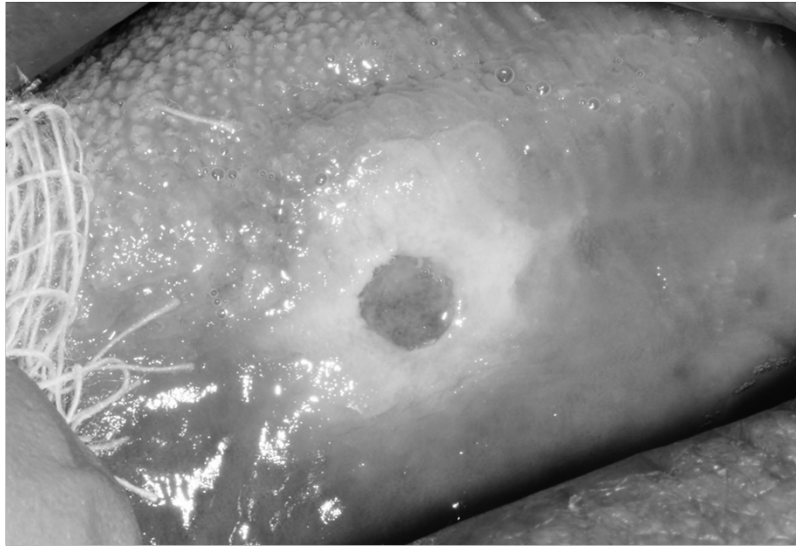






Traumatic Ulcers

- **Heal with no treatment (5-10 days) in the absence of additional irritation/trauma**
- **Topical OTC protective mucoadhesives can provide comfort**
- **Topical corticosteroids not indicated**
 - **Retard normal healing mechanisms**
 - **Can promote fungal infection, further slows healing**



Traumatic Ulcers

- **Xerostomia can contribute to lesion persistence and also promotes candida infection**
- **Patient should maintain adequate hydration**
- **Saliva substitutes or salivary stimulants can be helpful in moderate-severe cases of xerostomia**

Traumatic Ulcers

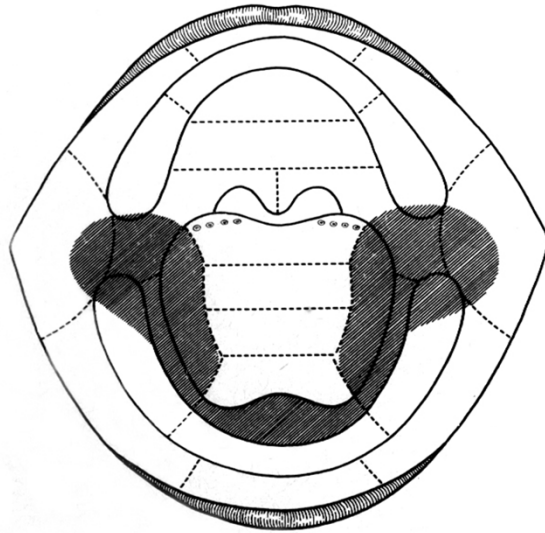
- **Follow-up warranted; 2-3 weeks**
- **If no evidence of healing, +/- conservative treatment measures, biopsy is usually warranted to establish a diagnosis and guide proper therapy**

Neoplastic Ulcers

- **Much less common than other types of oral ulcers, but more significant**
- **Majority (>90%) are due to surface precancerous lesions or squamous carcinoma**

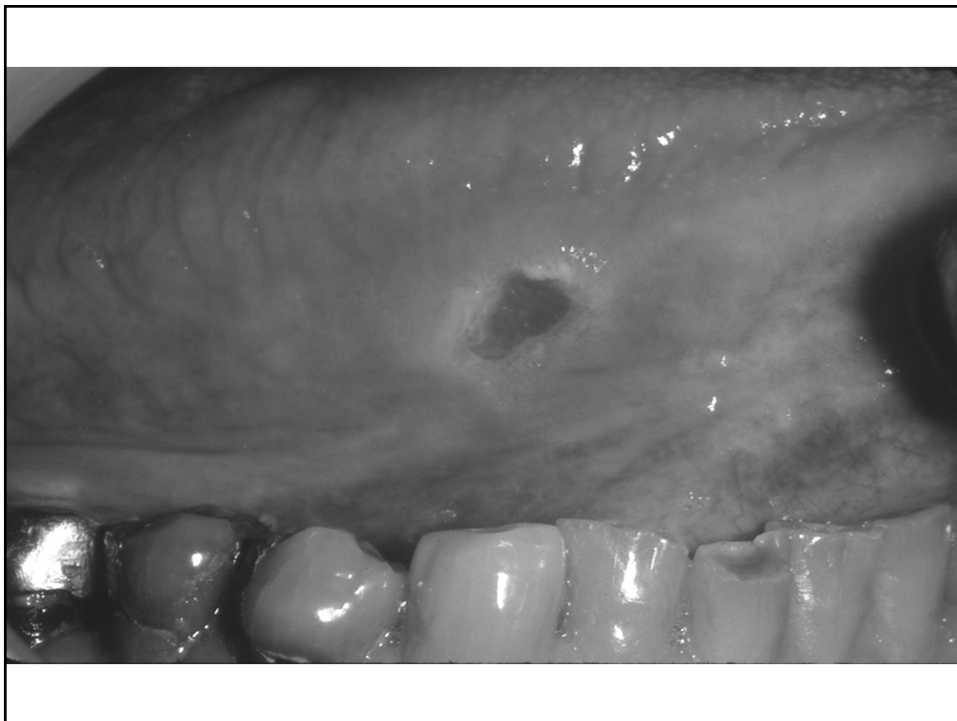
Neoplastic Ulcers

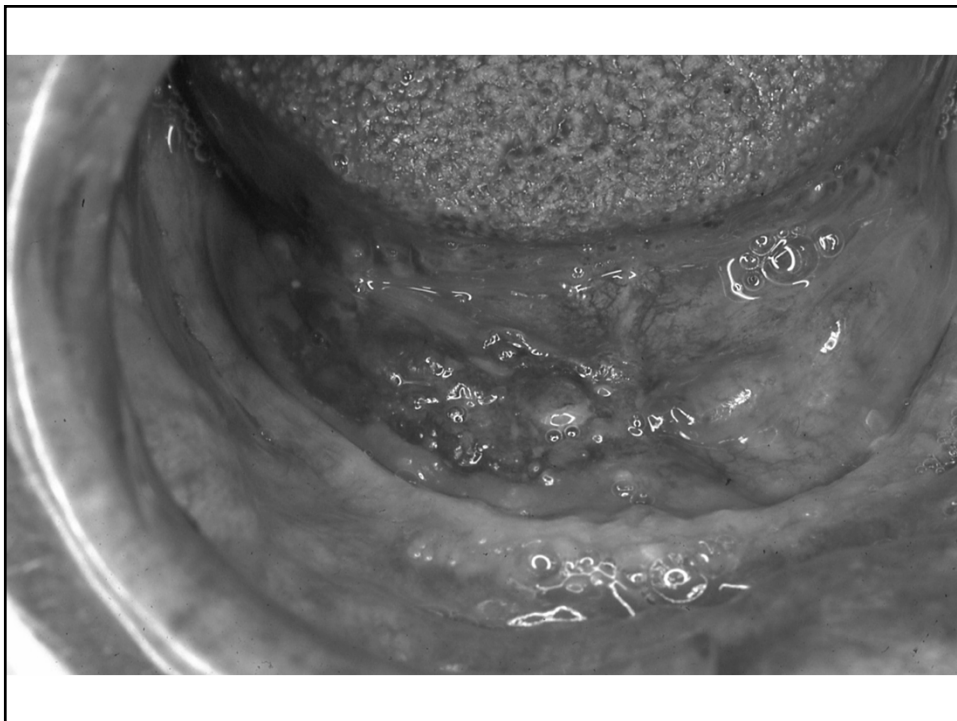
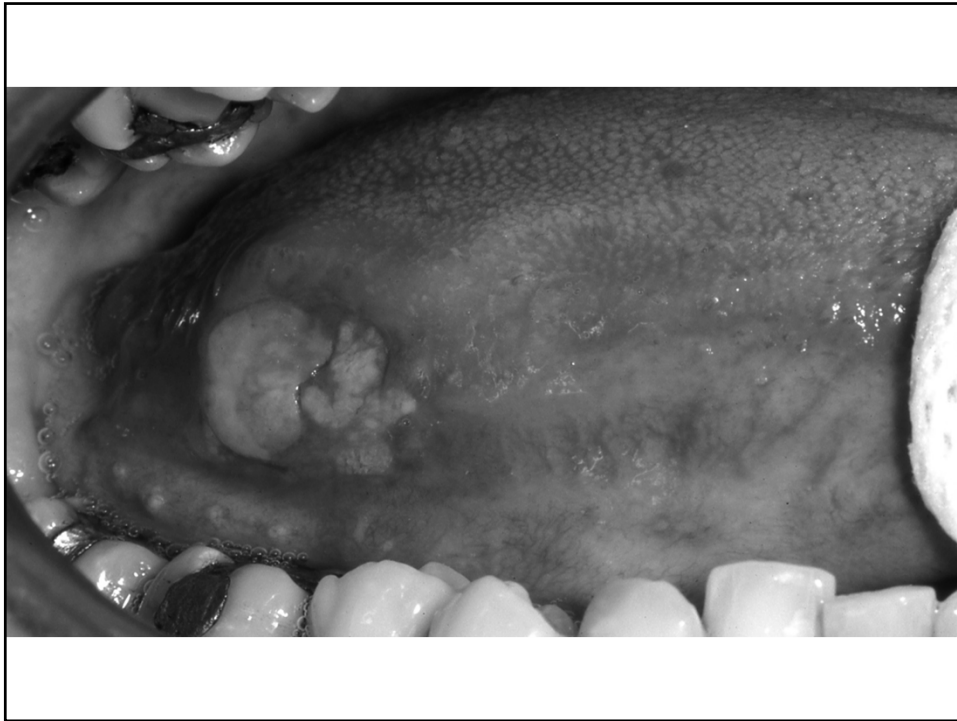
- **High-risk sites for oral squamous cell carcinoma include the ventrolateral tongue, lateral soft palate and floor of the mouth**
- **Tend to be chronic, often arise within pre-invasive lesions (leukoplakia/erythroplakia)**
- **Symptoms are variable, often asymptomatic**



Moore C, Catlin D *Am J Surg* 1967;114:510-3







Neoplastic Ulcers

- **“Take home” message:**
 - **If an ulcer persists for more than 2-3 weeks despite therapy/removal of potential irritants, biopsy should be recommended to establish a diagnosis and direct proper treatment**

- Special thanks for select clinical images to:
 - **Kristin McNamara; The Ohio State University**
 - **Carl Allen, Columbus, Ohio**
 - **Brad Neville, University of South Carolina**
 - **Doug Damm, Lexington, Kentucky**
 - **Philip Hawkins, Wauwatosa, Wisconsin**