Sheet no. : 2

Refer to slide : 1 **" Developmental Anomalies**"

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**fissured tongue**  
- fissures of variable depth and directions on the dorsum of the tongue   
-- and maybe found on the lateral border  
-clusters in families  
-common in population so some of you may have a fissured tongue >> 20% of the population   
-complications:   
burning sensation when eating acidic or spicy food

\*unknown etiology

\*deep fissures on the dorsum of the tongue may cause :

-growth of microorganisms

-collection of food depries

Halitosis may happen because of plaque   
20% associated with geographic tongue  
it may be also associated with down syndrome and Melkersson Rosenthal syndrome

**geographic tongue**

It's called geographic because you can see red areas on the dorsum of the tongue surrounded by whitish border could be multiple areas adjacent to each other   
-it's common (3%)  
-you may find a difficulty in identifying this disturbance, and some of the dentists may think that it's a dangerous case

-atrophy of filiform papilla , borders of the lesion appear more prominent as a whitish border

The area where the filiform papilla are gone becomes red

The filiform papillae re grow again and another lesion appear at another area of the dorsum of the tongue

\*periods of remission : Sometimes they all disappear so the patient has a normal tongue and then it reappears again   
-there's a family history in some cases  
-vary in age, it may affect all ages, children and young people  
-appear at an area then it becomes bigger, then healing occurs, then appears at another area, as if it's jumping , because of this it is called also benign migratory glossitis, but actually it's wrong to call it like this because it doesn't migrate , it only appears in a new region.

\*the patient comes to the clinic complaining that the area of atrophy is sensitive to spicy and acidic food

-the way it looks makes the patient think its cancer >> cancer phobia

No need for management just reassurance

-histologically;  
the BORDERS are hyperkeratotic, hyperplasia and whitish in color, characterized with a dense acute inflammatory cell infiltrate (neutrophils)  
at the CENTER we have atrophy of filiform papilla and chronic inflammatory cells infiltrate in the lamina propria   
the lesion at first appears as a white area not red, then it becomes larger and the center becomes depapillated , we'll find neutrophils as a first evidence to the lesion  
-QUESTION:  
what's the relation between neutrophils and the lesion? (Because they are found in early lesion)

Complications:  
it's associated with fissured tongue and other skin diseases such as psoriasis (in 10% of patients with psoriasis).

Psoriasis patients have 3 to 4 times more prevalence of having geographic tongue; they have also found histological similarities between psoriasis and geographic tongue. Some even say that geographic tongue is psoriasis happening in the oral cavity, but no scientific evidence of this fact yet.

Geographic tongue is also associated with Reiter’s syndrome (*read about it.)*

Red area surrounded by whitish border, it is raised, hyperkeratinization and hyperplasia. It may appear in other places in the mouth, other than the tongue but its called migratory stomatitis

QUESTION: Is the tongue involved when the lesion affects other oral sites?

**Median rhomboid glossitis**  
Central lesion at the dorsum of the tongue, at the junction between the post. 1/3 (circumvallet) and the ant. 2/3  
-reddish area without whitish borders

It is persistent throughout life,   
  
There are two theories to explain the origin of the disease: developmental anomaly (persistent tuberculum impar) or chronic candida infection.

How to prove that this is candida infection?   
Biopsy, special stains for candida (albicans, especially)

In some patients the palate opposing the tongue lesion will show red lesion called kissing lesion where the medium rhomboid glossitis on the tongue infects the area on the palate that's opposite to it.

Not all cases are cured with antifungeal. We have two theories but neither explains all the cases.

Do you recommend that this patient undergoes a biopsy?

It is a correct way to find that it is a candida infection, especially if it had infiltrated into the mucosa, since smear will show that candida is present, even if there no infection, as a normal flora.

However, this red area can be an inactive thyroid gland that hadn’t descended. And by inserting a needle to take a biopsy you may activate it creating problems for the patient. You can give antifungeal therapy; if it was cured then it was fungal infection.