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FACULTY OF NURSING

Disorders of tongue



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DISORDERS OF TONGUE INDIFFERENT CONDITIONS

- ORAL LICHEN PLANUS
- BLACK HAIRY TONGUE
- STRAWBERRY TONGUE
- RASPBERRY TONGUE
- FISSURED TONGUE
- ORAL HAIRY
LEUKOPLAKIA
- MIGRATORY GLOSSITIS
- ANKYLOGLOSSIA

Oral hairy leukoplakia

- OHL – corrugated white lesion seen on ventral and lateral surfaces of tongue
- Commonly associated with HIV
- EBV – causative agent
- Lesions are shaggy and frayed
- Plaque like and often bilateral
- Microscopy – reveals viral nuclear inclusions with a rim of chromatin

Oral hairy leukoplakia



[View/Print Figure](#)

Shaggy corrugated
hyperkeratotic plaque

Figure 5.

Oral hairy leukoplakia. The lateral tongue location differentiates this condition from hairy tongue. Biopsy is needed if squamous cell carcinoma is suspected.

Treatment

- No treatment is required
 - Resolves with- zidovudine. Acyclovir, gancyclovir
 - Topically application of- podophyllin resin and tretinoin
- OHL is highly predictive of AIDS development

Hairy tongue/lingua villosa/Lingua nigra

- Defective desquamation of filiform papillae
- Accumulation of excess keratin on filiform papillae of the dorsal part of tongue
- Dark color results from trapping of debris and bacteria
- Use of broad spectrum antibiotics
- Radiation therapy
- Seen in smokers and persons with poor oral hygiene
- Increased coffee and tea drinking

Treatment

- No treatment is required
- Gentle tongue scrapping and removal of etiology
- Surgical removal of papillae- laser, electrodesiccation

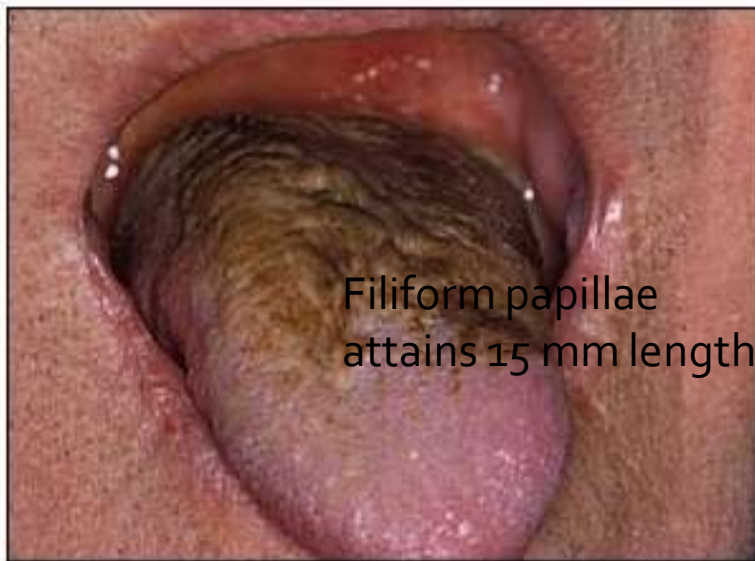


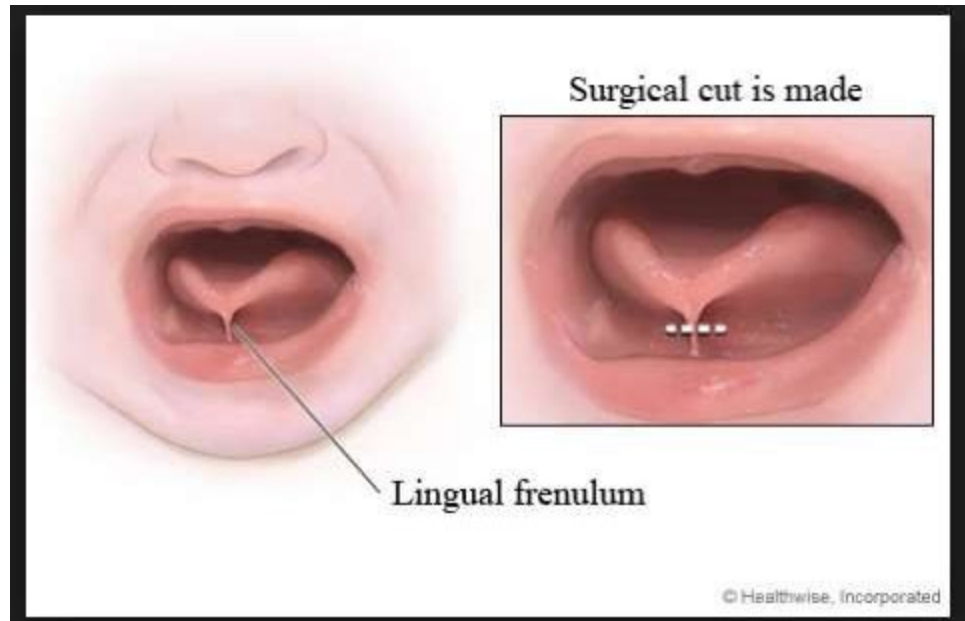
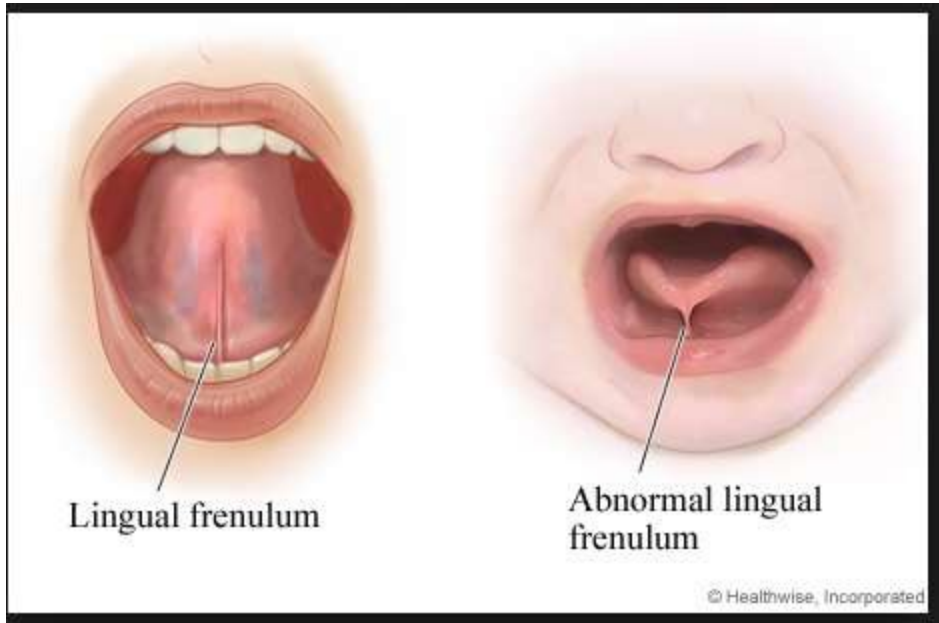
Figure 4.

Hairy tongue. The dark coloration is caused by the trapping of debris and bacteria, which is worsened by smoking and poor oral hygiene.

Ankyloglossia/ tongue tie

- Inferior frenulum attaches to the bottom of tongue
- Restricts free movement of tongue
- Frenulectomy is recommended





TRAUMATIC FIBROMA

Traumatic fibroma (*Figure 7*) is a common lesion of the oral cavity. It usually appears along the bite line as a focal, thickened area that is typically dome shaped, pink, and smooth. It is caused by the accumulation of dense, collagenous connective tissue at the site of chronic irritation. Because it can be difficult to differentiate this lesion from other neoplasms, excisional biopsy is indicated. Chronic trauma can also precipitate the development of pyogenic granulomas at the site of traumatic fibromas.³⁰

[View/Print Figure](#)



Figure 7.

Traumatic fibroma. Biopsy is necessary to differentiate from other neoplasms.

Squamous cell carcinoma of tongue



SCC of tongue

- Smoking, alcohol abuse are risk factors for SCC of tongue
- HPV is implicated in tongue cancer
- Seen in anterior two thirds of tongue
- Usually painless
- Presents as a non healing ulcer
- Nodal metastasis is common due to lymphatic drainage of tongue

Symptoms of tongue cancer

- **Symptoms of tongue cancer**
- A red or white patch on the tongue, that will not go away
- sore throat
- A sore spot (ulcer) or lump
- Pain when swallowing
- Numbness in the mouth
- Unexplained bleeding from the tongue (that is not caused by biting your tongue or other injury)
- Pain in the ear (rare)

Treatment

- Hemiglossectomy
- Total glossectomy
- Radiation therapy
- Chemotherapy



Hemiglossectomy

Strawberry tongue

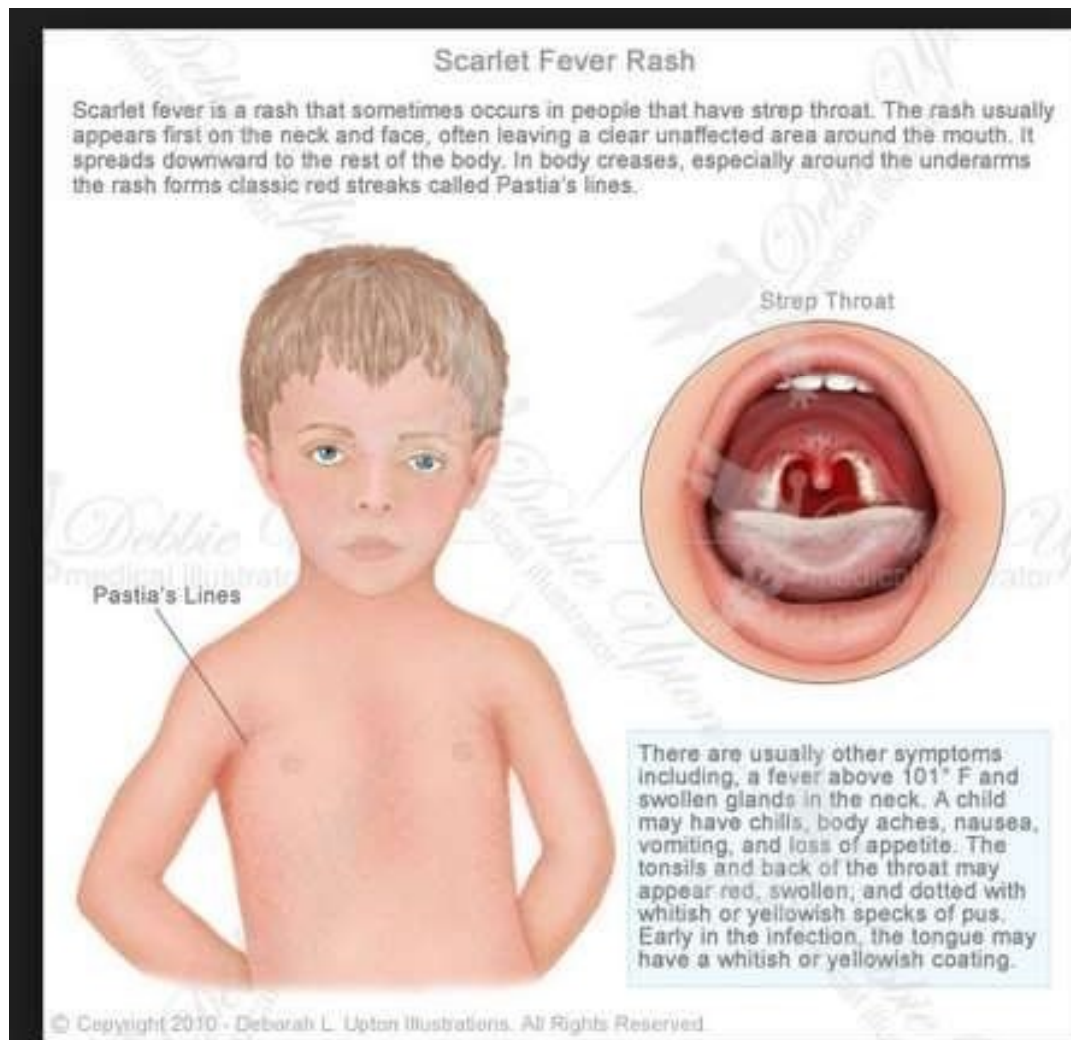
- i. In this the tongue takes the distinctive red color of a strawberry
- ii. This is different from general inflammation of the tongue, glossitis, which often exhibits a smooth shiny tongue.
- iii. This is characterized by enlargement of the **fungiform papillae**. *Thus, along with the reddening of the tongue, it is dotted with raised papillae giving it the look of a strawberry.*
- iv. It can take two colors – white and red. It is sometimes also referred to as 'raspberry tongue



Strawberry tongue

- A strawberry tongue generally reflects a systemic disease rather than oral disorder. Among the possible reasons are:
- Scarlet Fever: This is a childhood disease which is caused by strep infection. A tongue that looks like the surface of a strawberry is one of the distinguishing features of this disease among other symptoms like red rashes and fever. In the initial stage of the infection, the child develops a white strawberry tongue which turns red after four to five days.
- Kawasaki disease: This is a rare disorder that occurs in small children. It is characterized by fever, rashes and red mouth including the tongue. It causes inflammation of blood vessels in the whole body. It needs to be watched even after the child has recovered as it can sometimes have an adverse effect on heart blood vessels. The cause for this disorder is not known.
- Toxic shock syndrome: This is characterized by fever, drop in blood pressure, vomiting, rashes, red mouth and throat. It is caused by toxins released by certain bacteria. This can quickly assume life threatening proportions.

SCARLET FEVER



KAWASAKI DISEASE



**Child with Kawasaki disease
(red eyes, dry cracked lips, red tongue)**

PERNICIOUS ANEMIA

- Chronic haematologic disease
- Caused by Lack of intrinsic factor used for gastric secretions
- Traid of symptoms
 - 1. generalized weakness
 - 2. sore painful tongue
 - 3. tingling of extremities

Red and beefy tongue in pernicious anemia



Glossitis
Glossodynia
Glossopyrosis leads
to bald tongue



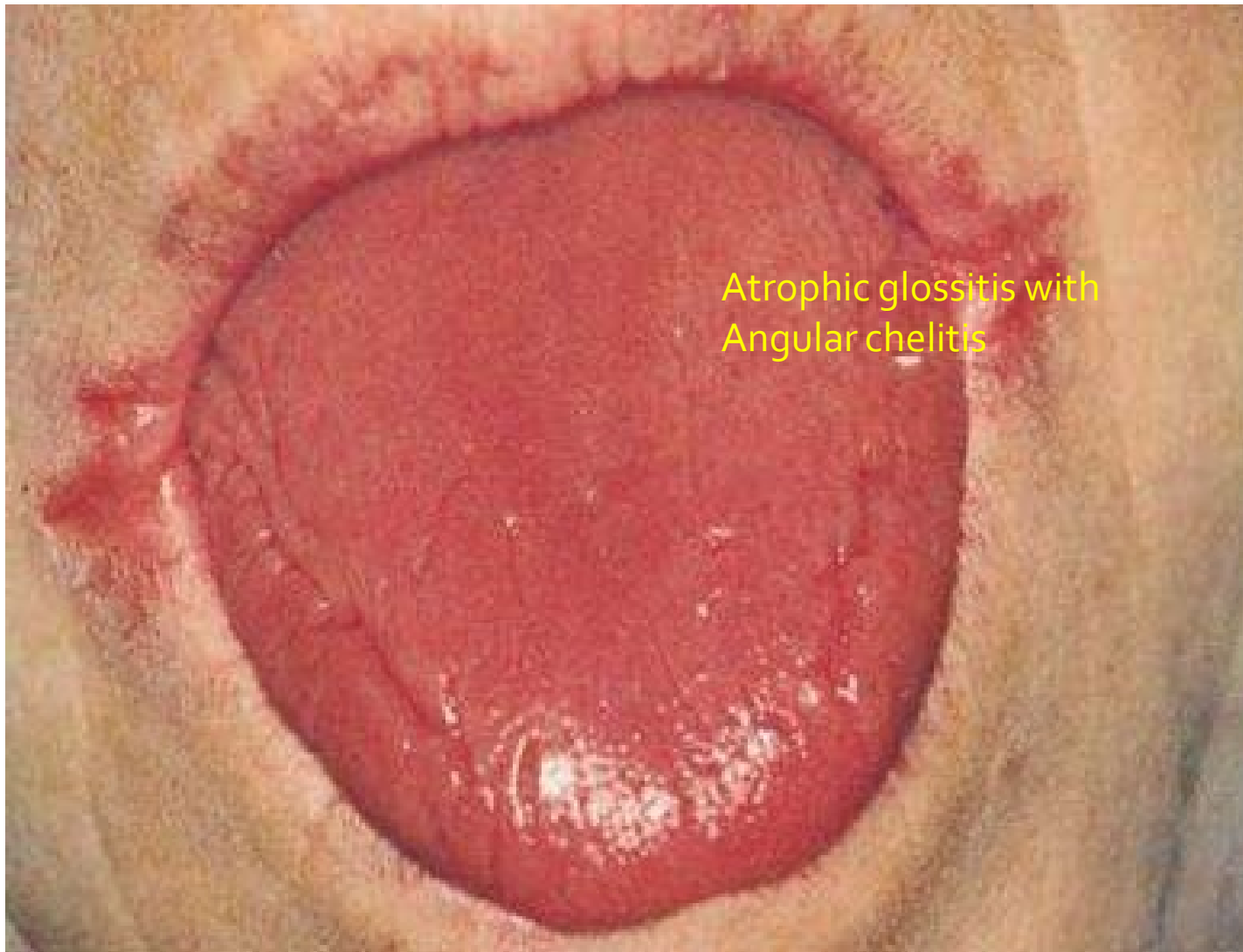
Atrophic Glossitis

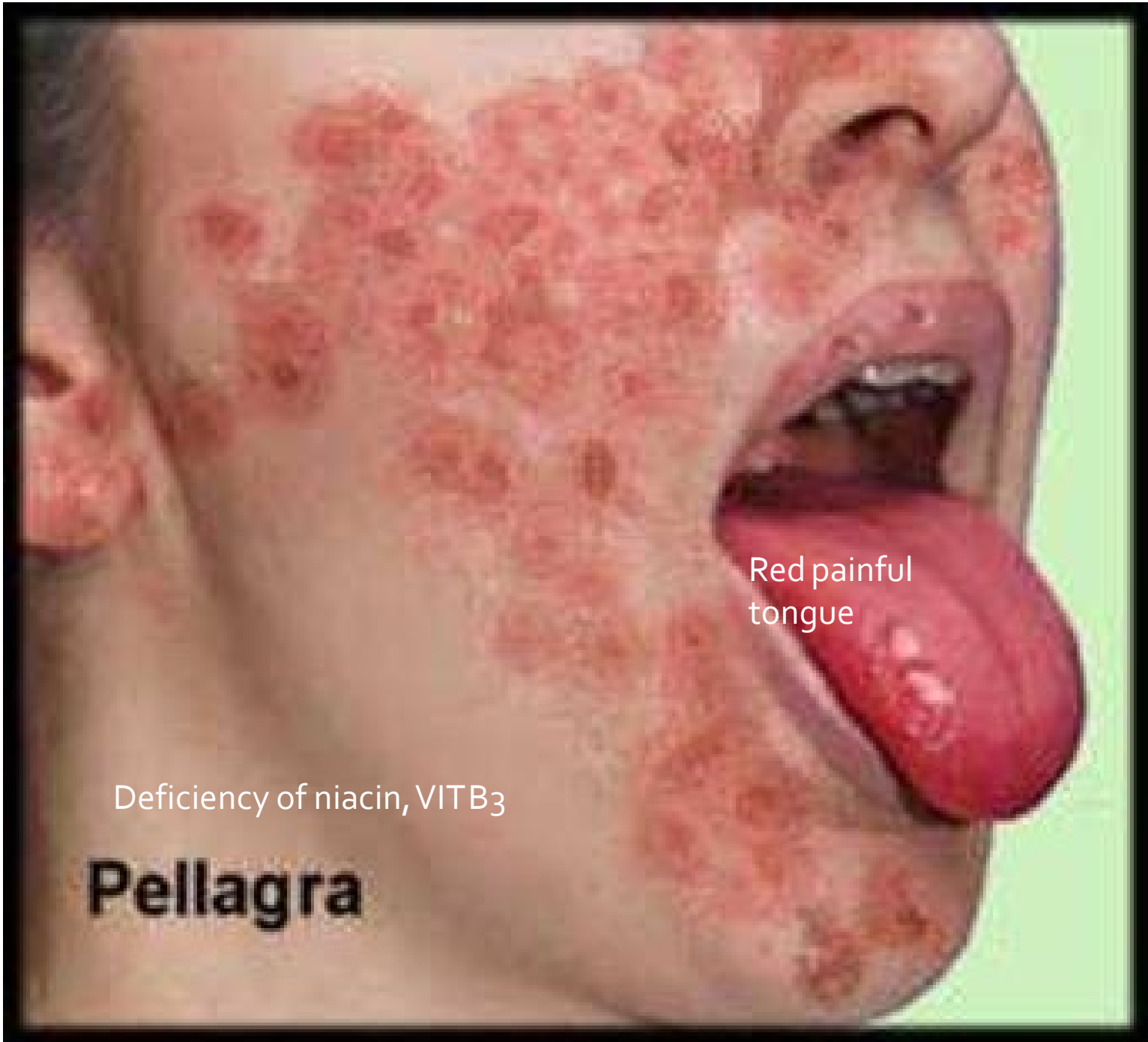
The most frequent cause of atrophic glossitis is poor nutrition. In this case, an alcoholic who's diet contained a lack of folic acid and other B vitamins presented with a red beefy tongue lacking in filiform papillae.

Treatment

- Administration of vit B₁₂
- Folic acid
- Delayed treatment causes anemia, neurological complications

Iron deficiency anemia





Red painful
tongue

Deficiency of niacin, VITB₃

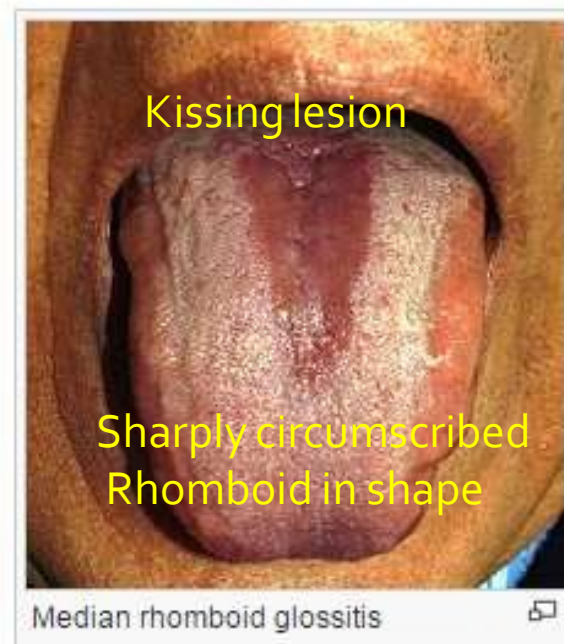
Pellagra

Median rhomboid glossitis

- Central papillary atrophy of tongue- defective fusion of lingual tubercles at the midline
- Susceptibility for candidiasis
- Absence of filiform papillae
- Presents – at posterior midline of dorsum of tongue
- soft palate erythema at the area of contact with the underlying tongue- kissing lesion

Treatment

- No treatment is necessary
- Antifungal therapy- reduce clinical erythema and inflammation in candida infection



GEOGRAPHIC TONGUE

- Benign migratory glossitis- psoriasiform mucositis in dorsal part of tongue
- Changing patterns of serpiginous white lines surrounded by depapillated mucosa
- Wandering rash of tongue
- No treatment is necessary



Geographic tongue (benign migratory glossitis)

Fissured tongue/ scrotal tongue/ lingua plicata

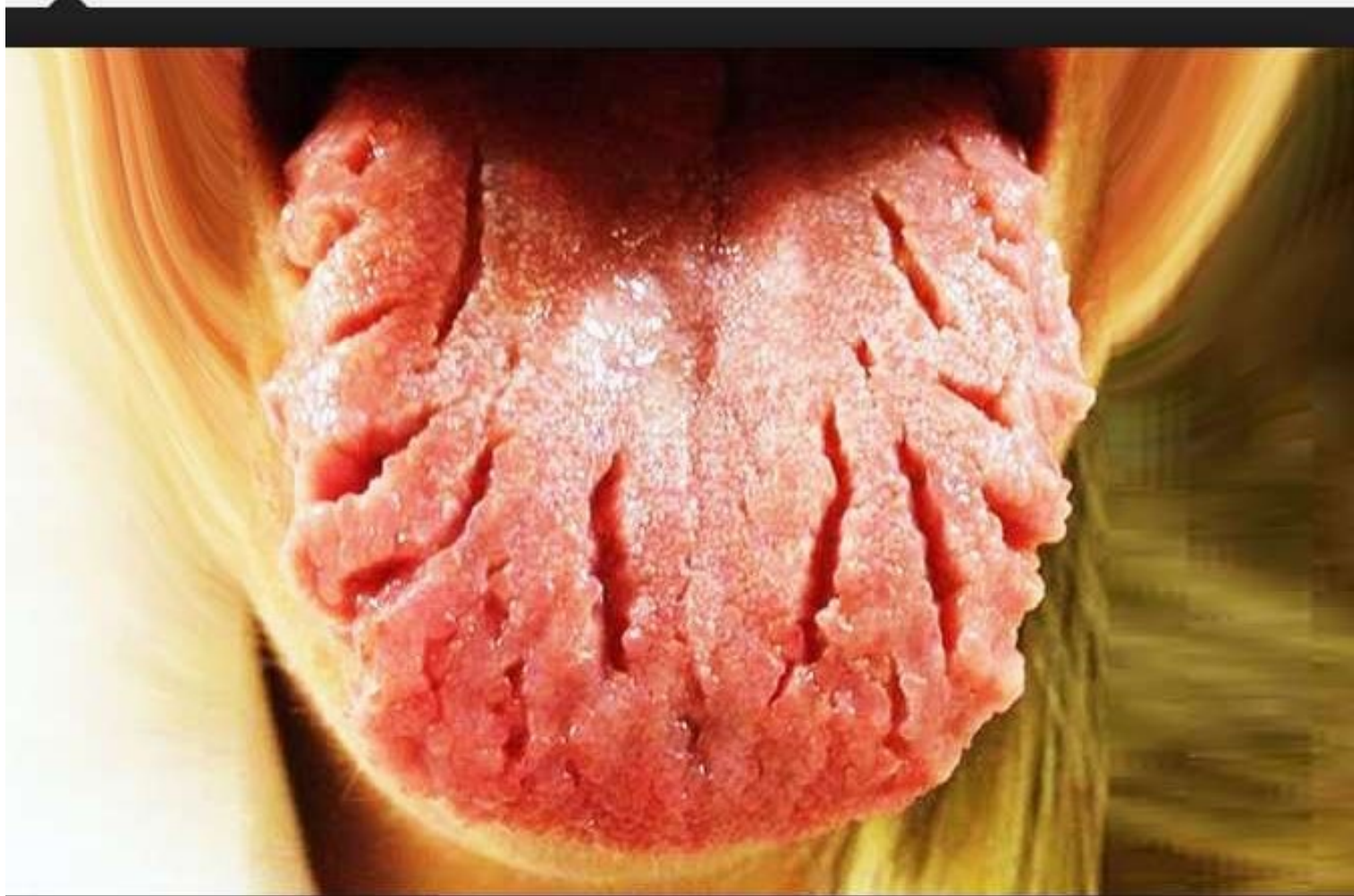
- Characterized by grooves that vary in depth
- Seen on dorsal and lateral aspects of tongue
- Seen in melkersson rosenthal syndrome and downs syndrome
- Debris can be trapped in the fissure
- Depth of fissure varies about
- No treatment is required



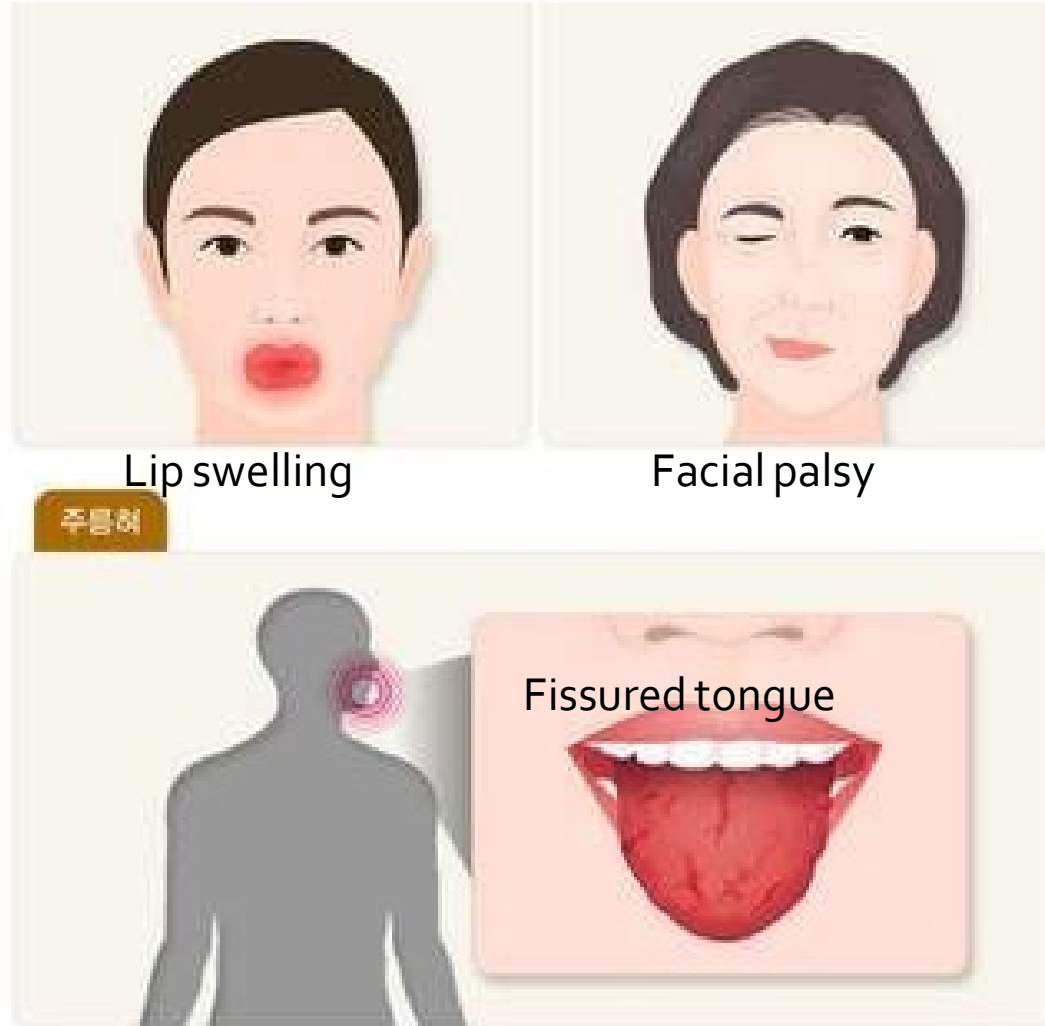
Figure 2.

Fissured tongue. Fissures may trap food and bacteria, causing I

Scrotal tongue



Melkettsson Rosenthal Syndrome



BMS

- **Burning Mouth Syndrome**
- Burning mouth syndrome (also called oral dysesthesia) occurs most commonly in women after menopause.
- The most commonly affected part of the mouth is the tongue (pain in the tongue is termed glossodynia)
- . A painful burning sensation may affect the entire mouth (particularly the tongue, lips, and roof of the mouth [palate]) or just the tongue
- The sensation may be continuous or intermittent and may gradually increase throughout the day.
- Symptoms that commonly accompany the burning sensation include a dry mouth, thirst, and altered taste
- Possible consequences include changes in eating habits, irritability, depression, and avoidance of other people.

- Burning mouth syndrome is not the same as the temporary discomfort that many people experience after eating irritating or acidic foods. Burning mouth syndrome is poorly understood. It probably represents a number of different conditions with different causes but a common symptom.
- A common cause is the use of antibiotics, which alters the balance of bacteria in the mouth, leading to an overgrowth of the fungus *Candida* (a condition called thrush). Ill-fitting dentures and allergies to dental materials may be causes as well.

Summary of Tongue Conditions

CONDITION	CLINICAL PRESENTATION	TREATMENT	COMMENTS
Median rhomboid glossitis	Smooth, shiny, erythematous, sharply circumscribed, rhomboid shaped plaque; usually asymptomatic, but burning or itching possible; dorsal midline location	Topical antifungals	Often associated with candidal infection
Atrophic glossitis	Smooth, glossy appearance with red or pink background	Treat nutritional deficiency or other underlying condition	Caused by underlying disease, medication use, or nutritional deficiencies (e.g., iron, folic acid, vitamin B ₁₂ , riboflavin, niacin)
Fissured tongue	Deep grooves, malodor and discoloration may occur with inflammation or trapping of food	Usually no treatment; gentle brushing of tongue if symptomatic inflammation occurs	Associated with Down syndrome, psoriasis, Sjögren syndrome, Melkersson-Rosenthal syndrome, geographic tongue
Geographic tongue	Bare patches on dorsal tongue surrounded by serpiginous, raised, slightly discolored border	No treatment necessary, but topical steroid gels or antihistamine rinses can reduce tongue sensitivity	Associated with fissured tongue, inversely associated with tobacco use

THANK YOU