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Research Article

**FREQUENT SYMPTOMS AND SIGNS OF HYPOTHYROIDISM
IN PATIENTS**¹Dr Bilal Ghafoor, ¹Dr Sana Iftikhar, ²Dr Amina ayoub¹Avicenna Medical College & Hospital Lahore, ²Fatima Jinnah Medical University Lahore.**Abstract:**

Objective: This research work conducted to assess the most frequent symptoms & signs of hypothyroidism in people with medical detection of this disease with the help of tests of laboratory.

Methodology: This was a descriptive transverse research work completed in the duration of 13 months in the Avicenna Medical College and Hospital Lahore. All the patients with possible hypothyroidism diagnosis on the basis of symptoms and signs and got referral to the health care centers were the part of this research work. The tests of radio immunoassay & assessment of the hormones of thyroid carried out. The interviews conducted to gather the information about the demography & signs of disease in the patients. Computer was in use to enter the collected information and SPSS software was in utilization for analysis of the data.

Results: Total 50 patients filled the questionnaire and they have to undergo three interviews in this duration. 1: 6 was the male to female ratio. Intolerance to cold (95.0%) gain of weight & menorrhagia were the most frequent symptoms of this disease. Edema (80.0%) & pallor (60.0%) were the most frequent symptom of this disease. We found the extreme nature of disease in 4.0% patients. The mild nature was the most frequent appearance of this disease (60.0%).

Conclusions: The very frequent symptom & signs of this disease in the central part of Punjab (Multan city), which one of the areas with iodine deficiency; were much different from the symptoms & signs described by other research works. Nutritional, social & demographic condition, level of qualification & self-care are the most possible reasons. Unluckily, accompaniment of few symptoms and signs are not indicative for this complication of hypothyroidism. The only reliable methods are confirmation from laboratory tests and strong medical examination for the diagnosis of hypothyroidism.

Keywords: Frequent, Methodology, Hypothyroidism, Complication, Symptoms, Laboratory.

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INTRODUCTION:

Hypothyroidism is the result of the reduced formation of hormones of thyroid or any hindrance to them. This condition is the result of incomplete production or reduced action of the hormones of thyroid. It can start in the later stage of life. The clinical appearance may change from mild to severe and it depend upon age of patient, sex and physical status. In majority of spontaneous patients, a reduction in the function of thyroid occurs progressively, and subclinical complication progressing with the passage of time to overt complication of this disease [1. 3]. The clinical symptoms have ability to describe hypothyroidism, but these symptoms are not specific and their confirmation is possible with the evaluation of the function of thyroid with the help of laboratory tests.

Hypothyroidism can have an association with the size of the thyroid. Few patients will appear with very clear symptoms of hypothyroidism & minor alterations in the level of thyroid hormones other symptoms will describe the abnormal function of thyroid only [1-3]. This complication can affect the various other organ systems of human body. Mental retardation is an outcome of hypothyroidism in the neonates as well as less growth. This is showing the high need of the regular testing for hypothyroidism in new births. Proper laboratory tests can confirm the presence of hypothyroidism and its therapy is possible with the help of replacement of thyroid hormones [1-3]. Uncommon appearance of the hypothyroidism is not easy to be recognize and it causes the delay in the start of the proper treatment [2]. In the areas with iodine efficiency as USA, hypothyroidism is available in 1% to 8% people, but in the areas with iodine deficiency, the occurrence of this issue is ten to twenty folds more [2]. Yearly occurrence of the auto immune hypothyroidism is 4/1000 women & 1/1000 men. The occurrence of this diseases increases with the increase of the age especially after sixty year of age.

The presentation of this disease in the elder patients is different from the presentation of this disease in

younger ones [4]. Qualification level, climate and knowledge of disease are the important factors which affects the occurrence of this disease. This study aimed to assess the medical appearance of hypothyroidism in the areas with iodine deficiency.

METHODOLOGY:

This was an elaborate transverse research work. This research work completed duration of 13 months in the Avicenna Medical College and Hospital Lahore. All the patients having possible hypothyroidism diagnosis on the basis of symptoms and signs and referred to these centers or found with records in hospitals or laboratory were the part of this research work. The tests of radio immunoassay and assessment of the thyroid hormones carried out. Interviews of the patients carried out to record the information about demography symptoms & signs of the complication. Computers were in use for the entry of the gathered information from patients. SPSS software was in use for the analysis of the information. The distributive & central indices are available.

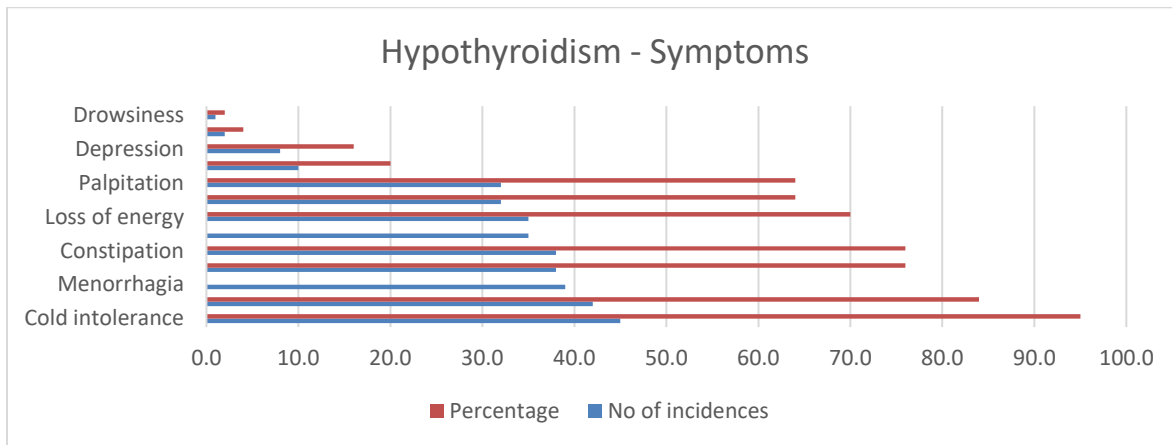
RESULTS:

Total 50 patients filled the questionnaire for 3 times in the duration of this study period. Total forty-two were the female patients and 8 were male. The average age of the patients was 23.20 years. The youngest patient of this complication was a neonate and the elder most patient was with sixty-five year of age. Total 74.0% (n: 37) diagnosed with this disease prior to start of this disease and our examinations diagnosed the 26.0% (n: 13) patients. Total 1/3 of the old patients found with some complaints in spite of the treatment. Amongst the old patients, thirty patients found with the normal results in the tests of laboratory. Forty-five patients (90.0%) had attained hypothyroidism & other 10.0% (n: 5) were the congenital patients. Intolerance to cold, gain of weight & menorrhagia were the most frequent signs of this complication as mentioned in (Table-1).

Table-I: Symptoms of Hypothyroidism in Cases Referred to Health Services

Common Symptoms	No of incidences	Percentage
Cold intolerance	45.0	95.00
Weight gain	42.0	84.00
Menorrhagia	39.0	92.85*
Muscle/joint pain or weakness	38.0	76.00
Constipation	38.0	76.00
Menstrual Irregularity	35.0	83.30*
Loss of energy	35.0	70.00
Dry skin & hair	32.0	64.00
Palpitation	32.0	64.00
Inability to Concentration	10.0	20.00
Depression	8.0	16.00
Vocal cord Dysfunction	2.0	4.00
Drowsiness	1.0	2.00

* Calculated between females.

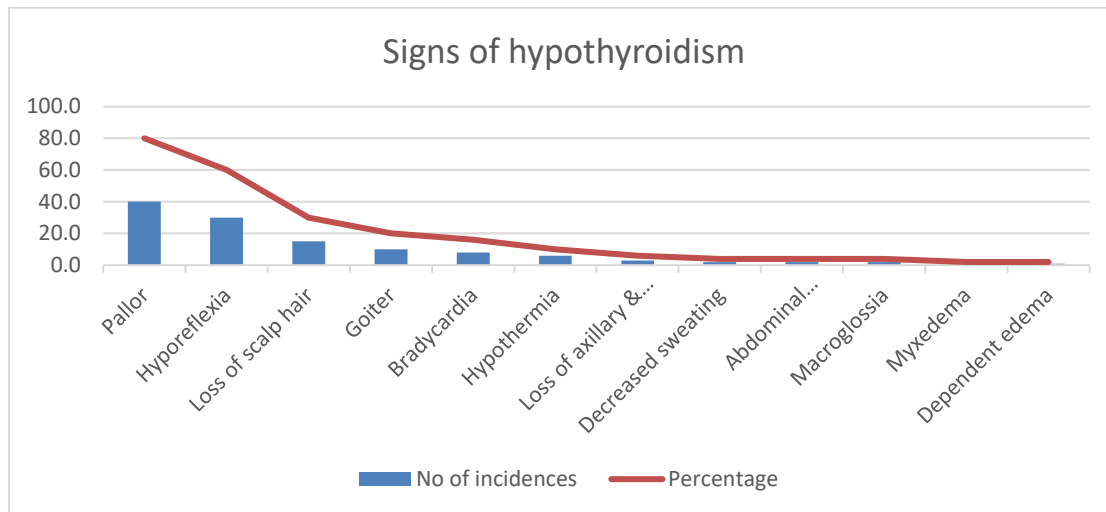


Edema (80.0%) & pallor (60.0%) were the most common symptoms of this complication as described in Table-2. We found the extreme nature of disease in 4.0% patients. The very frequent appearance of this

complication was mild (60.0%). The appearance of this complication was mild in 60% (n: 30) patients; moderate in 36.0% (n: 18) patients and severe in 4.0% (n: 20) patients.

Table-II: Signs of Hypothyroidism in Cases Referred to Health Services

Signs	No of incidences	Percentage
Pallor	40.0	80.00
Hyporeflexia	30.0	60.00
Loss of scalp hair	15.0	30.00
Goiter	10.0	20.00
Bradycardia	8.0	16.00
Hypothermia	6.0	10.00
Loss of axillary & pubic hair	3.0	6.00
Decreased sweating	2.0	4.00
Abdominal distension	2.0	4.00
Macroglossia	2.0	4.00
Myxedema	1.0	2.00
Dependent edema	1.0	2.00



DISCUSSION:

The result of this research study displayed that diagnosis of 74.0% (n: 37) patients carried out prior to start of work and 26.0% (n: 13) got referrals because of medical appearance and their diagnosis performed in this research work. In current research work, 8.0% patients were at the final stage of the complication this is much below a compared to many other research works [5]. Females outnumbered the males in this work and in other studies this high ratio was available which describes that hormones of sex play an important part in the disease autoimmune thyroid [5, 6]. In some research works, the most victims of the complication were in their 3rd or 4th decade of their lives [5]. In this research study, this problem was more common in the patients in their second decade of their lives. The most common possible reasons are exposure to environment and lack in nutrition.

High occurrence of this issue in the areas with iodine deficiency interferes with the alteration in hormone and forms the detection of complication very hard as disturbances because of menses dates or propensity of lessen the weight in that age appears like hypothyroidism. Goiter was available in sixteen percent patients of this research work. Some specialist has proved the accompaniment of the hypothyroidism & goiter as present in disease of Hashimoto [7]. There was no accessibility to calculate the antibodies of thyroid in this research work. Hyperreflexia was available in 30.0% patients of current research work. There is a report of new scale on the basis of the relation among time of reflexes relaxation & FT4 and T3 [8]. The most common complaints of the patients were intolerance

to cold, gain of weight, feebleness & malaise. The most common symptoms in some other research works are not regular menses periods, dryness of skin, and intolerance to cold, menorrhagia, hoarseness & edematous face [5, 9].

Intolerance to cold, because of decreased basal metabolism & cardiac production, reported as the very frequent hypothyroidism symptoms [5]. The clinical factors of this complication changes importantly between various populations because of their environment, level of qualification and knowledge of the disease [3]. The appearance of the hypothyroidism is change in the high age patients as compared to the young ones [4].

CONCLUSIONS:

In this current research work, the most frequent symptoms & signs of this complication were different in comparison with the signs and symptoms prescribed by other research works. The most possible reasons are the social and demographic conditions as well as nutritional attitudes. An important disparity in this research work was that the range of the age patients was lower as compared to the other research works; prescribing that some factors of the environment & various ethnicities may play a vital part in those findings.

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