



## CONDUCTING AN ORAL EXAM USING THE “4L’S”

### Introduction

This section contains information on how to conduct a brief oral exam for adults and older infants using the “Four L’s” screening oral examination technique, followed by a series of visuals of common problems that may be found during the exam. There is also a visual presentation of the “knee to knee” positioning technique for infants.

Following this introduction, there are visual representations of common problems found during an oral screening exam. You might also want to read through the contents of Tab Five, which provides treatment recommendations for common problems found in adults and children during an oral screening exam. There are separate sections of Tab Five for adults and children.

### Procedure for Brief Oral Exam: Adults and Older Infants

Oral assessment in the primary and prenatal care settings includes a screening oral exam. The purpose of the exam is to identify signs of white spot lesions, caries, gum disease, oral lesions or conditions in the mouth that increase risk of disease such as dry mouth or presence of appliances. The “**Four L’s**” screening oral exam recommended and taught in this program includes the four quick steps described below. We call the exam the “Four L’s”. (Note that the examiner will need a glove, a piece of gauze and good lighting). See the graphic illustrations which follow.

#### ◆ **Lift and Lower the Lips**

Check the gum line for white spot lesions or caries that form at gum line, Look for signs of gum disease (edema, redness, recession or bleeding). Assess lips for mucus indications.

### ◆ **Look at the Teeth**

View teeth for:

- white spot lesions/caries
- missing or broken teeth
- fillings or crowns
- appliances (braces, partials, dentures)

### ◆ **Lasso the Tongue**

Loop the gauze around the tongue, gently raise it and move it laterally in both directions to see under the tongue for (a) bony or soft tissue lesions; (b) signs of adequate or inadequate saliva flow or (c) erythroplakia or leukoplakia (red or white plaques that cannot be wiped away).

### ◆ **Lap Around the Gums**

With gloved finger palpate the upper and lower gums for:

- masses (fluctuant, hard masses or other mucosal lesions)
- pain with palpation
- spongy, bleeding gums

## Screening Oral Exam Demonstrated on an Adult

### The Four "Ls" for Oral Screening Exam: Part of Every Physical Exam

- ✓ **L**ift/**L**ower the lips



- ✓ **L**ook at teeth



- ✓ **L**asso the tongue



- ✓ **L**ap around the gums with your finger



## Knee to Knee Positioning for Oral Exam in the Infant/Young Child

1. Parent and provider sit facing one another in a knee to knee position.
2. Place child's head in the health care provider's lap so that the child can see the parent.
3. The child's legs should wrap around the parent's waist.
4. The parent holds the child's hands away from the face.
5. In this manner, the health care provider can perform an oral/pharyngeal exam and apply fluoride varnish.
6. The fundamental maneuvers of performing the oral exam remain the same.



# Visual Examples of Common Problems Found During an Oral Screening Exam

Christine Cogil, DNP, FNP-BC, MSN: Assistant Professor  
College of Nursing

## TOPICS

### **Oral Assessment: Lift and lower lips**

- Actinic Cheilitis- Slide 1
- Angular Cheilitis- Slide 2
- Xerostomia- Slide 2
- Herpetic lesions –Slides 3 and 4
- Aphthous ulcer- Slides 5 and 6
- Mucocele- Slides 7 and 8
- Exostosis- Slide 9

### **Intra-oral assessment: Look at the teeth**

- Dental caries- Slide 1
- Fluorosis- Slide 2
- Braces- Slide 3
- Dry socket- Slide 4

### **Lasso the tongue**

- Candidiasis- Slide 1
- Geographic Tongue- Slide 2
- Syphilis- Slide 3
- Ankyloglossia (Tongue Tie)- Slide 4
- Leukoplakia/Erythroplakia- Slide 5
- Tori- Slide 6

### **Intra-oral assessment: Lap around the gums**

- Pyogenic Granuloma- Slide 1
- Gingivitis- Slide 2
- Periodontitis- Slide 3
- Dental Abscess- Slide 4

## DENTAL APPLIANCES



- Remove *unfixed appliances for oral exam*
- Partials, Dentures, Retainers
  - Risk for candidiasis, unobserved lesions

### The Four "Ls" for Oral Screening Exam: Part of Every Physical Exam

✓ Lift/Lower the lips



✓ Look at teeth



✓ Lasso the tongue



✓ Lap around the gums  
with your finger



## ORAL ASSESSMENT: LIFT AND LOWER LIPS

### INTRA / EXTRA ORAL SKIN OF THE LIPS



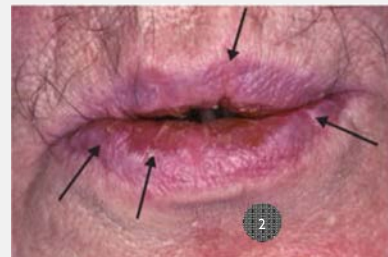
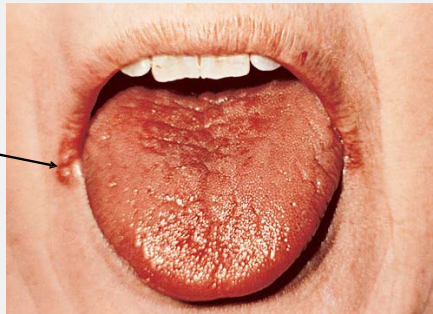
## ACTINIC CHEILITIS

- Early Stage
  - Mild erythema
  - Swelling
  - Fine scaling on vermillion border
- Progressing
  - Skin thin and smooth
  - White-gray areas intermingled with red, scaly region
- Ulceration
  - Biopsy for malignancy



## XEROSTOMIA (DRY MOUTH)

- Fissured tongue
- Ropy saliva
- Dry mucous membranes
- Halitosis
- Difficulty chewing, speaking, swallowing
- Angular cheilitis
- Increases risk for caries



## HERPES SIMPLEX A.K.A. COLD SORE OR FEVER BLISTER

- Stimuli that trigger viral replication = clinical lesions:
  - Stress
  - Sunlight
  - Hormonal changes
  - Fatigue
  - Fever





## HHV: PRIMARY HERPETIC GINGIVOSTOMATITIS

- Initial infection with herpes simplex virus
  - Herpes is found on Keratinized tissue
- Children between 6 mos. and 6 yrs.
- S/S:
  - Fever
  - Malaise
  - Cervical lymphadenopathy
  - Painful, erythematous swollen gingiva
  - Multiple tiny clusters of vesicles on perioral skin, vermilion border of lips, and oral mucosa
  - Vesicles progress to ulcers



## HERPES VS. APHTHOUS ULCERS

LOCATION, LOCATION, LOCATION

### Herpes: Keratinized Tissue

- Lips
- Hard Palate
- Tongue



### Aphthous Ulcers: NON-Keratinized tissue

- Buccal and labial mucosa
- Soft palate



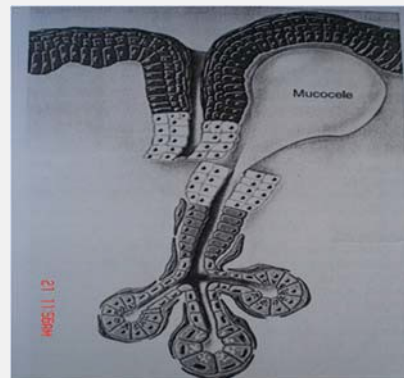
## APHTHOUS ULCERS - A.K.A. CANKER SORES NON-KERATINIZED TISSUE

- Very common (20%)
- More prevalent in females
- S/S:
  - Yellow-white center
  - Red halo
  - Clusters or single lesion
  - Painful
- Associated with:
  - Trauma
  - Dental TX
  - Acidic, citrus foods
  - Hormonal changes
  - Stress



6

## MUCOCELE



7

## MUCOCELE

- **Causes**

- Severed minor salivary gland duct causing secretions to spill into adjacent connective tissue
- Inflammatory response causes granulation tissue to wall off mucus → Forms a cyst-like structure
- Most common location: Lower labial mucosa

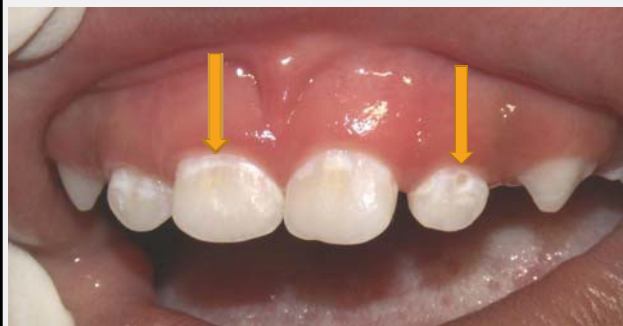


## EXOSTOSIS



- Genetic
- Exacerbated by bruxism

## INTRA-ORAL ASSESSMENT: LOOK AT THE TEETH



## FLUOROSIS



2

## BRACES

Risk for white spot lesions/decay



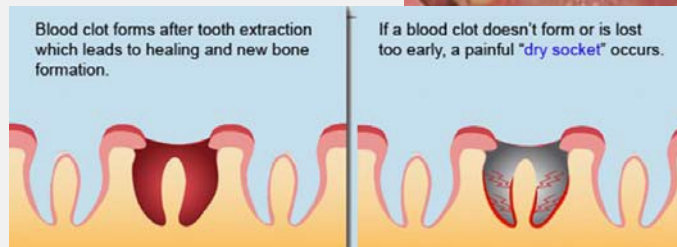
3

## DRY SOCKET

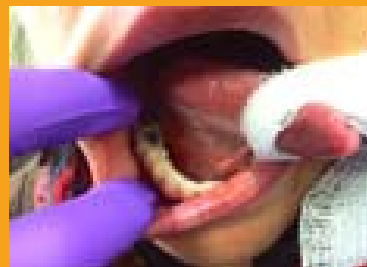
- Post operative complication of extractions when blood clot is lost before healing takes place

Clinically: tooth socket is empty and bone is exposed

- Very painful
- Foul odor
- Bad taste
- No infection
- Common location: 3<sup>rd</sup> molars



## LASSO THE TONGUE





## CANDIDIASIS



1

## GEOGRAPHIC TONGUE

### S/S:

- Erythematous patches surrounded by a white or yellow border
- Diffuse areas devoid of filiform papillae
- Distinct presence of fungiform papillae
- Remission and changes in the depapillated areas
- Sometimes burning sensation

### TX:

- None



2

## SYPHILIS

- Primary Stage chancre
  - Single or multiple lesions
  - Lasts 3-6 weeks without treatment
  - Regional lymphadenopathy

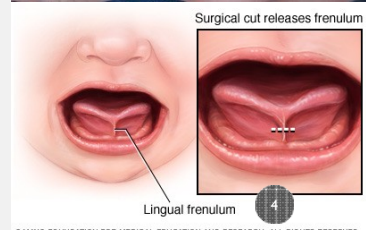


- Secondary Stage
  - Starts with rash – typically rough, red or reddish brown spots on palms of hands and soles of feet
  - Mucous patches - multiple, painless, grayish-white plaques covering ulcerated mucosa



## ANKYLOGLOSSIA A.K.A. TONGUE TIE

- Congenital
- Lingual frenulum tethers the tongue's tip to the floor of mouth
- S/S
  - Difficulty sticking out the tongue past the lower front teeth
  - Inability to lift tongue to upper teeth and palate
  - Tongue appears notched or heart shaped when stuck out





## LEUKOPLAKIA/ERYTHROPLAKIA



5

## TORI



- Genetic
- Not excised unless there is food trapping
- May reoccur after excision

## INTRA-ORAL ASSESSMENT: LAP AROUND THE GUMS



## PYOGENIC GRANULOMA



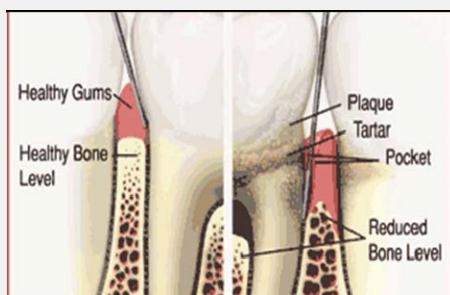
## GINGIVITIS

- Local inflammation
  - Aggravated by plaque build up on teeth
  - Causes gingiva to swell and bleed
- Common in pregnancy
  - 60-75% of pregnant women



## PERIODONTITIS

- Gingivitis progresses to periodontitis
- Gingivitis is reversible
- Bone loss due to Periodontitis is irreversible
- Severe periodontitis may result in tooth loss



Example of Severe Periodontitis



## ABSCESS

- Palpable as a fluctuant mass
- May be purulent

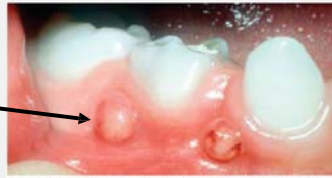


Figure - These periodontal abscesses developed in a child with untreated dental caries.

