

## Lec.13

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### Clinical consideration

**Aglossia** (absence of tongue): very rare, due to complete agenesis of tongue primordia.

**Hemiglossia** (half tongue): It occurs if one of the lingual swelling fails to develop.

**Microglossia**: Tongue is too small. **Macroglossia**: Tongue is too large.

**Tongue tie (ankyloglossia)**: It occurs when frenulum of tongue extends to the tip of the tongue, thus preventing its protrusion and causing difficulty in speech

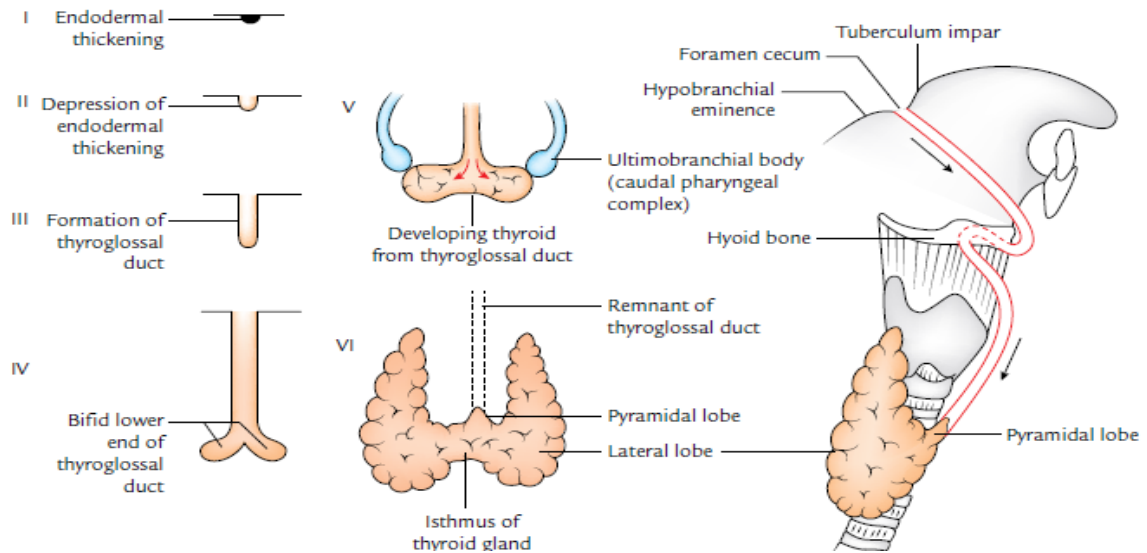
**Bifid tongue**: In this condition, the anterior portion of the tongue splits into two parts. It is caused by failure of fusion of two lingual swellings.



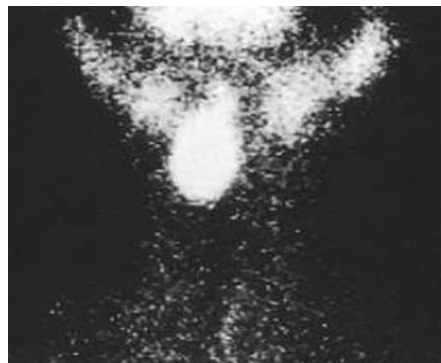
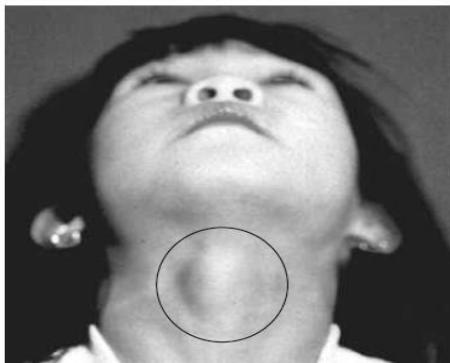
### Development of the thyroid gland

In the midline of the pharynx floor, the endodermal lining of the foregut forms the **thyroid diverticulum**. This diverticulum migrates caudally, passing ventral to the hyoid bone and laryngeal cartilages.

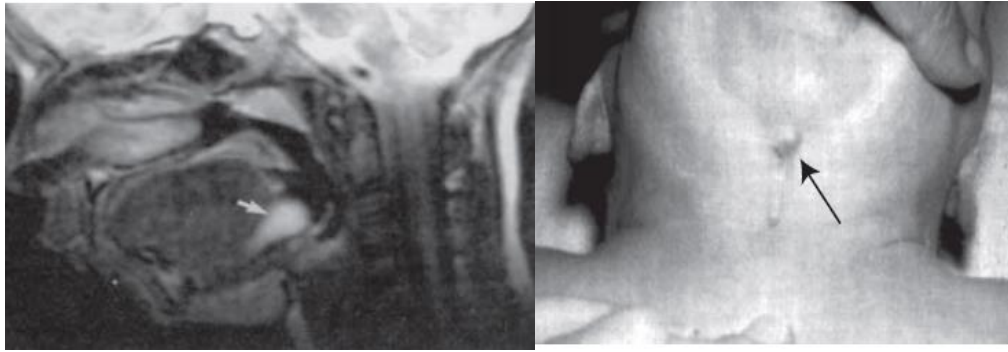
During this migration, the thyroid remains connected to the tongue by the **thyroglossal duct**, which is later obliterated. The site of the thyroglossal duct is indicated in the adult by the **foramen cecum**.



**Ectopic thymus, parathyroid, or thyroid tissue** result from the abnormal migration of these glands from their embryonic position to their definitive adult location. The [99mTc] pertechnetate scan localizes the position and the extent of the sublingual thyroid gland.



**Thyroglossal duct cyst occurs** when parts of the thyroglossal duct persist and thereby form a cyst. It is most commonly located in the midline near the hyoid bone, but it may also be located at the base of the tongue, when it is then called a **lingual cyst**.



The photograph shows a **thyroglossal duct cyst** (*arrow*), which is one of the most frequent congenital anomalies in the neck and is found along the midline most frequently below the hyoid bone. The MRI (Figure) shows a **lingual cyst** consisting of a mass of thyroid tissue (*arrow*) at the base of tongue.