

### Defects related to the size of the tongue

#### 1-Microglossia

#### 2-Macroglossia Tongue Abnormalities

**1-Microglossia:** This is a condition where the size of the tongue is abnormally small. Cases of complete absence of the tongue is a rare condition. A tiny tongue will pose many difficulties related to speech and swallowing. **There is no treatment for this condition, and the affected person will have to train their tongue to the best of their abilities.**



**2-Macroglossia :** This is a much more common condition than microglossia, where the tongue is highly enlarged. An enlarged tongue may be congenital, when it is associated with generalized muscular hypertrophy.



**Acromegaly** is a hormonal disturbance where growth hormone is secreted in excess of the requirements of the body. The reason behind the enlargement of the tongue in this case is related to the relaxation of the muscles that support the lower jaw, and there is no support to keep the tongue in position. macroglossia causes disturbances in the teeth. Due to the continuous pressure exerted by the heavy tongue, teeth begin to move away and the tongue occupies these spaces between the teeth.

**The treatment of macroglossia involves the removal of the cause that gives rise to this condition. Surgical stripping of the tongue to reduce the heavy musculature**

#### 3-Cleft tongue

Cleft tongue is a condition where the tongue has a cleft running right across it horizontally or vertically, Complete clefting is rare, and occurs as a result of lack of developmental forces to push both halves of the tongue towards each other.

Partial clefting presents as a deep groove in the middle of the tongue. Cleft tongue causing difficulty in eating as food gets stuck in the cleft.

**4-Benign Migratory Glossitis :** This condition is also called a Geographic Tongue due to the behavior of the lesions, which tend to "migrate" from one area of the tongue to another. The exact cause for the condition remains unknown, but it occurs in cases of emotional stress. Females are twice as affected as males.



The lesions are yellowish-white or deep red in color depending on the papillae that are affected. The area of the lesion loses its epithelial lining, making hot foods seem hotter. The areas of desquamation persist for a while, regress spontaneously, but reappear over time. Patients with this condition are usually asymptomatic ,no known treatment for the disease, but moderate success with vitamins and mineral supplements.

### 5-Hairy Tongue

This is a condition characterized by the hypertrophy of the filiform papillae of the tongue as well as desquamation of the area . If the papillae become stained with tobacco, they appear black in color and look like hair on the tongue.



The tongue could also appear yellowish-white if foodstuff is trapped within these papillae.

1-Anemia 2-gastric troubles have a role on the development of this condition.

3- Antibiotics like penicillin also responsible for the staining of the papillae.

4-Smoking is the biggest cause for the occurrence of the condition. 5-Sometimes, head and neck irradiation after cancer may also produce this condition. The only treatment of the condition is to keep the tongue as clean as possible by using a toothbrush.

### 6-Ankyloglossia

Ankyloglossia occurs as a result of the fusion of the lingual frenum to the floor of the mouth, complete fusion rarely occurs; a partial ankyloglossia or "tongue-tie" is a much more common condition. This leads to speech problems



The treatment is to surgically sever the connection between the frenum and the floor of the mouth.

7-Fissured Tongue: a transverse groove is present on the tongue from which numerous smaller grooves radiate all over the surface of the tongue. The condition is painless and the only problem is with the food debris gets stuck in the grooves. These have to be cleaned by gauze or a toothbrush.



### 8-Median Rhomboid Glossitis

This condition is a classic developmental disorder of the tongue. It is a failure of the developmental apparatus during the organogenesis of the fetus. A structure called "tuberculum

impar" is supposed to withdraw when the two halves of the tongue come close to each other during development.



When this does not happen, the structure gets trapped in between the two halves of the tongue creating an area. Median Rhomboid Glossitis has also been strongly linked with the fungal infection caused by *Candida albicans*. This condition is more common in men as in women. The exact cause for this occurrence is not known, although hormonal links have been suggested.

There is no known treatment sometime administer anti-fungal agents

**9-Glossoptosis** refers to the downward displacement or retraction of the tongue(displacement of the tongue into the pharynx)