

## THESIS ABSTRACT

### **TITLE:CYTOPATHOLOGICAL SPECTRUM OF THYROID LESIONS -A HOSPITAL BASED STUDY**

**INTRODUCTION :** Diseases of the thyroid gland are commonly encountered in clinical practice and comprise a spectrum of entities which cause systemic diseases like Autoimmune thyroiditis ,a localised lesion such as colloid goiter or a tumor mass. Prompt accurate diagnosis and early management help in reducing the morbidity and mortality associated with the thyroid pathology. The significance of the study lies in bringing to focus the change in scenario of the variation in thyroid pathology in the recent years. This is an attempt to evaluate the spectrum of various thyroid lesions using cytopathology which is a simple and non-interventional method of study.

**AIMS AND OBJECTIVES :**1.To evaluate the morphology of the thyroid lesions by fine needle aspiration cytology in adult patients with swelling of the thyroid gland . 2.To study the distribution of lesions according to age and sex. 3. To correlate cytomorphological features of the thyroid gland lesions with histopathological features wherever possible. 4. To evaluate sensitivity, specificity and diagnostic accuracy of different lesions .

#### **SOURCE AND DATA FOR THE MATERIAL AND METHODS:**

The present study was conducted in the Department of Pathology Chennai Medical College Hospital and Research Centre, Irungalur.

**DURATION OF STUDY :** 2015-2017-A two year prospective study.

**SAMPLE SIZE:** 100 cases

**INCLUSION CRITERIA :** Adult patients with palpable thyroid gland enlargement attending the out and in -patient department in our hospital. Both adult men and women are included in the study.

**EXCLUSION CRITERIA :** Children with thyroid enlargement below 12 years of age.

**MATERIALS AND METHOD:** After explaining about the procedure and getting his/her written consent, the Fine needle aspiration of the thyroid gland was performed. The smears were stained using Hematoxylin and Eosin, Giemsa and Papanicolaou stains and interpreted using Bethesda System of Reporting Thyroid Cytopathology (BSRTC).

**RESULTS AND STATISTICAL ANALYSIS:** Our study of 100 cases of thyroid swellings revealed that the majority of the patients with thyroid swellings were females and the mean age was 41.3 years. Majority of the cases showed Benign lesions. In the present study Autoimmune thyroiditis was found to be the commonest thyroid pathology to be diagnosed cytologically, followed by Colloid goiter. Out of the 100 study cases only 27 cases were subjected to histopathology.

**CONCLUSION :**The present study concludes that in our population, Benign lesions are the most common and Autoimmune thyroiditis being the predominant pathology reported here. This study brings to focus the recent change in the scenario of the cytological spectrum of thyroid lesions i.e a shift from Iodine - deficient colloid goiters to Auto-immune based thyroiditis.

**Key words:** Thyroid, Bethesda, BSRTC, FNAC, Autoimmune thyroiditis, colloid goiter.