



A DEMOGRAPHIC PROFILE AND AWARENESS STUDY OF HYPERTHYROIDISM AMONG PATIENTS IN A TERTIARY HOSPITAL IN WESTERN INDIA

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ABSTRACT

Background and objectives- To study the demographic profiling and awareness of hyperthyroidism among patients reporting to our hospital.

Methods- A randomized retrospective study was done consisting of 50 patients who were diagnosed with hyperthyroidism in the Out patient department of our hospital during two year period after approval by ethical committee. The data obtained were tabulated, analysed, assessed and formulated.

Results- Females were more commonly affected, with age group of 60-69 being more commonly affected in the male and female category, with majority of patients belonging to the class III of kuppusamy socio-economic classification. On laterality males had more bilateral involvement with women having predominantly unilateral involvement. On treatment study, males were on a strict treatment regime as compared to their counterparts. In the socio-economic classification majority of class V category were not on any treatment. On awareness majority of male & female patients were equally unaware of the fact that they were suffering from hyperthyroidism.

Conclusions- Our study showed that majority of female patients were affected, off treatment and unaware of the disease. Patients of lower socio-economic class were off treatment and unaware of the disease. As we found the group of 60-69 years were more commonly involved a thorough survey and screening of this age group is essential. With proper awareness, screening, check-ups, camps and education among we can make a remarkable difference in treatment in restoring visual function, appearance and help a reclusive patient to become socially reintegrated.

KEYWORDS : Graves orbitopathy, Thyrotoxicosis, Hyperthyroidism, thyroid eye disease (TED), thyroid- associated ophthalmopathy (TAO)

A.INTRODUCTION-

Graves' disease is the most common autoimmune disease representing 50–80% of cases of hyperthyroidism¹. Many patients experience distressing symptoms, and a few develop sight threatening complications. Patients are often young or middle aged and at the peak of their career. Sight loss can be prevented by appropriate management, yet it still occurs even in countries with advanced healthcare systems. For example, treatment can reverse blindness and help a reclusive patient to become socially reintegrated. As very few studies have been conducted to know this awareness and management protocol and a study to know the demographic profile among patients of hyperthyroidism along with other parameters like socio-economic status and treatment and management protocol was conducted at our tertiary hospital.

B.MATERIALS & METHODS-

A randomized cross-sectional observational study was done at our hospital Shri Gurugobind Singh Government Hospital, Jamnagar. 50 patients who were diagnosed with hyperthyroidism in the Out patient department of our hospital during two year period were collected after approval by institutional ethics committee. General information like age, history of smoking, affected years with hyperthyroidism, whether on or off medication, awareness of the disease, socioeconomic status based on modified Kupuswamy scale², other systemic diseases were collected. Complaints of the patients suffering was collected and tabulated. Eye signs, involvement of other soft tissue were observed. The data obtained were collected, analysed, assessed and tabulated and was entered into an Excel spreadsheet and then transferred to SPSS software (Statistical Package for Social Sciences, version 22, SPSS Inc, Chicago, IL, USA) for analysis.

Inclusion criteria-

1. Patients with various presenting with ocular symptoms such as

diminution of vision, blurring of vision, irritation, foreign body sensation, redness

2. Patients with thyroid associated ophthalmopathy who had not received Immunosuppressive or surgical treatment for their eye disease
3. Male and female patients both will be included without bias.
4. Patients with systemic diseases like diabetes, hypertension, auto immune diseases will be included in the study.
5. Patients with history of anterior segment eye surgeries such as cataract glaucoma, LASIK, RK, PRK.

Exclusion criteria

1. Patients with active infections in the eye
2. Patients with ocular or systemic emergency
3. Patients with perforated, traumatised and congenital anomaly in the eye.
4. Anything not mentioned in the inclusion criteria

C.RESULTS-

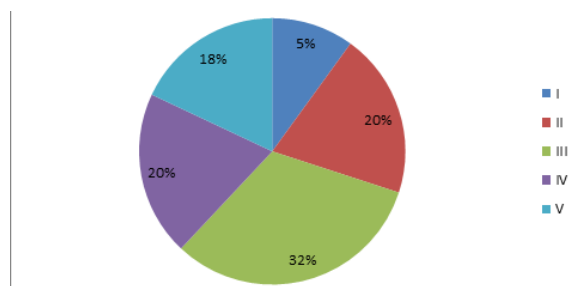
1. Females were commonly affected with 72% incidence.
2. On age comparison majority of patients were found in the age group of 60-69 comprising about 29% & 28% in both the male & female category as described in Table-1.

Table 1: Age comparison (males/ females)

AGE GROUP	MALES	PERCENTAGE	FEMALES	PERCENTAGE
30-39	4	29%	3	8%
40-49	3	21%	10	28%
50-59	0	0%	5	14%
60-69	4	29%	10	28%
70-79	2	14%	7	19%
80-89	1	7%	1	3%

2. On socio-economic classification majority of patients were found in the III class of kuppuswamy status comprising about 32% followed by class II & IV each comprising 20% and class V described in Graph-1.

Graph 1: Socio-economic classification



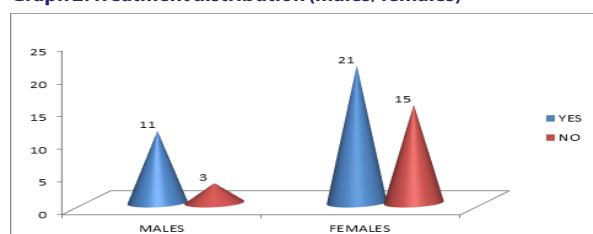
3. On laterality and sex distribution male patients had predominantly bilateral involvement & female patients predominantly had unilateral involvement as depicted in Table-2 suggesting males were more severely affected as compared to female counterpart.

Table 2: Laterality & sex distribution (males/ females).

LATERALITY	MALES	PERCENTAGE	FEMALES	PERCENTAGE
UNILATERAL	5	36%	19	53%
BILATERAL	9	64%	17	47%

4. On treatment distribution majority male patients were on treatment & majority female patients were off treatment as depicted in Graph-2.

Graph 2: Treatment distribution (males/ females)



On treatment & socio-economic profiling majority patients who were off treatment belonged to class IV & class V as depicted in Table-3

Table 3: Treatment vs socio-economic ratio (males/ females)

CLASS	ON Rx	OFF Rx	TOTAL	PERCENTAGE
I	4	1	5	80%
II	8	2	10	80%
III	13	3	16	81%
IV	5	5	10	50%
V	2	7	9	22%

On awareness study both the male and female patients were unaware of the fact that they were suffering from hyperthyroidism as depicted in table-4

Table 4: Awareness of hyperthyroidism (males/ females)

	AWARE	NOT AWARE
MALES	1(33%)	2(67%)
FEMALES	4(27%)	11(73%)

D. DISCUSSION-

Referral to specialist centres is appropriate for all but the mildest cases.³ Suboptimal management of patients with GO appears to be widespread.⁴ Correlating with this study we found that most patients suffering from hyperthyroidism were off treatment. This problem is largely due to delays in starting treatment. Health professionals are not always aware of the remarkable difference that treatment can

make in restoring visual function and appearance.⁵ On comparing with older reports we found that both male and female patients were unaware that they were suffering from hyperthyroidism as the diagnosis is mostly are overlooked. Natarajan et. al in their study found most common presenting symptom was Palpitation (90%) followed by Tremulousness of hands (84%), anxiety (82%), weight loss (76%).⁶ Correlating with older studies our study showed palpitation to be the most common symptom followed by weight loss and eye protrusion.

E. CONCLUSION-

Imparting knowledge on basic signs of hyperthyroidism like facial changes must be taught to the general public at large and getting themselves evaluated on developing such changes. Similarly the hazardous complications of hyperthyroidism must be brought into the knowledge of the public. As this is a totally reversible disease the benefits of early treatment must be explained in detail with majority of patients unaware of the fact that they are suffering from hyperthyroidism. An early detection of signs and symptoms must be picked up and started on treatment and referred to specialist centres to prevent further complications like loss of sight etc. With Suboptimal management of patients with GO appears to be widespread the patients be frequently evaluated as the. Patients on minimal suspicion should be screened in camps and in the opd must be investigated and evaluated immediately thus reducing the psychological trauma and morbidity.

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