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Review Article



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Effectiveness of Homoeopathic Medications in Comparison with Hormone Replacement Therapy in Hypothyroid Patients and Assessing their Comorbidity and Risk Factors

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ABSTRACT

Introduction: Insufficient synthesis and release of thyroid hormone give rise to hypothyroidism. At present, thyroid disease forms the second most common endocrine disorder in India next to Diabetes mellitus. The women are affected more than men .10% prevalence in adult women and 3% in adult men. Symptoms include fatigue, lethargy, aches and pains, increased sensitivity to cold, constipation, excessive tendency to sleep and angina pain .Thyroid hormone replacement must be taken for the rest of their life in case of hypothyroidism patients, if they are following allopathic system of medicine and the side effects which these medicines produced are much harmful than hypothyroidism. If homoeopathic similimum could stimulate the body to produce its hormones in a balanced level, then the need for lifelong hormonal replacement in hypothyroidism becomes unnecessary.

Methodology: A comparative cross sectional study has been conducted using questionnaire on 60 hypothyroid patients, in such a way that female patients who has been diagnosed with hypothyroidism between the ages of 35 to 55 were selected. They were divided as 30 homoeopathic users and 30 non-homoeopathic users. Field study was conducted and allopathic users were obtained through NSS camp surveys and homoeopathic users through patients attending SKHMC OPDs. The questionnaires were filled by the patient. Details regarding TFT values height, weight, were recorded. The comorbidities suffered by each patient were recorded and analysis was made. Regarding symptomatic change before and after medication and also risk factors were added in the questionnaire. Analysis was done using chi square test to compare the treatment groups.

Result: From the study conducted, it has been observed that the disease is prevalent in patients between 35 and 39 years. Majority of the patients had conditions like increased BMI(>25). Regarding symptomatic relief in patients before and after medication in both groups, homoeopathic users got better symptomatic relief when compared with non-users. Many of the symptoms has persist even after using conventional treatment when statistically analysed with a p value <0.01.

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Introduction

According to ICD 10 classification (2018), hypothyroidism is classified under E00-E89, as endocrine, nutritional and metabolic diseases and E03 as other types of hypothyroidism [1]. Hypothyroidism is a clinical state resulting from inadequate production of thyroid hormone for prolonged periods or rarely from peripheral tissues to the effect of thyroid hormone [2]. The prevalence of primary hypothyroidism is 1:100 but increased to 5:100 if patients with subclinical hypothyroidism are included.The female male ratio is 6:1 [3]. The prevalence of hypothyroidism in India is 11% compared with only 2% in UK and 4- 6% in USA [4]. The highest prevalence of hypothyroidism is noted between the age group between 46 and 54 years and least affected is between 18 and 35 years of age. As there is increases in incidence of hypothyroidism among women this study can help in assessing the effectiveness of homoeopathic medication over conventional method of treatment. It also helps to understand the risk factors, causes and comorbidities associated with hypothyroidism especially between the age group of 35 and 55 years. The feedback mechanism of hypothyroidism is mentioned (Figure 1). **Citation:** Abina Augustine, MV Ajith Kumar, Chandraja CV (2022) Effectiveness of Homoeopathic Medications in Comparison with Hormone Replacement Therapy in Hypothyroid Patients and Assessing their Comorbidity and Risk Factors. Journal of Nephrology & Endocrinology Research. SRC/JONE-112. DOI: doi.org/10.47363/JONE/2022(2)110



Figure 1: Regulation of Thyroid Hormone

Homoeopathic Effectiveness in Chronic Diseases

Dr. D.P.Rastogi, states that, in treatment of any disease the homoeopathic approach is slightly different from conventional medicine. There is a popular misconception in homoeopathy that homoeopaths merely go after the symptoms and do not bother about the disease, a person suffering from it. It is not so. A homoeopathic physician makes 2 diagnosis, one for labelling the disease and other to select the medicine or otherwise called invidualistic approach [5].In hormonal disorders homoeopathic medicines has a strong therapeutic approach [6]. While treating underactive thyroid, it is important to understand that since the gland itself is sluggish the treatment should focus on stimulating the glands to produce thyroid hormone adequately rather than simply supplying deficient hormone. So homoeopathy can act par superior to hormone replacement therapy. In homoeopathy, we are correcting the internal imbalance. If a successful result is obtained, there isn't any need for lifelong intake of supplements [7].

Hormone replacement therapy is the use of manmade thyroid hormone when its levels are lowered in body [8]. A study on 2014 shows that 42 million people in India have thyroid disorders [4]. This makes the study relevant in present day.

Methodology

A comparative cross sectional study was conducted among hypothyroid patients. Patients under homoeopathic medications were selected from the Saradha Krishna OPDs and those under hormone replacement therapy were selected through the survey conducted by NSS camp. After signing the consent form the patients were given with the questionnaires to be filled. Later on their medical history was collected through direct questioning and also through case records. Details regarding their TSH values, height, weight etc. were also collected to calculate their BMI. *Chi square test* was used to derive at a conclusion.

Inclusion Criteria: Only female Patients between the age limit of 35 – 55 years.

Exclusion Criteria: Patients below 35 years and Patients above 55. Patients with Hypothyroidism during pregnancy and mentally retarded patients.

Data Collection

Height and weight are measured according to the WHO guidelines. BMI was calculated using the formula BMI=Weight (Kg)/Height $(m)^2$. Below 18.5 is considered underweight, 18.5 to 24.9 is considered healthy, 25 to 29.9 is considered overweight, 30 or higher is considered obese.

Patients marked their symptoms based on their severity as *very severe, severe ,bearable ,mild* and *nil* based on Linkert Scales and before medication and after medication were assessed.

Ethical Consideration

Ethical clearance was obtained from the ethical committee in Sarada Krishna Homoeopathic medical college. SKHMC/ IEC/2018/143.

Result

People within the age group between 35 to 39 is found more affected that is 20 patients. Then comes the age group between 45-49 with 16 patients. In-between 40 and 44, there are 14 patients and least number of patients were seen between 50 and 54 with 10 patients (Table: 1).

Age group	Number of patients			
35-39	20			
40-44	14			
45-49	16			
50-54	10			

Table No. 1

Regarding BMI, majority of the patients comes under the category of overweight that is 25 patients with BMI between 25-30 .22 patients has BMI within range of 20-25. Between 30–35 there are 10 patients and between 35-30 there are 3 patients (Table: 2). this shows that there is increase in BMI with hypothyroidism. Here 13 patients come under the category of obese.

Table No: 2

BMI	Number of patients
20-25	22
25-30	25
30-35	10
35-40	3

For patients under thyroxine replacement therapy, before medication, 15 patients had severe weakness and after medication the number had increased to 17. Weight gain was seen in 10 patients before taking medication after medication it is seen in only 7 patients .Hearing problem was seen in 1 patient and after medication it is not seen in any of the patients. Ocular problem was seen in 1 patient and it remains the same even after taking medication. Initially only 3 patients presented with depression but after medication 14 patient's experiences severe depression. Before medication 5 patients had muscle pain and after medication 10 patients had it. Before medication 5 patients had cold intolerance later on 11 patient experiences severe cold intolerance. Hair loss was severe among 9 patients after medication it is severe in 23 patients. Loss of appetite was seen in 1 patient and after medication it is seen in 2 patients. Dryness of skin was severe in 8 patients after medication it is seen only in 1 patient (Figure: 2).

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Figure 2: Symptom Changes Before and After Medication in Patients Treated with Thyroxine Replacement Therapy

Comorbidities	Number of patients			
Diabetes mellitus	4			
Hypercholesterolemia	13			
Heart disease	1			
Palpitation	23			
Arthritis	11			
Hypertension	8			
Chest pain	6			
Shortness of breath	24			
Uterine Fibroid	6			
Fatty liver	2			
PCOD	2			
Anaemia	2			
Hypotension	2			
Asthma	3			





Figure 3: Symptoms Changes Before and After Medication in Homoeopathic Users



Figure 4: Menstrual Character



Figure 5: Family History

Among homoeopathic users weakness was severe among 16 patients and after medication only 3 of them experiences severe weakness. Weight gain was seen in 8 patients and now seen in only 5 patients with severity. None of them have hearing problem before and after taking medication.1 patient has ocular problem before and after taking medication. 7 patients had depression before taking medication and it has reduced to 4 after taking medications. 3 patients had muscle pain before taking medication and 4 persons showed the symptoms after medication.11 patients complains of hair loss severely before taking medication but after taking medicine only 7 of them are still suffering. Loss of appetite was seen in 3 patients before medication and now seen only in one patient. Dryness of skin was experienced by 3 patients but after medication no one is suffering from such a symptom (Figure: 3).

Most of the patients presented with shortness of breath that is 24 patients and palpitation with 23 patients, 13 patients had hypercholesterolemia, 11 patients with arthritis, 8 patients with hypertension, 6 patients from uterine fibroid and chest pain, 4 patients with diabetes mellitus and 3 patients with asthma. Among 60, 2 patients had fatty liver, 2 had hypotension, 2 had anemia and 2 had PCOD. Only 1 patient is suffering from heart disease (Table: 3).

Among 60 cases, 50 are menstruating in which 36 patients are having a regular menstrual period and 14 with irregular menses (Figure: 4). Familial occurrence was seen in 20 patients (Figure: 5).

Chi Square

Overall score was compared to show the efficacy of the treatment and found significant. The chi-square statistic is 5.7109. The p-value is .01686. The result is significant at p <0.05 (Table: 4 and Table: 5).

Table: 4							
	Better	Not better	Row Totals				
Hormone replacement	7 (11.50) [1.76]	23 (18.50) [1.09]	30				
Homoeopathy	16 (11.50) [1.76]	14 (18.50) [1.09]	30				
Column Totals	23	37	60 (Total)				

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Table: 5							
	Weakness	Weight gain	Depression	Muscle pain	Hair loss	Row Totals	
Hormone replacement	17 (15.11) [0.24]	7 (9.06) [0.47]	14 (13.60) [0.01]	10 (10.57) [0.03]	23 (22.66) [0.01]	71	
Homoeopathy	3 (4.89) [0.73]	5 (2.94) [1.45]	4 (4.40) [0.04]	4 (3.43) [0.10]	7 (7.34) [0.02]	23	
Column Totals	20	12	18	14	30	94 (Total)	

Discussion

The prevalence of hypothyroidism increases with age. But in this study the prevalence of hypothyroidism is seen mostly between the age group of 35-39. BMI has seen increased in patients with hypothyroidism due to their reduced BMR. Even though only 13 patients are obese in this study, majority of them comes under the category of overweight subjects. Studies conducted by Gulio Savia (et al), Esma Altunoglu (et al) and Jayantha Paul (et al) has also arrived a similar result showing positive correlation of BMI with hypothyroidism. Patients who are taking homoeopathic medication feels better when compared to patients treated with hormone replacement therapy. Patients treated with hormone replacement therapy experiences an increased severity in their symptoms after taking medicines. Studies conducted by Tapas Kundu et al. gives a similar result in his patients having hypothyroidism taking homoeopathic medication. Patients suffering from hypothyroidism is found to have a chance of increased incidence of cardiovascular symptoms like shortness of breath, palpitation, chest pain and other heart diseases these are also confirmed by people like Lachezar B et al, Eric L, Anandhasayanam et al. Hypercholesterolemia, female complaints and Diabetes has been given as a comorbidity in the study conducted by Otto Mayer et al, Indu Varma et al, Dr. Ravishankar et al respectively. Through this study we could find that in most of the patients suffering from hypothyroidism has a positive history of the same condition in their parents or first degree relatives. Thus through this study we can confirm one of the cause of hypothyroidism as hereditary factor. It is very clear that most of the diseases are interrelated. Food habits also causes hypothyroidism, there were patients who uses tapioca, which is a goitrogen [9-13].

Obesity is considered both as a risk factor and also as a comorbidity, this obesity in turn can leads to other co-morbidities.

Limitations

Patients were not sure whether they started their hypothyroidism first or the associated complaints. It was with the help of similar studies I could come to this conclusion regarding the comorbidities.

Conclusion

The co-morbidities prevailed among hypothyroid females are diabetes mellitus, hypercholesterolemia, chest pain, heart diseases, palpitation, shortness of breath, arthritis, asthma, anemia, hypertension, fatty liver and female complaints predominantly including uterine fibroid, PCOD, menstrual irregularities and a small group presenting with difficulty in conception, abortions and complications during delivery. The risk factors includes positive familial history, intake of goitrogen (tapioca). Homoeopathic patient's gets better relief from their symptoms when compared to patients treated with thyroxine replacement therapy.

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