# **CBL**

## **Objectives**

- Discuss the structure and functions of thyroid gland
- Recognize the mechanism of action of thyroid Hormones and regulation
- Relate the clinical picture with the presentation of such clinical condition.
- Recognize the importance of selection of salt utilized in cooking
- Recognize the social issues related to swelling in front of neck
- Identify the anatomical structures of the endocrine gland in front of the neck
- Discuss the synthesis of T3 T4

#### Case

30 year old female with H/O wt loss, diarrhea, heat intolerance for five weeks along with Palpitations, and excessive sweating. O/E she had swelling in front of neck, fine tremors at both out stretched hands. Palms are sweaty and warm, BP 140/60 mm Hg. Pulse is 140 irregularly irregular.

## **Investigation's: Findings:**

WBCs 11000/ cumm Thyroid function Test: ESR 40 TSH 0.002 T3 17 T4



### Questions

- 1. Which is the commonest structure enlarged in front of the neck in hilly / mountainous areas of the Pakistan?
- 2. Which endocrine gland is involved in this case?
- 3. How thyroid hormone is playing role for normal functions of the body?
- 4. Discuss the underlying mechanism of these symptoms?
- 5. How iodine is incorporated in thyroid gland and hormone and what other macromolecules are involved for its synthesis?
- 6. How thyroid hormone is regulated for normal functions of the body?
- 7. How to investigate biochemical grounds in such a case to reach the disorder?
- 8. How would you address patients concerns regarding swelling in front of the neck?