

# Lingual Thyroid: A Case Report in Somaliland

Dr. Tex Li-Hsing Chi, DDS, Ph.D.  
Oral and Maxillofacial Surgery  
Translational Medicine

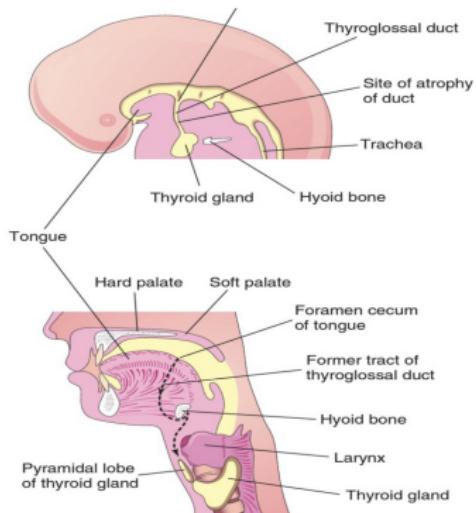
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# Introduction

- ▶ Lingual thyroid is a rare entity (1 in 100,000) resulting from abnormal embryological thyroid gland migration
- ▶ Ectopic thyroid tissue located at the base of the tongue between the circumvallate papillae and the epiglottis
- ▶ Often leads to compressive symptoms like dysphagia

# Embryological Migration

- ▶ In normal embryological development, the thyroid gland descends from the foramen cecum of the tongue to its normal pre-tracheal position in the neck
- ▶ In lingual thyroid, the thyroid fails to descend and remains situated at the base of the tongue



## Case Presentation

- ▶ 22-year-old female with long-standing headaches and 5 years progressive dysphagia
- ▶ Headaches were a major chief complaint, occurring 2-3 times per week for several years
- ▶ Characterized by throbbing, unilateral pain mainly in the frontotemporal area
- ▶ Lasting 4 hrs or more
- ▶ She also need to avoid light exposure which can aggravate headache pain
- ▶ Physical exam showed no palpable thyroid tissue in neck
- ▶ No focal neurological deficits on exam

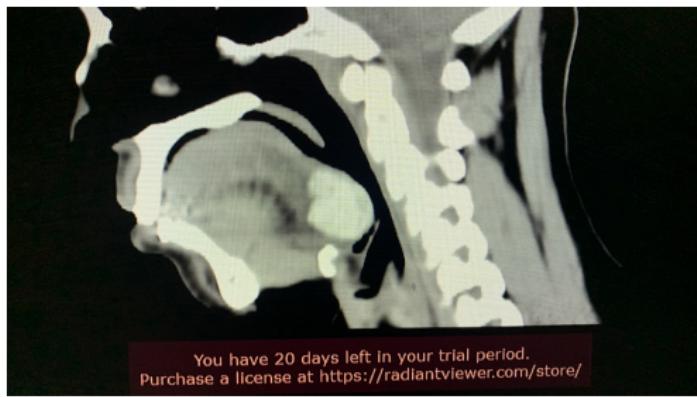


## Laboratory Test

- ▶ Labs: vitamin D insufficiency, mildly elevated TSH, normal T3/T4
  - ▶ Vitamin D: 25-OH vitamin D = 27 ng/mL (normal 30-100 ng/mL)
  - ▶ Mildly elevated TSH: 6.5 µIU/mL (normal 0.4-4.5 µIU/mL)
  - ▶ Normal free T3: 3.2 pg/mL (normal 2.3-4.2 pg/mL)
  - ▶ Normal free T4: 1.1 ng/dL (normal 0.8-1.8 ng/dL)

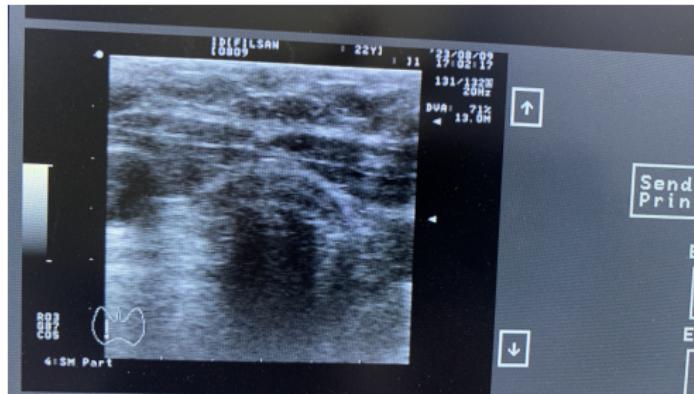
# Images

- ▶ CT-scan (non-contrast): 2 x 2 x 2 cm lesion at tongue base, no thyroid tissue in neck



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# Ultrasound



## Problem List

- ▶ Headache
  - ▶ Long-standing history of frequent headache
- ▶ Dysphagia
  - ▶ 5 years progressive dysphagia likely due to lingual thyroid mass effect
- ▶ Lingual thyroid
  - ▶ Ectopic thyroid tissue at base of tongue
  - ▶ (?) Early hypothyroidism (mildly elevated TSH)
- ▶ Left leg numbness
  - ▶ New onset symptom
- ▶ Vitamin D insufficiency: photophobia or hijab coverage?
- ▶ (?) Parathyroid glands

# Diagnosis

- ▶ Leading diagnosis: Lingual thyroid with early hypothyroidism
- ▶ Differential diagnoses:
  - ▶ Thyroglossal duct cyst
  - ▶ Metastatic thyroid cancer
  - ▶ Primary tongue base cancer

# Suggested Evaluation and Management

- ▶ Headache: consulting neurologist Dr. Jama and Dr. Chen
  - ▶ survey thyroid hormone profile, brain MRI (removal of her braces/wire of orthodontic devices)

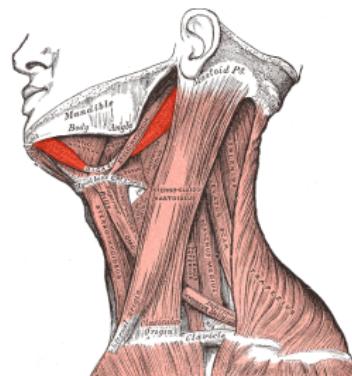


# Suggested Evaluation and Management

- ▶ Dysphagia by lingual thyroid: consulting ENT Dr. Maxamed and Dr. Hung
  - ▶ Surgical relocation of lingual thyroid
  - ▶ Thyroid hormone replacement



# Lingual Thyroid Relocation



# Conclusions

- ▶ Lingual thyroid should be considered with tongue base lesions and absent cervical thyroid
- ▶ Lifelong monitoring and treatment of hypothyroidism needed
- ▶ Multidisciplinary management required



Mahasanid