

Common Signs and Symptoms in Patients with Hypothyroidism in North-Western Iran

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Abstract- Thyroid disorders, particularly hypothyroidism is among the common clinical disorders occurring in most communities. The main aim of this study was to determine common clinical signs and symptoms in patients with hypothyroidism in North-Western Iran. This study was a cross sectional retrospective study which was conducted to investigate common clinical signs and symptoms in 680 patient with hypothyroidism during 2003-2007 in Hamadan, North-Western Iran. Data were collected using questionnaire and interview. Data were analyzed using t- and Chi-square tests. The results indicated that weakness and fatigue were the most common symptom in patients with hypothyroidism.

Index Terms- Hypothyroidism, Signs, Symptoms, Iran

I. INTRODUCTION

THE most common thyroid disorder is hypothyroidism. *Hypo-* means *deficient* or *under (active)*, so hypothyroidism is an underactive thyroid gland. Hypothyroidism is a clinical syndrome that can result in a deficiency in the production of thyroid hormones and reduce them in the blood. Since the main purpose of thyroid hormone is to "run the body's metabolism," it is understandable that people with this condition will have symptoms associated with a slow metabolism. The estimates vary, but approximately 10 million Americans have this common medical condition. In fact, as many as 10% of women may have some degree of thyroid hormone deficiency. Certain physical symptoms including fatigue, intolerance to cold and constipation [1], [2]

Most people will have a combination of these symptoms. Occasionally, some patients with hypothyroidism have no symptoms at all, or they are just so subtle that they go unnoticed. Left untreated, the symptoms of hypothyroidism will usually progress. Rarely, complications can result in severe life-threatening depression, heart failure, or coma. When hypothyroidism isn't treated, signs and symptoms can gradually become more severe.

Many factors will go into the treatment of hypothyroidism and it is different for everybody. The signs and symptoms of hypothyroidism vary, depending on the severity of the hormone deficiency. But in general, any problems you have tend to develop slowly, often over a number of years. Recognizing the symptoms of hypothyroidism is extremely important. The sooner detecting the symptoms, the sooner can receiving proper treatment to manage the disorder. The

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symptoms of hypothyroidism aren't always noticeable, but it's important that you understand what to look out for. Recognizing hypothyroidism early on will allow you to manage the disorder and prevent it from interfering with your life [3].

Accordingly, considering the great importance of thyroid disorders and its complications, and that in many parts of the world about the risk factors of thyroid plentiful studies have been conducted but unfortunately research has been done in this regard and in recent years in Iran is very limited this study was conducted to identify the common signs and symptoms of hypothyroidism in patients with hypothyroidism in North-Western Iran.

II. MATERIAL AND METHODS

A. Protocol of Study

This study was a retrospective cross-sectional study. Target population was 680 patients with hypothyroidism referred to one of the hospitals, clinics and laboratories during 2003-2007 in Hamadan province, north-western Iran. The data were collected using standard questionnaire and face to face interview.

B. Statistical Analysis

Statistical significance was evaluated by t-test and chi-square test using SPSS 19.

III. RESULTS

Table I indicates the signs and symptom in patients with hypothyroidism.

TABLE I
SIGNS AND SYMPTOM IN PATIENTS WITH HYPOTHYROIDISM

Signs and Symptoms	%frequency	% Repaired (after treatment)
Fatigue and Weakness	%81/6	%32/25
Mood swings	%55/7	%31/5
Pain in Neck	%41/2	%27/7
Swallowing Problem	%29/2	%30
Dizziness	%64/25	%7
Hair loss	%51/7	%55/5
Muscle weakness	%55/1	%36/8
puffiness of the eyes	%56/2	%10/5
Soft nails	%28/8	%30
Dry skin	%42/6	%26/6
Thinning hair	%32	%36/3
Reduction in Brain Activity	%26/4	%22/2
Increased Sensitivity to Cold	%45/8	%46/6
Tremor	%55/2	%42
Weight gain	%49/7	-
Weight loss	%50/3	-
Constipation	%33/08	%18
Reduce Heart Function	%33/9	%10

According to research findings, tremor (88/75%), fatigue and weakness (81/6%), constipation (65/4%), dizziness (64/25%), puffiness of the eyes (56/2%) and myalgia (55%) were the most common symptoms in patients with hypothyroidism.

IV. DISCUSSION

The results indicated that in patients with hypothyroidism, weakness and fatigue was the most common symptom and also the results show that the majority of clinical symptoms of hypothyroidism have failed to fully repair after treatment. In consistent with our findings, researches show that weakness and fatigue is one of the common symptoms of hyperthyroidism. Our findings about the signs and symptoms appeared in hypothyroidisms are also comparable to other reports [5], [6].

Patient education about common clinical signs and symptoms of hypothyroidism will have an important impact on the prevention of complications related to hypothyroidism.

V. CONCLUSION

We have shown that common signs and symptoms observed in patients with hypothyroidism are comparable to common signs and symptoms observed in other populations.

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