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Research Article

HYPOTHYROIDISM SYMPTOMS AND SIGNS¹Dr. Tooba Riaz, ²Dr. Saira Batool, ³Dr. Maliha Tahir¹CMH Lahore Medical and Dental College²Nishter Medical College³Multan Medical and Dental College**Abstract:**

Objective: The objective of this research work is to assess the most frequent symptoms of hypothyroidism in patients with medical detection of the underactive thyroid gland due to insufficient production of the thyroid hormones proved by the tests of laboratory.

Methodology: This research was carried out in Mayo Hospital Lahore in the duration of thirteen months. All the patients were suffering of probable under active thyroid gland depending on the symptoms of this disease were the part of this study. Tests of radioimmunoassay & evaluation of thyroid hormones production carried out. Interview carried out to record the symptoms and information of demography. SPSS software was in use for the collection of information.

Results: The interview for three times carried out of fifty patients who finished questionnaires during the period of this research work. Female were greater in quantity than male. The most frequent signs were intolerance from cold, gain of weight & menorrhagia. The most frequent symptoms were pallor & edema. The serious nature of this disease was present in four patients. Mild type presentation was the most common appearance of the hypothyroidism about sixty percent.

Conclusions: The most frequent symptoms & signs of underactive thyroid in the centre regions of Pakistan glands were very different from the outcomes of other studies. The condition of nourishment & Social demography, the level of illiteracy and personnel hygiene are some of the possible reasons. Unluckily, coexistence of some signs & symptoms are not the associate with underactive thyroid gland. It shows that valid medical and laboratory results are the only authentic procedures for the detection of the underactive thyroid gland.

Keywords: Nourishment, hypothyroidism, detection, Underactive Thyroid, Social Demography, glands.

Corresponding author:**Dr. Tooba Riaz,**

CMH Lahore Medical and Dental College

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INTRODUCTION:

Hypothyroidism is the outcome of insufficient creation of the thyroid hormones or hindrance in their production. It is a state which is the result of less production or no action of the hormones of thyroid. This problem may start in any time of life. The decrease in the metabolic operation is the cause of hypothyroidism which results in low mental and physical progress. The medical appearances vary from no symptoms and mild to serious and obvious disease and it also depends on the age of the patient, sex & physical appearance. In most of the impulsive cases, a lack in the operation of thyroid happens steadily, from mild hypothyroidism to the obvious hypothyroidism [1-3]. The medical symptoms have the ability to describe the hypothyroidism, these symptoms are not particular, and they can get the confirmation with the evaluations carried out with the help of laboratory tests. Hypothyroidism can have an association with an increase or decrease in the size of goitre. There will be some patients who show the vivid symptoms of under active thyroid gland with very low changes in the amounts of hormones of thyroid, whereas others patients will have fine symptoms in spite of complicated operation of thyroid function [1-3]. Due to a many physiologic impacts of the hormones of thyroid, hypothyroidism has a very deep effect on many systems of our body.

In very small children, hypothyroidism is the cause low growth unless the treatment of the replacement of the thyroid hormones carried out after a few weeks after birth. In a large number of patients, the confirmation of the primary hypothyroidism carried out with the help of laboratory tests and treatment carried out with the therapy of replacement of thyroid hormone [1-3]. Abnormal appearance of the hypothyroidism is very difficult to recognize and causes a delay in the start of the proper treatment [2]. In the areas which are rich with Iodine as USA, hypothyroidism is present in one to eight percent of the population; but the areas which are iodine deficient; the occurrence of this disease is ten to twenty more [2]. The yearly occurrence of hypothyroidism is four in one thousand in female & one in one thousand in men. The occurrence of this problem increases after sixty year of age and reaches at six to seven percent. Normally, one man is suffering of this disease in comparison of five to ten women [2]. It shows that the occurrence of this disease is very high in the areas of iodine deficient areas even in the developed countries. Signs &

symptoms are of varieties from the general appearance. But in the areas of iodine deficient, this disease has a particular appearance. One research work concluded that the appearance of this disease is change in the elder patients as compared to the young ones [4].

MATERIALS AND METHODS:

This research was carried out in Mayo Hospital Lahore in the duration of thirteen months. All the patients with possible diagnosis of underactive thyroid glands on the basis of signs & symptoms, had visited the medical centres, had documented in the medical institutes were the part of this research work. Tests of radioimmunoassay & assessment of the hormones of thyroid carried out. Through interview, signs & symptoms and information of demography gathered. A computer was in use for the storage of the data and SPSS software was in use for the analysis of the collected information. Mid & distributive indices were also available.

RESULTS:

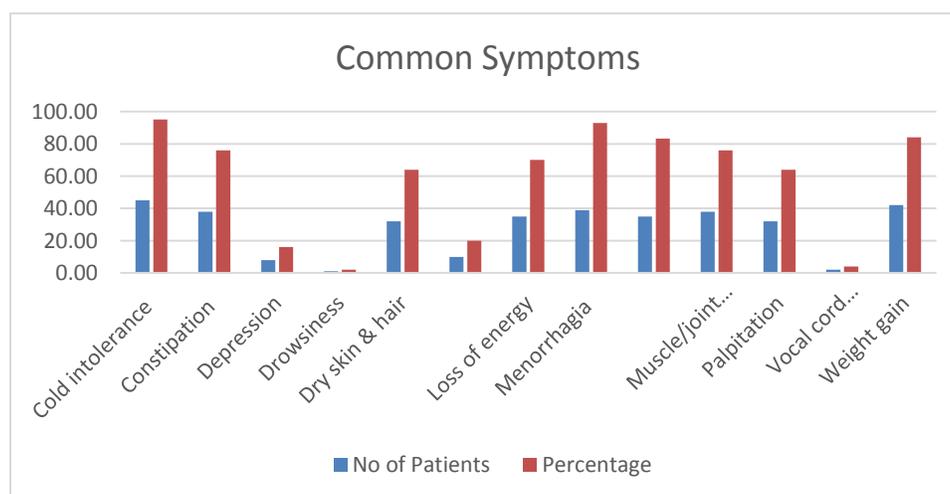
Three time interview carried out from the fifty patients who finished the questionnaires in the duration of that study period. There were forty-two females and eight males in this study. The average age of the patients was 23.2 years. The youngest patient was a neonate but the oldest patient was sixty five year old. Seventy four percent patients detected with this disease before the start of this case study but twenty six percent patients detected with the disease during the interrogation of the matter. About 1/3 previous patients had grievances regardless of the treatment. In the previous patients, thirty patients got normal outcomes from the test carried out in laboratory.

Forty five patients acquired this disease and remaining ten percent were congenital patients. The most frequent signs included intolerance to cold intolerance (about ninety five percent), gain in the weight & menorrhagia as mentioned in Table-1. As displayed in Table-2, the most frequent symptoms were edema as about eighty percent & pallor as about sixty percent. The serious nature of this disease was present in only four patients. The most frequent appearance of hypothyroidism was mild type as about sixty percent. The appearance of this disease was mild in 30 patients, medium in 18 patients and serious in only two patients.

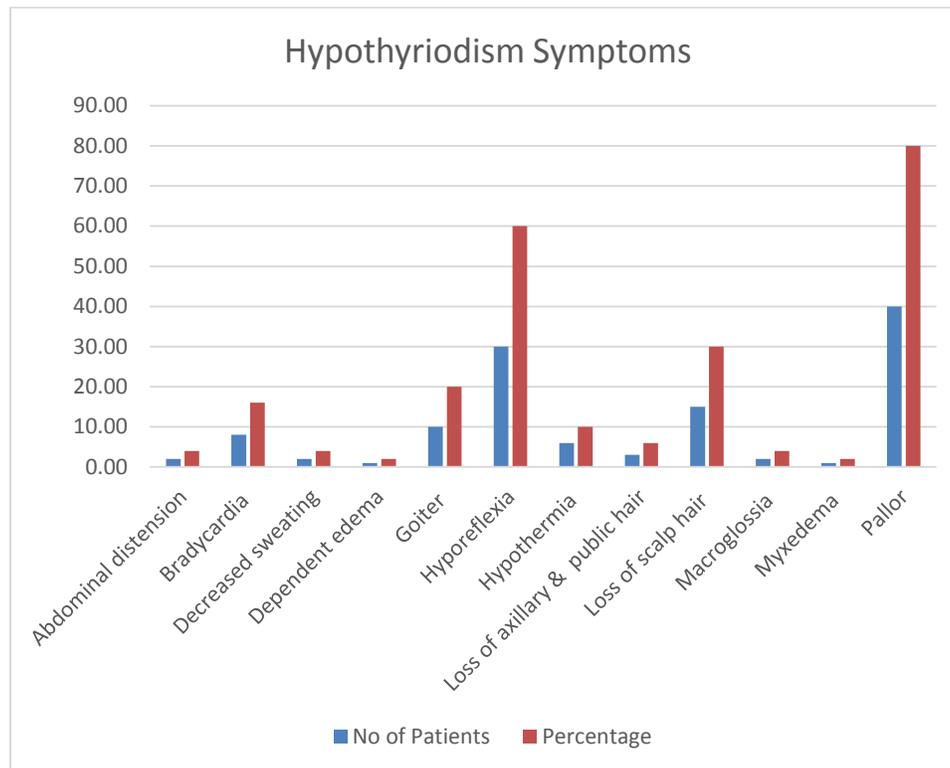
Table-I: Most common Symptoms of menorrhagia, dry skin, cold intolerance, hypothyroidism in cases referred to health services in Lahore

Symptoms	No of Patients	Percentage
Cold intolerance	45.00	95.00
Constipation	38.00	76.00
Depression	8.00	16.00
Drowsiness	1.00	2.00
Dry skin & hair	32.00	64.00
Inability to concentration	10.00	20.00
Loss of energy	35.00	70.00
Menorrhagia	39.00	92.85
Menstrual irregularity	35.00	83.30
Muscle/joint pain or weakness	38.00	76.00
Palpitation	32.00	64.00
Vocal cord dysfunction	2.00	4.00
Weight gain	42.00	84.00

* Percentages are calculated between females.

**Table-II: Most common Signs of hypothyroidism in cases referred to health services in Lahore city**

Symptoms	No of Patients	Percentage
Abdominal distension	2.00	4.00
Bradycardia	8.00	16.00
Decreased sweating	2.00	4.00
Dependent edema	1.00	2.00
Goiter	10.00	20.00
Hyporeflexia	30.00	60.00
Hypothermia	6.00	10.00
Loss of axillary & public hair	3.00	6.00
Loss of scalp hair	15.00	30.00
Macroglossia	2.00	4.00
Myxedema	1.00	2.00
Pallor	40.00	80.00



DISCUSSION:

The findings displayed that thirty seven patients detected before this research work, twenty six percent patients had referred because of medical presentations. In this research work, 8 percent patients found in the last stage of this disease that was much less than other research works [5]. Females were greater than males in quantity while other studies also reported high ratios. It was concluded that the hormones of sex play a vital role in the autoimmune thyroid abnormality [5, 6]. In some other case studies, most of the patients were from twenty one to forty year of age [5]. But in this research work, this was available in the second decade of the life. More May be more ecological antigen contact and reduction in the diet are also some of the possible reasons for this problem. The high occurrence of hypothyroidism in the regions which are iodine deficit interferes with the alteration of hormones and makes the detection of the disease very hard, e.g. the abnormalities in menstruation or the propensity to less weight presents as underactive thyroid glands.

In this research work, sixteen percent patients were suffering of goitre. Some authors have concluded the coexistence of goitre & underactive thyroid gland as hashimoto abnormality [7]. The evaluation of the antibodies of thyroid was not within reach in this research work. Hyporeflexia was present in thirty

percent patients. The abnormality in the menstrual cycle & menorrhagia, intolerance to cold & hoarseness are the most frequent signs in some of other research works [5, 9]. Intolerance to cold because of low basal metabolism & cardiac productivity has concluded as very frequent symptom of underactive thyroid gland [5]. The medical aspects of underactive thyroid gland change considerably among various communities owing to their type of weather, literacy condition & lack of ignorance about this problem [3]. The appearance of hypothyroidism is alterable in the elders in association with young patients; there are less signs & symptoms and mitigated rate of some traditional signs [4].

CONCLUSIONS:

In this research work, the most frequent signs & symptoms of hypothyroidism were not similar as compared to the sign and symptoms of other case studies. It shows that the nutritional attitudes and socio-demography are the possible reasons of this disease. An important disparity in this research work was the age of the patients which was much lower than range of age in other research studies; signifying that various ecological aspects and various races also play an important role in the findings of these outcomes.

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