



FIGURE 5-14 Bilateral linear leukoplakic lesions on the dorsolateral tongue, suggestive of oral hairy leukoplakia. (Courtesy of Dr. Pamela Taylor, Riverton, Wyoming)

## **White lesion    lec 6,7**

### **1.Leukoplakia 2.Oral candidiasis 3.Lichen planus 4.Oral cancer**

**1.Leukoplakia** Is a common condition of the mouth that involves the formation of white spots on the mucous membranes of the tongue and inside the mouth.

**Causes Of leukoplakia:** Causes in most cases is unknown but many are related to tobacco use and chronic irritation . A small proportion of cases , particularly those involving the floor of the mouth or the undersurface of the tongue is associated with a risk of cancer.

**Treatment Of leukoplakia** 1-avoidance of predisposing factors like smoking , tobacco and betel chewing , alcohol . 2-removal of chronic irritants like sharp edges of teeth. In suspicious cases, a biopsy is also taken and surgical excision done if pre-cancerous changes or frank cancer is detected.

**2.Oral candidiasis** Is an infection of yeast fungi of the genus candida on the mucous membranes of the mouth , it is frequently caused by candida albicans

**Oral thrush** : may refers to candidiasis in mouths of babies



### **Symptoms of Oral candidiasis**

Oral infection by candida species usually as thick white or cream colored deposits on mucosal membranes . the infected mucosa of the mouth may appear inflamed (red and possibly slightly raised) Adults may experience discomfort or burning.

### **Treatment of Oral candidiasis**

Oral candidiasis can be treated with topical anti-fungal drugs such as nystatin. Patients who are immunocompromised, either with HIV/AIDS or as a result of chemotherapy , may require systemic treatment with oral or intravenous administered anti-fungal

**3.Lichen planus** Is inflammatory disease that affects the skin and the oral mucosa, and presents itself in the form of papules, lesions or rashes.

**Causes** The cause of lichen planus is not known. It is not contagious and does not involve any known pathogen. It has been suggested that true lichen planus may respond to stress. Where lesions may present on the mucosa or skin during times of stress in those with the disease. Lichen planus affects women

more than men (at a ratio of 3:2) and occurs most often in middle-aged adults. Lichen planus in children is rare.

### forms of Oral lichen planus

Oral lichen planus may present in one of three forms:

**1-The reticular form :** manifests as white lacy streaks on the mucosa

**2-The bullous form :** presents as fluid filled vesicles which project from the surface.

**3-The erosive form:** presents with erythematous (red) areas that are ulcerated and uncomfortable.



**Treatment :** Currently there is no cure for lichen planus but there are certain types of medicines used to reduce the effects of the inflammation. Lichen planus may go into dormant state after treatment. There are also reports that lichen planus can flare up years after it is considered cured.

Medicines used to treat lichen planus such as

**Immunosuppressant medications (Oral and topical steroid).**

#### **4.Oral cancer**

Oral cancer involves abnormal, cancer tissue growth in the mouth.

**Location:** Oral or mouth cancer most commonly involves the tissue of lips or the tongue. It may also occur on the floor of the mouth , cheek lining , gingiva (gum) , or palate (roof of the mouth).

**Microscopically:** Most oral cancers look very similar under the microscope and are called squamous cell carcinomas. These are malignant and tend to spread rapidly.

**Causes:** The exact cause is 1-unknown. 2- Smoking and other tobacco use are associated with 70 percent of oral cancer cases. Smoke and heat from cigarettes , cigars , and pipes irritate the mucous membranes of the mouth. 3- Use chewing tobacco or snuff causes irritation from direct contact with the mucous membranes. 4- Heavy alcohol use is another high-risk activity associated with oral cancer. 5-Other risks include poor dental and oral hygiene 6- chronic irritation (such as that from rough teeth, dentures, or fillings).

Some oral cancers begin as leukoplakia or mouth ulcers. Oral cancer accounts for about 8 percent of all malignant growths. Men are affected twice as often as women, particularly men older than 40.

#### **Symptoms**

1-Skin lesion, lump ,or ulcer on the tongue ,lip ,or other mouth area.

2-Usually small

3-Most often pale colored ,may be dark or discolored

4-May be deep , hard edged crack in the tissue

5-Usually painless initially

6-May develop a burning sensation or pain when the tumor is advanced Additional symptoms that may be associated with this disease :

1. Tongue problems

2. Swallowing difficulty

3. Mouth sores

4. Abnormal taste

5. Speech difficulties and chewing problems

### Signs

1- a visible and/ or palpable (can be felt)

2-As the tumor enlarges , it may become an ulcer and bleed.,

**test:** biopsy and microscopic examination of the lesion confirm diagnosis of oral cancer.

### Treatment

1-Surgical excision (removal) of the tumor is usually recommended if the tumor is small enough. Sometime surgery may be necessary for large tumors.

2-Radiation therapy and chemotherapy would likely be used when the tumor is malignancy

3-Rehabilitation may include speech therapy ,movement therapy chewing, swallowing, and speech.

### Complications: -

Postoperative disfigurement of the face , head and neck.

Complications of radiation therapy , including dry mouth and difficulty swallowing.