



COMPARATIVE STUDY OF EFFICACY OF THYROIDINUM 3X VS INDIVIDUALIZED HOMOEOPATHIC MEDICINE IN IMPROVING QUALITY OF LIFE IN PATIENTS WITH PRIMARY HYPOTHYROIDISM

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ABSTRACT :

Background: Primary hypothyroidism is associated with a range of physical, emotional and social manifestations that may affect quality of life. This study compared Thyroidinum 3X with individualized homoeopathic medicine in patients with primary hypothyroidism.

Objective: To compare the efficacy of Thyroidinum 3X and individualized homoeopathic medicine in improving quality of life in patients suffering from primary hypothyroidism, and to compare their effects on thyroid function tests.

Methods: An experimental comparative study was conducted on 30 patients with primary hypothyroidism, aged 20–45 years. Fifteen patients received individualized homoeopathic medicine and fifteen received Thyroidinum 3X. Patients were assessed clinically and by the SF-36 questionnaire, with thyroid function tests including TSH, T3 and T4. Follow-up was carried out every 15 days and as required. Statistical analysis was performed using the Mann–Whitney U test after assessment of normality by the Shapiro–Wilk test.

Results: In the individualized homoeopathic medicine group, 11 of 15 patients (73.33%) showed improvement in quality of life according to the reported SF-36 assessment, compared with 6 of 15 patients (40%) in the Thyroidinum 3X group. The study also reported greater reduction in TSH levels in the individualized homoeopathic medicine group.

Conclusion: Within the study data reported, individualized homoeopathic medicine showed greater improvement in the reported quality-of-life and TSH outcomes than Thyroidinum 3X.

Keywords: Primary hypothyroidism; Thyroidinum 3X; individualized homoeopathic medicine; quality of life; SF-36; TSH

Introduction

Hypothyroidism is a clinical condition in which the thyroid gland does not produce sufficient thyroid hormones to meet the needs of the body. Primary hypothyroidism results from a defect at the level of the thyroid gland, whereas secondary hypothyroidism is associated with dysfunction at the pituitary or hypothalamic level.

The clinical manifestations of hypothyroidism may involve multiple systems and may include changes in energy, weight, bowel function, skin, hair, menstrual function, mood and general well-being. The condition may therefore influence several dimensions of health-related quality of life.

The present study evaluated the effect of two homoeopathic treatment approaches—Thyroidinum 3X and individualized homoeopathic medicine—on quality of life in patients with primary hypothyroidism. The SF-36 questionnaire was used to assess quality of life and thyroid function tests were used to assess changes in thyroid status.

The study was undertaken to compare the outcomes obtained with Thyroidinum 3X and individualized homoeopathic medicine in patients with primary hypothyroidism.

Aim and Objectives

Aim: To improve the quality of life in patients suffering from primary hypothyroidism.

Primary objective: To compare the efficacy of Thyroidinum 3X and individualized homoeopathic medicine in improving quality of life in patients suffering from primary hypothyroidism.

Secondary objective: To compare the efficacy of Thyroidinum 3X and individualized homoeopathic medicine on thyroid function tests.

Materials and Methods

Study design: Experimental comparative study.

Study population and sample: Thirty patients with primary hypothyroidism were included. Fifteen patients were assigned to the individualized homoeopathic medicine group and fifteen to the Thyroidinum 3X group.

Study setting and recruitment: Patients were recruited through the teaching Homoeopathic Hospital outpatient department, peripheral outpatient departments and camps.

Age range: Patients aged 20–45 years were included.

Inclusion criteria: Patients aged 20–45 years with elevated TSH who were willing to provide written informed consent.

Exclusion criteria: Children below 18 years and pregnant women.

Randomization and blinding: Simple randomization was performed using the random numbers table method. The study was described as single blind.

Intervention: Patients in the individualized group received individualized homoeopathic medicines in centesimal and LM potencies according to the case analysis. Patients in the comparison group received Thyroidinum 3X.

Medicine preparation and source: Medicines were obtained from a GMP-compliant homoeopathic pharmacy and were prepared according to the Homoeopathic Pharmacopoeia of India. Individualized medicines were repeated according to the principles described in the study.

Follow-up: Patients were followed up every 15 days and as per individual patient requirements.

Investigations: Thyroid function was assessed using TSH, T3 and T4. The study protocol states that these investigations were advised every six months.

Quality-of-life assessment: Quality of life was assessed using the SF-36 questionnaire. The questionnaire comprised eight domains: physical functioning, role limitations due to physical health, role limitations due to emotional problems, energy/fatigue, emotional well-being, social functioning, pain and general health.

Statistical analysis: Normality of data was assessed using the Shapiro–Wilk test. The data were reported as not normally distributed, and the Mann–Whitney U test was used for comparison. A 95% confidence level and alpha value of 0.05 were used in the study.

Ethical considerations: Written informed consent was obtained from participants and confidentiality of patient information was maintained. The study reported that no adverse reactions were observed.

Results

A total of 30 patients with primary hypothyroidism were studied, with equal allocation of 15 patients to each treatment group.

Table 1. Gender distribution of study participants

Characteristic	Number	Percentage
Female	23	76.67%
Male	7	23.33%
Total	30	100%

Table 2. Age distribution of study participants

Age group (years)	Number	Percentage
21–25	4	13.33%
26–30	13	43.33%
31–35	8	26.67%
36–40	3	10.00%
41–45	2	6.67%
Total	30	100%

Table 3. Distribution of participants according to treatment group

Group	Number of patients
Individualized homoeopathic medicine	15
Thyroidinum 3X	15
Total	30

Table 4. Individualized homoeopathic medicines reported in the individualized treatment group

Individualized medicine	Number of patients
Calcarea carb	4
Graphites	1
Ignatia	1
Calcarea Flour	1
Natrum Carb	1

Baryta Carb	2
Carcinosin	1
Lachesis	1
Natrum Mur	1
Sepia	2

Table 5. Reported overall response according to SF-36 assessment

Outcome	Individualized group (n=15)	Thyroidinum 3X group (n=15)
Improved according to reported SF-36 assessment	11 (73.33%)	6 (40.00%)
Not improved	4 (26.67%)	9 (60.00%)

The study reported improvement in 11 of 15 patients (73.33%) receiving individualized homeopathic medicine and in 6 of 15 patients (40%) receiving Thyroidinum 3X. The reported improvement was therefore greater in the individualized treatment group.

The research study reports that all SF-36 parameters showed statistically significant improvement and that individualized homeopathic medicine was more effective than Thyroidinum 3X in improving quality of life.

T3 and T4 were reported to be within normal limits before and after treatment in the study, whereas TSH was elevated in all cases. Therefore, the statistical comparison of thyroid function was based on TSH.

For the TSH analysis, the study reported a Mann–Whitney U value of 0, z value of 4.64 and $p < 0.00001$, and described the difference between the groups as statistically significant.

Table 6. Reported differences in TSH levels between initial and follow-up assessment

Patient	Individualized group: TSH difference	Thyroidinum 3X group: TSH difference
1	13.5	17.3
2	7.4	16.8
3	2.8	4.6
4	3.8	4.2
5	6.8	0.3
6	39.6	1.1
7	91.15	6
8	1.6	0
9	4.2	0.3
10	47.7	0.3
11	0.5	0.5
12	116.4	3.3
13	79.8	0.3
14	0.3	0.5
15	0.4	0.3

Discussion

The present comparative study evaluated two treatment approaches in 30 patients with primary hypothyroidism using quality-of-life assessment and thyroid function testing. Equal numbers of patients were included in the individualized homeopathic medicine and Thyroidinum 3X groups.

The study population comprised 23 females and 7 males. The largest age group was 26–30 years, followed by 31–35 years. This distribution represents the study population in which the interventions were evaluated.

The reported SF-36 findings showed improvement in 73.33% of patients in the individualized homeopathic medicine group compared with 40% in the Thyroidinum 3X group. The study therefore reported a greater proportion of improvement with individualized homeopathic treatment.

The individualized treatment group included Calcarea carb, Graphites, Ignatia, Calcarea Flour, Natrum Carb, Baryta Carb, Carcinosis, Lachesis, Natrum Mur and Sepia according to individual case assessment. This reflects the individualized prescribing approach used in the study.

The study also reported reduction in TSH levels in both groups, with greater reduction reported in the individualized homeopathic medicine group. The statistical analysis presented in the source document reported a statistically significant difference between the groups.

The case material included clinical presentations with menstrual, metabolic, emotional, gastrointestinal, skin and general symptoms. Individualized prescribing was based on the totality of symptoms and case analysis, whereas Thyroidinum 3X was used as the comparative intervention.

Overall, the findings reported in the study indicate greater improvement in the measured quality-of-life and TSH outcomes in the individualized homeopathic medicine group than in the Thyroidinum 3X group.

Conclusion

In this comparative study of 30 patients with primary hypothyroidism, individualized homoeopathic medicine was associated with improvement in quality of life in 73.33% of patients, compared with 40% in the Thyroidinum 3X group. The study also reported greater reduction in TSH levels in the individualized homoeopathic medicine group. On the basis of the outcomes reported in the study, individualized homoeopathic medicine showed greater improvement in the assessed quality-of-life and TSH outcomes than Thyroidinum 3X.

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