

A study of 100 cases of hyperthyroidism



Medical Science

KEYWORDS :

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ABSTRACT

100 patients of Graves' hyperthyroidism from August 2009 to July 2011 are studied for the Clinical Profile of hyperthyroidism and their response to therapy (Carbimazole and Radioactive iodine) in hyperthyroidism from which the conclusion drawn is increasing age is associated with clinically less severe hyperthyroidism and The full dose of radioactive iodine therapy and Antithyroid drugs are equally effective (80 to 90%) in the management of Graves' hyperthyroidism.

INTRODUCTION:

Thyroid disorders are the most common among all the endocrine disorders in India. Among the thyroid disorders hyperthyroidism is a common clinical problem, which is frequently missed due to wide range of clinical manifestation, varying from subclinical hyperthyroidism to life threatening thyroid storm.

In India, According to a projection from various studies on thyroid disease, it has been estimated that about 42 million people in India suffer from thyroid diseases (10). The prevalence of hyperthyroidism is estimated around 0.1% in India (9). In India, According to a projection from various studies on thyroid disease, it has been estimated that about 42 million people in India suffer from thyroid diseases (10). The prevalence of hyperthyroidism is estimated around 0.1% in India (9). The most common cause of thyrotoxicosis is Grave's disease followed by toxic multinodular goiter (TMNG), solitary toxic adenoma and thyroiditis.

AIMS AND OBJECTIVES:

Aims and objectives of our study are,

1. To Study the Clinical Profile of hyperthyroidism.
2. To study the effect, side effect and response to therapy (Carbimazole and Radioactive iodine) in hyperthyroidism.

METHODS AND MATERIALS:

We have studied 100 patients with hyperthyroidism from August 2009 to July 2011. All the patients were evaluated regarding detailed history and thorough physical examination was done. All the patients were investigated in the form of routine investigation and Thyroid function test (S. TSH, S. Free T4, S. Free T3). ECG, Chest X-Ray, USG Thyroid, Thyroid scan and 2D ECHO was done when required. Response to the therapy was noted. Crook Wayne's Index is also considered for this study.



RESULTS:

Age (Year)	In study (n = 100)
15 to 30	30
31 to 44	29
45 to 60	32
≥ 61	03

All over mean crook score in our study is 20.21 ± 6.62 , In our

study we found that there was a negative correlation ($r = -0.9949$) between age and crook score, which suggests that increasing age, is associated with clinically less severe hyperthyroidism. It is also supported by study of Xander et al (21) carried out with Hyperthyroid Symptom Scale (HSS).

SYMPTOMS	Present study (n = 100)
Tachycardia	99
Palpitation	97
Finger tremor	97
Tiredness / weakness	95
Hyper kinesis	94
Weight loss	90
Anxiety	89
Heat intolerance	80
Excessive sweating	75
Warm & moist hand	67
Goiter	66
Increased appetite	63
Diarrhea	50
Lid lag	35
Exophthalmos	31
Oligomenorrhea	25
Breathlessness	14
Proximal myopathy	2
Dermopathy	1
Atrial fibrillation	1

SUMMARY & CONCLUSION:

- Graves' disease is more common in young adult population, affecting female more than male. Increasing age is associated with less severe hyperthyroidism.

Response to RAI	Hyperthyroidism	Hypothyroid	Euthyroid
Our study (n=50) (%)	26	74	0

- The full dose of radioactive iodine therapy and Antithyroid drugs are equally effective (80 to 90%) in the management of Graves' hyperthyroidism. In both the group treatment response and outcome were more favorable in female patients, old age, small goiter, mild exophthalmopathy and low basal free T4 level. Predilection of treatment failure is seen in male gender, young age, large goiter, moderate to severe exophthalmopathy, high basal free T4 level, higher 24hr radioactive iodine uptake and longer duration of pretreatment with antithyroid drugs. All the patients put on radioactive iodine therapy will get hypothyroid stat and lifelong levothyroxine supplement to maintain euthyroid stat. Carbimazole is also effective and requires dose titration and monitoring for side effects like hepatotoxicity, agranulocytosis.

tosis and dermatopathy at regular interval. Fortunately in our population these side effects are negligible.

Response to drugs		3 month	6 month	12 month
Our study (n=44) (%)	Euthyroid	81.81	86.36	90.9
	uncontrolled	18.19	13.64	09.1

REFERENCE

1. Terry F Davies, P Reed Larsen. Chapter 11: Thyrotoxicosis: Williams Textbook of Endocrinology. 10th edition. | 2. Kasper. Harrisons' Principles of Internal medicine, 18th edition, chapter: 341: Disorders of thyroid gland. | 3. Rebecca s. Bahn. Hyperthyroidism and other causes of thyrotoxicosis: Management guidelines of the American Thyroid Association and American Association of Clinical Endocrinologists, Endocrine Practice: vol. 17 no. 3 may /june 2011. | 4. RK Sahay. Thyrotoxicosis. JAPI January 2011; vol. 59: 26-31. | 5. Yash shah. Thyroid Ophthalmopathy. JAPI 2011; vol. 59: 60-65. | 6. Shashank R Joshi. Laboratory evaluation of thyroid function. JAPI Jan 2011, vol. 59:14-20. | 7. Leslie J degroot, Chapter 10 – Graves' Disease and the Manifestations of Thyrotoxicosis, Chapter 11 – Diagnosis and Treatment of Graves' Disease, www.thyroidmanager.org | 8. R Sankar. Radioactive Iodine therapy in Graves hyperthyroidism: a prospective study from a tertiary referral centre in north India. JAPI.vol53. july2005:603-606 | 9. Amit Allahabadiya. Age and gender predict the outcome of treatment for Graves' Hyperthyroidism. The journal of Endocrinology and Metabolism. Vol. 85. No.3:1038-1042. | 10. Henry R. Burch. Physicians' information and education resource: American college of physician. 2010.