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A STUDY ON GOITRE - IN A TERTIARY CARE HOSPITAL

C. P. Ganesh Babu¹, K. Karunakaran²

¹Department of General Surgery, Melmaruvathur Adhiparasakthi Medical college and Research Institute, Melmaruvathur, Tamilnadu, India

²Department of General Surgery, Madurai Medical College, Madurai, Tamilnadu, India

E-mail of Corresponding Author: ganeshvanicp@yahoo.co.in

ABSTRACT

A total of 450 cases of Goitre is studied from January 2006 - October 2009 in a tertiary care hospital.

Aim: To evaluate the cause and diagnosis of thyroid swelling in MAPIMS.

Materials and Methods: All cases were evaluated by performing thyroid function tests, ultrasound neck, FNAC. Patients were classified according to age distribution, gender, according to symptoms of Hypothyroid, Euthyroid, Hyperthyroid

Conclusion: More than 60% of the patients were suffering from Physiological Goitre. 15% were solitary nodule, 15% were Multinodular, 5% were Hashimotos, 5% malignancy. In our area most of the patients were suffering from Physiological Goitre due to low usage of iodized salt which is epidemiologically important.

Keywords: Goitre, iodized salt.

INTRODUCTION

Goitre is defined as enlargement of thyroid gland. Causes for goitre is wide open from benign to malignant conditions (table 1).(1). Even though national health programme has been initiated in India, still in many regions of India people use non -iodized salt only.

MATERIALS AND METHODS

A total of 450 cases of thyroid swelling were studied in MAPIMS from January 2006 to October 2009. Investigations performed were thyroid function tests, ultrasound thyroid, fine needle aspiration. Patients were classified according to age distribution, gender, and according to symptoms of Hypothyroid, Euthyroid and Hyperthyroid. And patients usage of iodized salt or not has also been used in the inclusion criteria.

RESULTS

Age distribution was from 10years to 70 years in our study. Most patients presented to our out - patient were in between 10 - 20 years of age (62%), next 21- 30 years (14.8%). (Table 2), (table 3). (R 2, R 3)

In female population alone 266 cases were reported in between age 10 -20 years , 54 patients were in the age 21 – 30 years. (table 4). In male population , more number of cases were reported in the age group of 31 - 40 years around 20 cases.(table 5).

According to the diagnosis, physiological Goitre cases were the commonest 271 cases(60.2%). next most common diagnosis is Thyroiditis.(table 6). Most of the patients were either Hypothyroid or Euthyroid. (table 7). (R 4). Comparing the usage of iodized salt , around 68.89% (310 cases) were not using iodized salt.(table 8).

DISCUSSION

Our study demonstrates the presence of significant amount of Physiological goiter in a particular geographical area inspite of the government agencies efforts in popularizing the use of iodized salt. 271 cases (60.22%) of Goitre in our area is Physiological Goitre due to lack of health education about iodized salt. 310 cases (69.89%) were not using iodized salt. In the 271 cases of physiological Goitre 250 cases were not using iodized salt and the remaining 21 cases inspite of usage of iodized salt usage they had Goitre due to low intake of salt. Even though majority of the population is not using iodized salt i.e, iodine deficiency prevalent in the community, why female patients are

predominantly suffering from Physiological goiter.

Another paradox in our study, in the male population physiological goiter is more common in the age group of 31-40 years which is not a physiologically active age group when compared to the age group of 10-20 or even 20-30. These are few questions which have to be addressed or atleast debatable in suitable forums.

CONCLUSION

In our study we have concluded that area in and around hospital most of the people 60.22% were suffering from physiological Goitre due to lack of usage of iodized salt which is epidemiologically significant. Hypothyroidism can be prevented from usage of iodized salt.

Table 1: Causes of Goiter

Diffuse toxic	Graves
Diffuse non toxic	Simple Goitre Dysharmonogenic Goitre Inflammatory Goitre
Nodular non toxic	-
Nodular toxic	-

Table 2: Total Number of Thyroid Swelling

AGE	NO. OF CASES	PERCENTAGE
10 - 20 years	279	62%
21 - 30 years	67	14.8%
31 - 40 years	45	10%
41 - 50 years	23	5%
51 - 60 years	23	5%
61 - 70 years	13	3%

Table 3: Gender Wise Distribution

GENDER	CASES	PERCENTAGE
FEMALE	398	88.4%
MALE	52	11.5%

Table 4: Female Age Distribution

AGE	TOTAL NO. OF CASES	PERCENTAGE
10 - 20 years	266	59%
21 - 30 years	54	12%
31 - 40 years	30	6.6%
41 - 50 years	18	4%
51 - 60 years	20	4.4%
61 - 70 years	10	2.2%

Table 5: Male Age Distribution

AGE	TOTAL NO. OF CASES	PERCENTAGE
10 - 20 years	5	1.1%
21 - 30 years	16	3.55%
31 - 40 years	20	4.44%
41 - 50 years	5	1.1%
51 - 60 years	3	0.6%
61 - 70 years	3	0.6%

Table 6: Diagnosis of Swelling

DIAGNOSIS	TOTAL NO. OF CASES	PERCENTAGE
Physiological Goitre	271	60.22%
Thyroiditis	60	13.33%
SNT	53	11.77%
MNG	45	10.00%
Malignancy	21	4.66%

Table 7: Thyroid Function Tests

STATUS	TOTAL NO. OF CASES	PERCENTAGE
EUTHYROID	210	46.66%
HYPOTHYROID	215	47.77%
HYPERTHYROID	25	5.55%

Table 8: Patients Using Iodized / Non - Iodized Salt

SALT STATUS	TOTAL NO. OF CASES	PERCENTAGE
NON- IODIZED SALT	310	68.89%
IODIZED SALT	140	31.11%

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