Differential Diagnosis of Oral Ulcerations

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Objectives

- Differential diagnosis of oral ulcerations with special emphasis on the diagnosis, etiology and management will be presented in a case-based format.
- Immune-mediated, traumatic and neoplastic ulcerations will be illustrated.
Ulceration
History of Oral Lesions

Name_____________________________ DOB: ______________

Duration of the sores: _________________
___ Painful ______ No pain ______ Referred pain

How many ulcers: ___

Recurrent: ___ Yes ______ NO

Location: keratinized mucosa _______ Nonkeratinized ______

GI symptoms: ___ Present ___ Absent

Skin lesions: ___ Present ___ Absent

Autoimmune diseases: ___ Present ___ Absent

Immunosuppression: ___ Present ___ Absent

List Medications: ________________________________________
Keratinized (bound) vs. Non-keratinized (mobile) Mucosae

<table>
<thead>
<tr>
<th>Keratinized (bound) mucosae</th>
<th>Non-keratinized (mobile) mucosae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard Palate</td>
<td>Buccal mucosa</td>
</tr>
<tr>
<td>Gingiva</td>
<td>Lateral Tongue</td>
</tr>
<tr>
<td></td>
<td>Floor of the mouth</td>
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<tr>
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<td>Vestibule</td>
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</tbody>
</table>
### Clinical Features of Acute vs. Chronic ulceration

<table>
<thead>
<tr>
<th>Acute</th>
<th>Chronic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pain</td>
<td>1. Little or no pain</td>
</tr>
<tr>
<td>2. History of trauma</td>
<td>2. History of trauma if remembered</td>
</tr>
<tr>
<td>3. Yellow base with a red halo</td>
<td>3. Yellow base with elevated margin</td>
</tr>
<tr>
<td>4. Heals in 7-10 days if cause eliminated</td>
<td>4. May mimic carcinoma and infectious ulcers</td>
</tr>
<tr>
<td></td>
<td>5. Delayed healing</td>
</tr>
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Acute vs. Chronic Ulcers

Acute ulcer upper lip

Chronic ulcer lingual vestibule
4-year-old male

- Sores in the mouth for 2 days
- Seen by his pediatric dentist 2 days ago for a restoration
4-year-old male
Diagnosis

a. Acute traumatic ulcer
b. Benign migratory glossitis
c. Aphthous ulcer
d. Herpetic ulcer
Management

- Warm salt water rinses
- Chloraseptic Sore Throat Relief Spray
20-year-old woman

- Painful sores in the mouth for a day
- h/o of dental appointment one day ago
20-year-old woman
Diagnosis

a. Acute traumatic ulcer
b. Benign migratory glossitis
c. Aphthous ulcer
d. Herpetic ulcer
Management

- Warm salt water rinses
- Magic mouthwash (Equal parts of Children’s Benadryl elixir + Maalox-rinse)
- Reevaluation in 3 weeks
25-year-old woman

h/o dental appointment the previous day
25-year-old woman
Diagnosis

a. Acute traumatic ulcer
b. Acute chemical burn
c. Aphthous ulcer
d. Herpetic ulcer
Acute Chemical Burn
Case

• 59-year-old male with four-week hx of right lateral tongue lesion, little discomfort reported by patient
59-year-old male lesion on tongue
Your Differential Diagnosis:

a. Chronic traumatic ulcer  
b. Aphthous ulcer  
c. Pemphigus/pemphigoid  
d. Squamous cell carcinoma
Treatment

- Treated with warm salt water rinses
- Mouth guard
- Biotene mouthwash
Follow-up Examination
28-year-old male

• h/o sores in the mouth present for a week
• Painful, difficult to eat
28-year-old male: Soft palate and uvula
Your Differential Diagnosis:

a. Herpetic ulcer
b. Aphthous ulcer
c. Pemphigus/pemphigoid
d. Squamous cell carcinoma
24-year-old woman,
lesion on the lip
24-year-old woman
Your Differential Diagnosis:

a. Traumatic ulcer
b. Aphthous ulcer
c. Pemphigus/pemphigoid
d. Herpetic ulcer
“Sulphuric acid and sulfonated phenolics in aqueous solution”
Treatment with Debacterol

Before

After
Management of Aphthous ulcers

• Tailored to the patient
  – Cauterize ulcers with Debacterol
  – Topical steroid therapy
  – Systemic steroid therapy
  – If lesions are frequent:
    • Evaluate for Inflammatory bowel disease
19-year-old woman

- History of sores in the mouth for the past one week
- History of fever
Gingival Sores
Sores in the Mouth
Enlarged Left Tonsil
Diagnosis

a. Primary herpetic gingivostomatitis
b. Aphthous ulcer
c. Streptococcal pharyngitis
d. Pemphigus
e. Acute ulcer
Treatment

• Symptomatic treatment
• Antibiotic therapy
25-year-old Male

h/o of sores in the mouth for the past 3 days
Diagnosis

a. Aphthous ulcer
b. Recurrent herpetic infection
c. Pemphigoid/Pemphigus
d. Basal cell carcinoma
Management

a. Symptomatic therapy
b. Antiviral therapy
c. Antibiotic therapy
d. Antifungal therapy
Recurrent Herpes

Aphthous Ulcer
# Comparison Between Aphthous and Recurrent Herpes

<table>
<thead>
<tr>
<th></th>
<th>Aphthous ulcers</th>
<th>Herpes infection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Triggers</strong></td>
<td>Stress, trauma, diet, hormones</td>
<td>HSV 1, Stress, trauma</td>
</tr>
<tr>
<td><strong>Appearance</strong></td>
<td>No prodrome</td>
<td>Prodromal symptoms</td>
</tr>
<tr>
<td></td>
<td>No vesicles</td>
<td>Vesicles precede ulcers</td>
</tr>
<tr>
<td></td>
<td>Single/multiple oval ulcers</td>
<td></td>
</tr>
<tr>
<td><strong>Sites</strong></td>
<td>Mobile mucosa</td>
<td>Bound mucosa</td>
</tr>
<tr>
<td><strong>Treatment</strong></td>
<td>Steroids</td>
<td>Antiviral</td>
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