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Research Article

### FREQUENCY OF THYROID MALIGNANCY IN A TERTIARY CARE HOSPITAL IN YEAR 2018.

Dr. Abdullah<sup>1</sup>, Dr. Danish Sagheer<sup>2</sup>, Dr. Urooj Aamir<sup>3</sup>, Dr. Muhammad Saad<sup>4</sup>.

<sup>1</sup>M.B.B.S., Medical Officer, THQ Hospital, Murree. <sup>2</sup>M.B.B.S., Medical Officer, Asia General Hospital, G.T. road, Rawalpindi., <sup>3</sup>M.B.B.S., Fauji Foundation Hospital, Rawalpindi. <sup>4</sup>M.B.B.S., Medical Officer, Asia General Hospital, G.T. Road, Rawalpindi.

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**Abstract:**

**Introduction:**

*Thyroid disorders are very commonly encountered in surgical OPDs. Most common disorders are multinodular goiter, follicular adenoma or papillary carcinoma. Their prognosis is mainly dependent on the time of diagnosis and type of neoplasms.*

**Methodology:**

*It was cross sectional study performed in Fauji Foundation Hospital, Rawalpindi. All patients with thyroid disorders were included in this study.*

**Results:**

*A total of 41 patients were encountered with thyroid disorders. 36 were females and 5 were male. Mean age of patient was 43 years. Out of total 41 cases presented, 35 had Multinodular goiter. Remaining 6 patients had several different neoplasms. 2 patients of Follicular adenomas were also found. One case of Poorly differentiated and Papillary thyroid carcinomas was found.*

**Conclusion:**

*3 patients were found to have malignant thyroid neoplasms. They include Papillary thyroid carcinoma, Paucicellular undifferentiated carcinoma and Poorly differentiated carcinoma.*

**Keywords:** *thyroid neoplasm, malignant, follicular adenoma.*

**Corresponding author:**

**Dr. Abdullah,**  
M.B.B.S., Medical Officer,  
THQ Hospital, Murree.

QR code



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**INTRODUCTION:**

Thyroid diseases are quite common these days. Their incidence increases as one ages and is associated with increased mortality and morbidity [1]. According to American Thyroid Association, more than 12 percent of US population will develop thyroid diseases once in their lifetime. Not only this, almost 20 million individuals have some sort of thyroid disorder making this entity very common and interesting for research purposes [2]. Thyroid function test is the most widely diagnostic test available for diagnosis, which is easily accessible and acceptable for most of the population. Serum TSH level is more specific for thyroid disorders rather than measuring T3 or T4 which may be normal as in the case of subclinical thyroid disorder. Thyroid hormones secretion is maintained by the balance of TSH and TRH which is secreted by anterior pituitary and hypothalamus respectively. They are in perfect balance for normal functioning of thyroid hormones. However, thyroid disorders break the chain and disrupt this natural phenomenon [3]. We conducted this research to find out the prevalence of thyroid disorders

and incidence of thyroid neoplasm especially malignancy among patients presenting in OPD of Fauji Foundation Hospital Rawalpindi.

**METHODS:**

This is a cross sectional study performed in Fauji foundation Hospital Rawalpindi from January 2018 to December 2018. All the patients with thyroid disorders were included in this study. FNAC was performed as per schedule to confirm the diagnosis. Histopathology reports were studied and demographic data along with diagnosis were noted with the help of self-administered questionnaire. Results were shown in tables where required.

**RESULTS:**

A total of 41 patients were found with thyroid disorders. 36 were females and 5 were male. Mean age of patient was 43 years. Out of total 41 cases presented, 35 had multinodular goiter. Remaining 6 patients had several different neoplasms which are shown in table 1.

**Table no. 1: Spectrum of thyroid carcinoma.**

Serial no.	Age	Gender	Histopathology	Capsule invasion
1	40	Female	Poorly differentiated carcinoma	No
2	53	Female	Paucicellular undifferentiated carcinoma	No
3	60	Female	Follicular adenoma	No
4	31	Female	Hyalinizing trabecular adenoma	No
5	40	Female	Follicular adenoma	No
6	34	Female	Papillary carcinoma	Yes

2 patients had follicular adenomas with age of 40 and 60 years. One patient was found to have papillary carcinoma. Patients had extensive bleeding during the procedure with many vascularized structures found in histopathology sample. One case of Hyalinizing trabecular adenoma, poorly differentiated and Paucicellular undifferentiated carcinoma were also found. Details of each cases is given in table no. 1.

Majority of the patients presented with difficulty in swallowing and swelling in front of neck. No family history of any thyroid malignancy was found in this study.

**DISCUSSION:**

Thyroid disorders are common these days. However, many disorders are treatable with simple medications. Few requires surgical intervention as thyroidectomy or lobectomy. In our research, 41 cases of thyroid disorders were found in Surgical OPD. Majority of patients had multinodular goiter. Multinodular goiter is usually considered a benign nodules upto 95% of cases, remaining 5% are malignant. 6 patients had

different neoplasms of which the details are given in table no.1. In our research, female dominance was found. This is in accordance with this study published in 2010 [4]. Follicular adenomas are the second commonest thyroid neoplasm encountered after multinodular goiter. No case of follicular carcinoma was found. Follicular adenoma is differentiated from carcinoma on the basis of cytology, sonographic or clinical features. Treatment includes surgical intervention which grants good prognosis in case of Follicular adenomas. However, the prognosis of Follicular carcinomas mainly depends on capsular invasion, with poor prognosis if capsular invasion is found such as in case of invasive follicular carcinoma [5]. One patient had Papillary thyroid carcinomas with tumor invading the capsule. Papillary thyroid carcinomas are the epithelial malignancy showing evidence of follicular cell differentiation and a set of distinctive nuclear features. It is the most common thyroid neoplasm encountered with excellent prognosis. One special feature of papillary thyroid carcinoma is that they invade lymphatics. This finding was also found in this patient. Risk factor of Papillary

thyroid carcinomas includes radiation exposure to head or neck and few familial diseases such as Familial adenomatous polyposis or Werner syndrome [6].

#### CONCLUSION:

3 patients were found to have malignant thyroid neoplasms. They include Paucicellular undifferentiated carcinoma, Papillary thyroid carcinoma and Poorly differentiated carcinoma. All 3 patients were females with mean age of 42.3 years.

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