

Clinical Manifestations of Oral Disease



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Tragic Choice

The Bob Leslie Story



Oral Cancer: The Scope of the Problem

- In North America, someone dies of Oral Cancer every hour of every day
- The 5-year survival rate is only 22% when discovered in late stages, but when diagnosed early, it can be 80% to 90%
- Unfortunately, only 35% of cases are diagnosed early

Late Diagnosis Leads to High Death Rate

Survival

Stage	5 Year Survival
I	80%
II	60-80%
III	40-60%
IV	20-40%

Early Detection is Crucial

Oral Cancer: The Forgotten Disease of Medicine

34,360 New Cases of Oral Cancer

Diagnoses estimated to be made this year in the U.S.

11,150 New Cases of Cervical Cancer

Diagnoses estimated to be made this year in the U.S.

**Almost 3X More Cases of Oral
Cancer Than Cervical Cancer**

Oral Cancer: The Forgotten Disease of Medicine

- ▶ Estimated U.S. deaths from Oral Cancer in 2007:
7,550
- ▶ Compared to **3,670** estimated deaths from Cervical Cancer in 2007

**More than Twice as Many Deaths From
Oral Cancer as Cervical Cancer**

May 10, 2007



The NEW ENGLAND
JOURNAL of MEDICINE

Case-Control Study of Human Papillomavirus and Oropharyngeal Cancer

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Conclusion: “Oral HPV infection is strongly associated with oropharyngeal cancer among subjects with or without the established risk factors of tobacco and alcohol use.”

Typical Oral Cancer Prone Patient

- ▶ Male
- ▶ 40+ years
- ▶ Heavy smoker
- ▶ Heavy drinker
- ▶ Poor oral hygiene
- ▶ Family history



Oral Cancer: The Scope of the Problem

- 25% of Oral Cancer patients have no risk factors
- The greatest increase of new Oral Cancer patients has occurred in patients under age 40
 - Nearly 5-fold Increase in this age group
 - Great majority have no risk factors
 - Majority occur on the tongue

HPV

- ▶ 150 different subtypes
- ▶ Recent research shows that at any given time 42.5% of females are infected
- ▶ 7% of adults have oral HPV infection

HPV

- ▶ Cervical cancer subtypes 16 & 18 (70%)
- ▶ Anal cancer subtype 16 (85%)
- ▶ Genital warts subtypes 6 & 11 (90%)
- ▶ Oral Cancer subtype 16
- ▶ Gardisel vaccine treats subtypes
6, 11, 16, 18

Oral Cancer

- ▶ HPV oral cancer is second only to cervical cancer as the most common HPV related cancer
- ▶ It is estimated that by 2020 HPV will cause more oral than cervical cancer

“The nearly 5-fold increase in young oral cancer patients under the age of 40, many with no traditional risk factors, **underscores the need for thorough examination of all patients** and increased awareness of this devastating disease.”

ALL PATIENTS

Leukoplakia

- ▶ A white patch or plaque that can not be wiped off and cannot be characterized clinically as any other disease



Leukoplakia

- ▶ In the US population the majority of these lesions are benign
- ▶ Approximately 5% are malignant at the time of biopsy
- ▶ Another 5% will become malignant

Erythroplakia

- ▶ Red patch that can not be classified clinically or microscopically as another entity



Erythroplakia

- ▶ 40% show at least severe dysplastic changes



Erythroplakia

- ▶ Approximately 50% of those lesions are squamous cell carcinoma



Squamous Cell Carcinoma

- ▶ Most common malignancy of the oral cavity



Solar Cheilitis

- ▶ Accelerated tissue degeneration secondary to sunlight
- ▶ Increased incidence in fair skinned Caucasians

Solar Cheilitis

- ▶ Atrophic pale, glossy appearing lip with mottled areas of hyperpigmentation, cracking, crusting and scaling



Lip

- ▶ Lower lip is more common than upper
- ▶ Major cause
 - Sunlight
 - Pipe smoking



Lip

- ▶ 25–30% of oral carcinoma
- ▶ 50–70 years
- ▶ M > F



Lip

- ▶ Chronic non-healing ulcer or exophytic mass
- ▶ Deep invasion occurs late



Tongue

- ▶ 60–80 years (expect this to lower due to HPV)
- ▶ M > F
- ▶ Typically asymptomatic
- ▶ Typically presents as indurated non-healing ulcer with elevated margins
- ▶ 25–40% of all oral cancers

Tongue



Tongue

▶ Location

- 45% posterior lateral border of anterior 2/3
- 25% posterior 1/3
 - Poorer prognosis due to late Dx

Tongue

- ▶ Most erythroplakic lesions of the tongue are dysplasia or invasive squamous cell carcinoma



Tongue

- ▶ Metastases are common
- ▶ Nodes are
 - Ipsilateral
 - Submandibular
 - jugulodiagastric



Tongue



Floor of Mouth

- ▶ Second most common
- ▶ 15–20% of intraoral squamous cell Ca
- ▶ Predominately older males



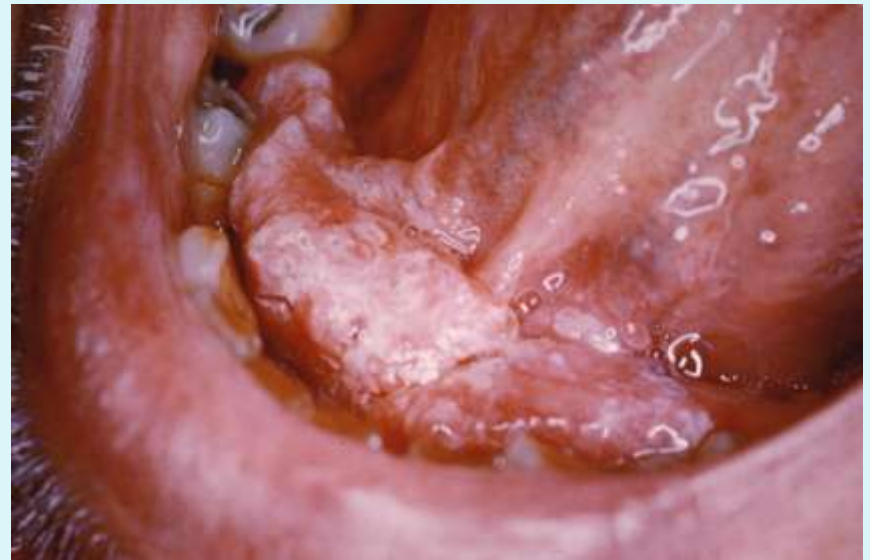
Floor of Mouth

- ▶ ETOH & tobacco major factors
- ▶ Painless, indurated ulcer, white or red patch



Floor of Mouth

- ▶ Metastases to submental nodes



Buccal Mucosa & Gingiva

- ▶ 10% of oral squamous cell carcinoma
- ▶ Typical patient is 70 year old male
- ▶ Smokeless tobacco is major factor



Buccal Mucosa & Gingiva

- ▶ Tends to be white patch to non-healing ulcer to exophytic lesion



Palate

- ▶ Soft palate
 - 10–20%
- ▶ Hard palate
 - Very uncommon
 - Adenocarcinoma more common
 - Increased with reverse smoking



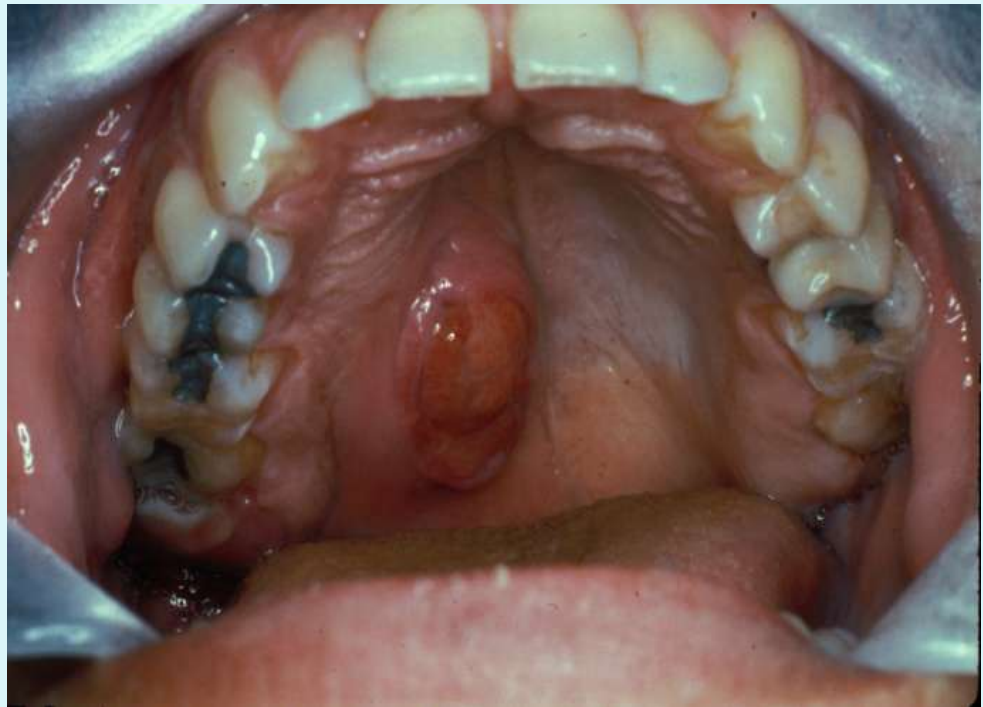
Palate



Palate



Benign



Malignant

Similar lesions



Malignant Melanoma

▶ Survival rates

- Skin
 - 65% 5 year survival rate
- Oral
 - 15% 5 year survival rate

Traumatic Ulcer

- ▶ Usually due to dental trauma
- ▶ Usually a cause and effect relationship
 - Helps Dx
- ▶ Increased incidence with patients with abnormal habits and fractured teeth
- ▶ Most common oral soft tissue lesion

Traumatic Ulcer



Reticular Lichen Planus

- ▶ “Lace Like” Striae (Wickman’s Striae)
- ▶ Buccal mucosa most frequently involved
- ▶ Usually symmetrical
- ▶ Also tongue, lips and gingiva
- ▶ Minimal symptoms



Reticular Lichen Planus



Plaque form of Lichen Planus

- ▶ Resembles leukoplakia
- ▶ Plaques slightly elevated, smooth, sometimes irregular surface
- ▶ Primary sites, dorsal tongue & buccal mucosa

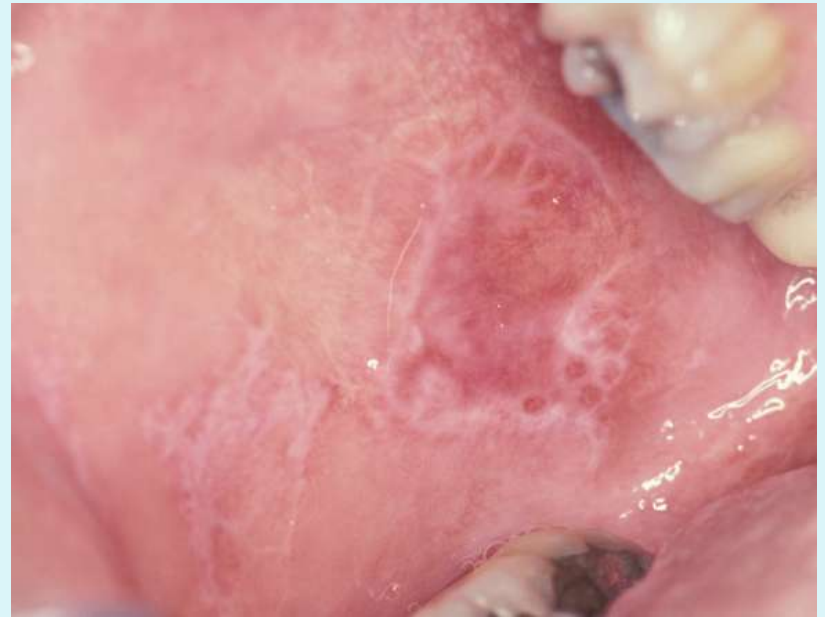


Plaque form of Lichen Planus



Atrophic form of Lichen Planus

- ▶ May be seen with erosive or reticular types
- ▶ Portion of keratinized to atrophic areas change with time
- ▶ Attached gingiva “desquamative gingivitis”
- ▶ Usually symptomatic burning



Atrophic form of Lichen Planus



Erosive form of Lichen Planus

- ▶ Surface is granular & erythematous
- ▶ May bleed
- ▶ Pseudomembranous plaque may cover
- ▶ Changing pattern
- ▶ May see radiating striae



Other Similar Lesions

- ▶ Lichenoid Stomatitis
- ▶ Pemphigus
- ▶ Pemphigoid
- ▶ Candidiasis



Questions?