RESEARCH PAPER

Understanding Hypothyroidism as a Manifestation of Mandagni: Evidence from a Case Study

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ABSTRACT

A 31 years old patient, came with symptoms suggestive of hypothyroidism, including heaviness in abdomen and whole body, constant fatigue, constipation, and increasing body weight, was managed using a single Ayurvedic formulation containing Ashwagandha, Triphala, Shilajit, Guggul, and Kanchanar along with recommended Pathya-Apathya regimen as mentioned in Bhaishajya Ratnawali Agnimandhya Rogadhikara. The treatment plan was based on Agni Deepana, Ama Pachana, Kapha-Medohara, Rasayana, and Srotoshodhana (especially Rasavaha Strotas) principles. Clinical assessment and serum TSH levels were monitored over a period of two months. Following the treatment plan, shows symptomatic improvement, particularly in heaviness in abdomen, energy levels and digestive regularity. A noticeable reduction in serum TSH levels was noted, although values remained slightly high at the end of the observation period. No adverse effects were reported. The observed clinical and biochemical changes suggest a potentially supportive role of Ayurvedic intervention in managing conditions correlated with hypothyroidism. However, as this is a single case observation, larger controlled studies are required to prove these findings and evaluate repeatability.

Keywords: Hypothyroidism, Agnimandya, Kapha-Meda vriddhi, Ayurveda, TSH, Rasayana therapy.

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INTRODUCTION

Hypothyroidism is a clinical syndrome resulting from deficiency of thyroid hormones, which leads to a generalized slowing of metabolic processes. The prevalence of Hypothyroidism around the world has increased to ~5% with additional ~5% undiagnosed cases. This raises a question mark on the lifestyle and dietary habits of people. Hypothyroidism is a broad clinical entity, as thyroid hormones influence nearly every organ and system of the body. Consequently, fatigue (due to decreased basal metabolic rate, also muscle and bone metabolism), cold intolerance, anorexia (decreased smooth muscle activity of GIT and disturbed digestive juice secretion), and menstrual irregularities (in females) are considered the cardinal symptoms for the clinical suspicion and diagnosis of hypothyroidism [1].

From a symptomatic perspective, conceptually hypothyroidism most commonly correlates with features of *Agnimāndya* [2] and *Kapha-āvṛtta Udāna Vāyu* [3]. A sedentary lifestyle and *Viruddha Āhāra–Vihāra* [4] are among the most prevalent and significant causative factors (*Nidana*) observed in this population. In this context, Agnimāndya should not be limited to Jāṭharāgni [5] alone, but also encompasses Dhātvagni. This is evident from the clinical manifestations of Dhātvāgni Māndya [6] observed alongside Jāṭharāgni Duṣṭi in a majority of cases of uncontrolled hypothyroidism. Excessive exposure to etiological factors (*Nidānas*) leads to the development of *Mandāgni*, resulting in *Āma* formation. The accumulated *Āma* [7] cause obstruction of the *Srotas*, leading to *Kapha-pradhāna Tridoṣa Duṣṭi.*

The *Kaṇṭha* [8] region serves as the seat of *Udāna Vāyu* as well as the thyroid gland; therefore, *Kapha* disturbance or *Āvaraṇa* in this region can directly impair the normal functioning of *Udāna Vāyu*. Since *Ūrjā* is one of the principal functions of *Udāna Vāyu*, its derangement ultimately manifests as *Ūrjā-hāni* [9] (reduced vitality/fatigue). Additionally, certain clinical features of hypothyroidism also show resemblance to the *Ati-sthūla Puruṣa Lakṣaṇas* described under *Aṣṭa-nindita Puruṣa*, such as *Āyuṣya-hāni* (reduced life expectancy), *Utsāha-hāni* (lack of enthusiasm or depressive affect), *Sveda-āgaman* (excessive sweating), *Daurgandhya* (body odour), and *Javoparodha* (reduced interest or responsiveness toward the surrounding environment) [10].

Case Description

A 31 years old male patient came with complain of Heaviness in abdomen and body, anorexia, and fatigue along with sleep disturbance, cold intolerance since 2-3 months. On detailed history taking, patient had a routine of staying awake at night and day sleeping (due to occupational reason). Also, there was complain of mild constipation, finance related stress, tendency of zoning out of situations and conversations, hairfall, and increased thirst. He had no relevant medical, surgical or family history. There was no history of HTN or T2DM.

Ashtvidha pariksha-

Nadi- Vata-Kaphaj Nadi.

Mutra- Prakrut.

Mala- Grathit.

Jivha- Lipta (Coated).

Shabd- Spashta.

Sparsha- Anushnasheeta.

Drika- Prabhayukt.

Akriti- Madhyam.

On examination

BP- 135/84 mm/hg

RR- 19/min

PR- 77/min

HR- 77/min

Weight- 72kg

BMI- 24.1 kg/m^2

Clinical findings-

Thyroid profile: T_3 – 1.075 ng/ml

T_4 – 7.791 µg/dl

TSH – 15.00 µIU/ml

MATERIALS AND METHODS

On evaluation patient was diagnosed with Sub-clinical hypothyroidism. From Ayurveda perspective, patient was diagnosed with *Mandagni Pradhana Awastha*.

SAMPRAPTI GHATAK

Dosha- Kapha Pradhana Tridosha.

Dushya- Rasa, Meda, Asthi.

Strotas- Rasavaha, Madovaha, Asthivaha, Purishvaha.

Adhisthana- Kantha.

Swabhava- Chirakari.

Agnidushti- Agnimandhya.

Sadhyatasadhyata- Krucchasadhya.

SAMPRAPTI CHAKRA-

Nidana Sevan

(Diwashayan, Ratrijagaran, Ajeernashana, adhyashana,Vishamashana, Viruddhashana, Atyambupanata, Pradvesha Yukta Sevanata, Swapna Viparyaya)

Jathara-Agnimandhya

Ama formation and Vikrut Kapha formation

Strotasavarodha

Margavarodha Janya Vata Prakopa

Dhatvagnimandhya and Bhutagnimadhya

Mandagni Janya Lakshanotpatti

Table 1: Therapeutic intervention

S.No.	Date	Name of the medicine	Dosage	*Anupana*	Duration
1.	02/12/2025	Thyrawin tablet [11]	2 tab. BD Orally	Warm-water	60 days

Thyrawin tablet-

Thyrawin tablet is a proprietary product, mainly consist of *Ashwagandha, Kanchanara, Guggul, Shilajit, Triphala.* On detailed analysis of the ingredients we get to understand the mechanism of how it works in hypothyroidism.

***Ashwagandha* (Withania somnifera)**

Ashwagandha is a *Rasayana* and *Balya* drug that strengthens *Dhatu* and supports *Ojas*. In hypothyroid conditions where *Agnimandya*, fatigue (*klama*), weight gain and mental dullness are common, *Ashwagandha* helps by enhancing *Dhatvagni,* reducing *Vata-Kapha* imbalance, improving energy, stamina and stress tolerance. It supports recovery from *Utsaahahani* (loss of enthusiasm) seen in long-standing metabolic slowdown.

***Guggul* (Commiphora mukul)**

Guggul is described as *Lekhana, Medohara, Deepana* and *Kaphahara.* In hypothyroidism where *Kapha* and *Meda* accumulation predominate, it helps in reducing *Srotorodha* (channel obstruction), supports proper *Agni* functioning and also assists in regulating metabolism. Traditionally used in *Galaganda* and *Granthi* disorders, it helps restore glandular balance.

***Shilajit* (Asphaltum)**

Shilajit is a potent *Yogavahi Rasayana*, enhancing the action of other drugs. In hypothyroid patients with chronic weakness and low metabolic fire, it improves *Agni* at cellular (*Dhatvagni*) level, enhances strength (*Bala*) and vitality, help reduce fatigue and sluggishness. It is particularly useful when there is long-standing Kapha-Vata dominance with exhaustion.

***Kanchanar* (Bauhinia variegata)**

Kanchanar is classically indicated in *Granthi, Apachi* and *Galaganda*. It works mainly by, reducing *Kapha-*

Meda accumulation, clearing lymphatic stagnation (*Rasa-Rakta srotas dushti*) and supporting glandular tissue balance. In hypothyroidism with neck swelling tendencies or nodular presentation, it plays a central role.

Triphala (Amalaki, Bibhitaki, Haritaki)
Triphala acts as a gentle *Anulomana, Rasayana* and *Deepana-Pachana* formulation. In hypothyroidism, corrects *Mandagni*, supports proper digestion and metabolism, prevents *Ama* formation and helps in weight regulation. It maintains bowel regularity, which is important in *Kapha*-dominant metabolic disorders.

From an *Ayurvedic* standpoint, this combination appears to correct *Agnimandya*, reduce *Kapha-Meda vriddhi*, clear *Srotorodha*, support *Rasayana* effect on endocrine-like glandular tissues and improve *Bala* and *Ojas*

Thus, the formulation can help with management principles of hypothyroidism through *Deepana-Pachana, Lekhana, Rasayana* and *Kapha-Medohara* actions, rather than direct hormone replacement.

Along with medication stated above, *Pathya* (suitable regimen/ food habits and lifestyle that are conducive to health and disease management) and *Apathya* (unsuitable regimen/ food habits and lifestyle that are not conducive to health and disease management) were suggested to the patient, specially focusing on sleeping early at night and avoid day-sleeping.

Table 2: *Pathya Apathya Ahara-Vihara* for *Mandagni* [12]

Pathya	***Apathya***
Dietary regimen (*Ahara*)-	**Dietary Restrictions (*Ahara*)**
Cereals should preferably be consumed only after six months or more of storage because the cereals get lighter to digest with time and newly harvested grains are considered *Guru* (heavy to digest).	Newly harvested grains i.e. *Navanna*, foods prepared from refined flour (*Atta/Maida*), deep-fried items, excessively spicy foods, and heavy or difficult-to-digest meals should be avoided.
After cooking the cereals (rice or pulses), the thin gruel (*Manda*) left behind should be consumed after seasoning it with salt, cumin, and *ghee*, as it does *Agni Deepan*.	Coarse varieties of rice such as *Sarna and Surmathiya,* chickpea *(Chana dal)*, black gram (*Urad dal), Rajma* (kidney beans), chickpeas *(Chole)*, and sprouted grains should not be consumed.
Light diet (*Laghu ahara*): Puffed rice (*lai*), *Murmura (*puffed rice*), Poha,* semolina (*Suji*) may be consumed.	*Paneer*, milk scum *(Khurchan),* and buffalo milk, curd, and *Ghee* should be avoided as they are *Guru* (very heavy to digest). Fresh curd is particularly contraindicated as it is *Abhishyandi* (blocks micro-channels in the body).
Pulses and grains: Green gram (*Moong daal*), pigeon pea (*Arhar daal*), red rice *(Shali chawal)*, and *Pasahar* rice are recommended.	Potato, old radish, elephant foot yam (*Jimikand*), *Suran*, raw onion, raw salads, carrot, and cucumber should be avoided.
Leafy vegetables: *Bathua*, red amaranth, *Chaulai* (amaranth greens), *Neem* leaves, fenugreek (*Methi*), coriander, and similar leafy vegetables should be well cooked with adequate oil before consumption, otherwise it can cause *Vata* imbalance and bloating.	Fruits such as *Jamun*, ripe banana, watermelon, and muskmelon should not be consumed as they can increase *Mandagni Awastha.*
Roots and tubers: Raw radish *(Kacchi Mooli)*, garlic, boiled sweet potato, ginger, and boiled beetroot should be consumed.	Spices: Red chilli and *Atilavana* (excessive salt) intake should be avoided.
Fruits and vegetables: Ash gourd (*Rakhiya*), raw banana, *Amla* (Indian gooseberry), orange, pomegranate, lemon, papaya, star fruit, drumstick (moringa), pointed gourd (*Parwal*), brinjal *(Vartak)*, bottle gourd, ridge gourd *(Taroi*), etc. are beneficial.	Excess sugar, sugar syrups, refined flour *(Maida)*,
Spices: Coriander, cumin, asafoetida (*Hing*), *Ajwain* (carom seeds), black pepper, and fenugreek are recommended for being *Strotoshodhak, Pramathi* and *Agni Deepana).*	

Fats (*Sneha*): Cow's ghee and mustard oil are advised. Other dietary recommendations: Raw Honey, betel leaf, and *Gulkand* may be taken. *Takra* (Buttermilk mixed with rock salt should be consumed). Cow's milk is also recommended. Sunflower seeds, roasted flaxseeds, soaked chia seeds, walnuts, soaked almonds, and eggs may be included in the diet as they are good source of iodine and selenium.	and gram flour *(Besan)* should not be consumed.
Lifestyle regimen (*Pathya Vihara*)- *Shatapavali* i.e. after meals, one should walk at least 100 steps. Daily exercise and *Yogāsanas* should be practiced. *Panchakarma* procedures like *Vamana, Virechana*, and *Swedana* may be administered as per requirement and under expert supervision.	**Lifestyle restrictions *(Apathya Vihara)*** Avoid *Ratrijagarana* (staying awake late at night), *Diwashayana* (sleeping during the daytime), and *Vegadharana* (suppressing natural urges, especially of defecation, urination, and flatus). Avoid eating anything without considering what is *Pathya-Apathya* (wholesome or unwholesome), and refrain from irregular or untimely meals. Do not undertake any medications or *Panchakarma* procedures without consultating a qualified physician. Avoid sleeping, lying down or sitting immediately after meals. Preferably sit in *Vajrasana* if necessary.

ASSESSMENT CRITERIA

Table 3: Showing BT and AT report of Objective parameters (Thyroid profile)

S. No.	Date	BT Report	AT Report
1.	02/12/2025	T_3 – 1.075 ng/dl T_4 – 7.791 µg/dl TSH – 15.001 µIU/ml	-
2.	05/02/2026	-	T_3 – 113.42 ng/dl T_4 – 5.9 µg/dl TSH – 7.41 µIU/ml

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UHID: ODU25260034332
VISIT ID:
PATIENT NAME: [redacted]
AGE/SEX: 31Year/MALE
CONSULTANT: . SELF
SAMPLE BY:MAHAMAYA CLINIC, NEAR WATER TANK BHATAGAON

ORDER DATE: 01/12/2025 07:39 PM
SAMPLE DATE: 01/12/2025 08:23 PM
RESULT DATE: 01/12/2025 11:18 PM
ODU25260034332

DEPARTMENT OF IMMUNO ASSAY

THYROID PROFILE
Specimen No: 2526022413
Specimen Type: SERUM
Method: Electrochemiluminescence immunoassay (ECLIA)

TEST NAME	RESULT	UNIT	REF. RANGE
T3	1.075	ng/ml	0.800-2.000
T4	7.791	ug/dl	5.100-14.100
TSH	**15.001**	uIU/ml	0.270-4.200

Reference Ranges for pregnancy

PREGNANCY	REFERENCE RANGE for TSH in uIU/mL (As per american Thyroid Association)	REFERENCE RANGE for FT4 in ng/dL
1st Trimester	0.100 - 2.500	0.70 - 2.00
2nd Trimester	0.200 - 3.000	0.50 - 1.60
3rd Trimester	0.300 - 3.000	0.50 – 1.60

Note:-
1.TSH levels are subject to circadian variation, reaching peak levels between 2 - 4.a.m. and at a minimum between 6-10 pm. The variation is of the order of 50% . hence time of the day has influence on the measured serum TSH concentrations.
2.Alteration in concentration of Thyroid hormone binding protein can profoundly affect Total T3 and/or Total T4 levels especially in pregnancy and in patients on steroid therapy.
3.Unbound fraction (Free,T4 /Free,T3) of thyroid hormone is biologically active form and correlate more closely with clinical status of the patient than total T4/T3 concentration.
4.Values <0.03 uIU/mL need to be clinically correlated due to presence of a rare TSH variant in some individuals.

DR. PRAVINA KHANDELWAL
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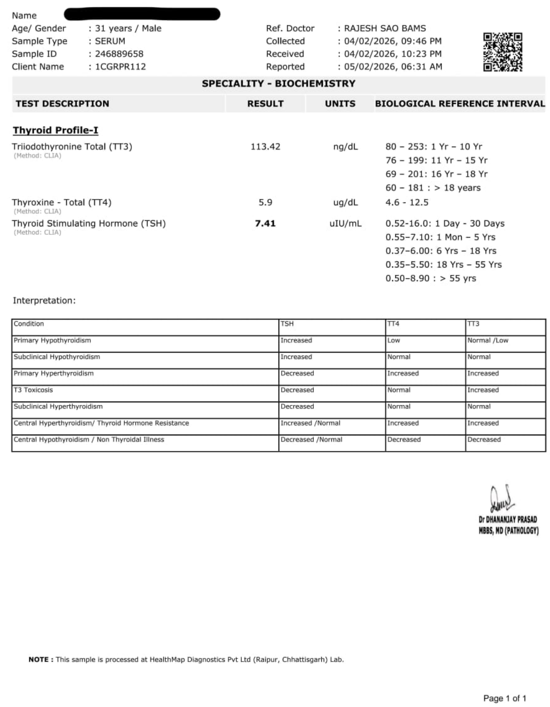


Name [redacted]
Age/ Gender : 31 years / Male
Sample Type : SERUM
Sample ID : 246889658
Client Name : 1CGRPR112

Ref. Doctor : RAJESH SAO BAMS
Collected : 04/02/2026, 09:46 PM
Received : 04/02/2026, 10:23 PM
Reported : 05/02/2026, 06:31 AM

SPECIALITY - BIOCHEMISTRY

TEST DESCRIPTION	RESULT	UNITS	BIOLOGICAL REFERENCE INTERVAL
Thyroid Profile-I			
Triiodothyronine Total (TT3) (Method: CLIA)	113.42	ng/dL	80 – 253: 1 Yr – 10 Yr 76 – 199: 11 Yr – 15 Yr 69 – 201: 16 Yr – 18 Yr 60 – 181 : > 18 years
Thyroxine - Total (TT4) (Method: CLIA)	5.9	ug/dL	4.6 - 12.5
Thyroid Stimulating Hormone (TSH) (Method: CLIA)	**7.41**	uIU/mL	0.52-16.0: 1 Day - 30 Days 0.55–7.10: 1 Mon – 5 Yrs 0.37–6.00: 6 Yrs – 18 Yrs 0.35–5.50: 18 Yrs – 55 Yrs 0.50–8.90 : > 55 yrs

Interpretation:

Condition	TSH	TT4	TT3
Primary Hypothyroidism	Increased	Low	Normal /Low
Subclinical Hypothyroidism	Increased	Normal	Normal
Primary Hyperthyroidism	Decreased	Increased	Increased
T3 Toxicosis	Decreased	Normal	Increased
Subclinical Hyperthyroidism	Decreased	Normal	Normal
Central Hyperthyroidism/ Thyroid Hormone Resistance	Increased /Normal	Increased	Increased
Central Hypothyroidism / Non Thyroidal Illness	Decreased /Normal	Decreased	Decreased

Dr DHANANJAY PRASAD
MBBS, MD (PATHOLOGY)

NOTE : This sample is processed at HealthMap Diagnostics Pvt Ltd (Raipur, Chhattisgarh) Lab.

Page 1 of 1

Image 1- Blood test report (BT)

Image 2- Blood test report (AT)

Table 4: Showing grading of subjective parameter (Each symptom is graded from 0 to 3 based on severity)

Heaviness in abdomen *(Udara-Gaurav)*

Grade	Description
0	No heaviness, feeling of lightness after meals
1	Mild heaviness occasionally, does not interfere with routine
2	Moderate heaviness after meals, uncomfortable
3	Severe persistent heaviness, affects daily activities

Anorexia (*Aruchi*)

Grade	Description
0	Normal appetite
1	Slightly reduced appetite
2	Markedly reduced appetite, eats with effort
3	Complete loss of appetite

Fatigue (*Klama*)

Grade	Description
0	No fatigue
1	Mild fatigue after exertion

2	Moderate fatigue even with routine work
3	Severe fatigue, difficulty performing daily activities

Constipation (*Malavibandha*)

Grade	Description
0	Regular bowel movements, soft stool
1	Occasional difficulty, hard stool
2	Bowel movement once in 2–3 days, hard stool
3	Severe constipation, requires laxatives

Stress (*Chinta/Manasik Tanava*)

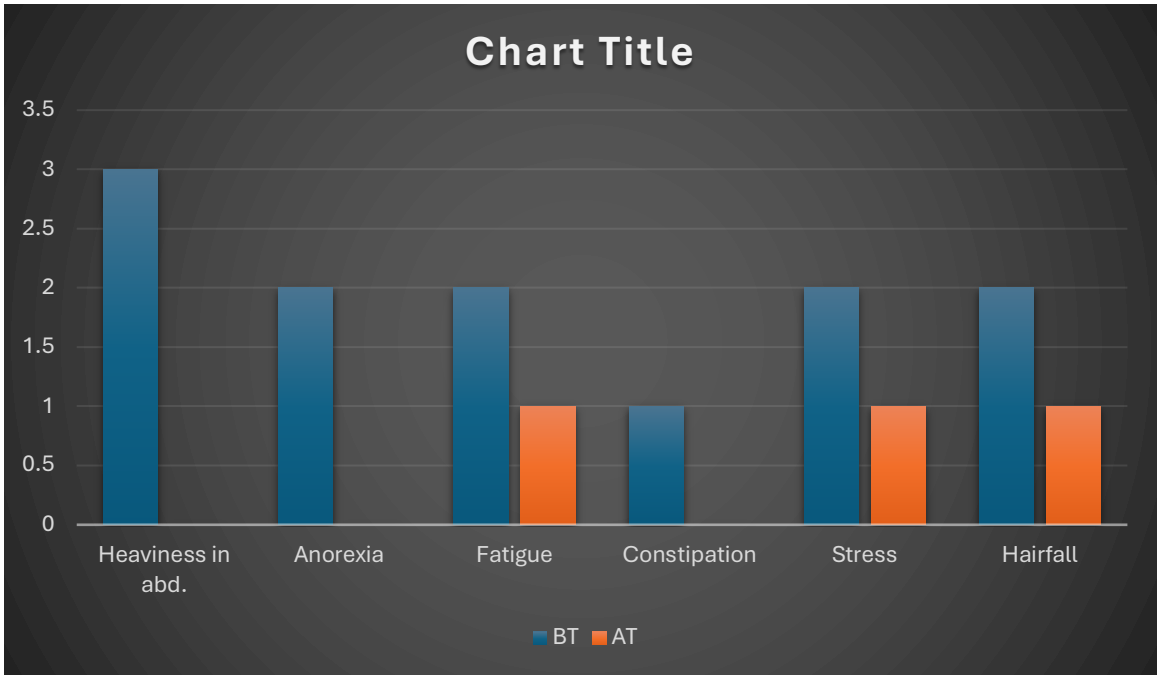
Grade	Description
0	No stress, calm mental state
1	Mild stress, manageable
2	Moderate stress affecting concentration or sleep
3	Severe stress affecting daily life

Hairfall (*Keshapata*)

Grade	Description
0	Normal hair fall (<50 hairs/day)
1	Mild increased hair fall
2	Moderate hair falls with thinning
3	Severe hair falls with visible scalp

Table 4: Showing grading of subjective parameters before and after treatment

Symptoms	**Before treatment**	**After treatment**
Heaviness in abdomen	3	0
Anorexia	2	0
Fatigue	2	1
Constipation	1	0
Stress	2	1
Hair-fall	3	1



DISCUSSION

In classical *Ayurvedic* texts, the concept of exogenous hormone replacement therapy is not mentioned. Instead, physiological balance was understood through the balancing of *Dosha, Agni*, and *Dhatu* equilibrium in the body. Health preservation was emphasized through healthy lifestyle such as *Dincharya* (daily regimen), *Ratricharya* (night regimen), and *Ritucharya* (seasonal regimen), which were designed to maintain systemic homeostasis. *Ahara* (wholesome diet), *Vihara* (appropriate lifestyle practices), *Nidra* (adequate undisturbed sleep), and *Brahmacharya* (regulated conduct and disciplined living) are described as foundational pillars (*Traya-Upasthambha*) supporting the body and sustaining vitality. These principles all together nurture and regulate the *Dwadasha Prana*—the vital functional entities responsible for sustaining life processes throughout life exists.

This case study reflects a preventive (with *Pathya-Apathya* guidelines) and regulatory approach to health that resonates with contemporary scientific perspectives on nutrition-mediated neuroendocrine modulation, circadian rhythm regulation, and gut–brain axis interactions. Rather than targeting isolated biochemical pathways, *Ayurveda* focuses on a systemic strategy aimed at restoring physiological harmony through synchronized diet, behaviour, and environmental adaptation.

CONCLUSION

Following the intervention, a noticeable reduction in serum TSH levels was observed over the study period of two months, also accompanied by marked clinical improvement (symptomatic relief). Although the biochemical parameters had not completely normalized, the patient reported relief in symptomatology. These findings indicate a favourable trend in this individual case and suggest a potential supportive role of *Ayurvedic* intervention in the management of such presentations. However, larger controlled clinical studies are required to establish reproducibility and generalizability in future.

CONFLICT OF INTEREST- None.
SOURCE OF SUPPORT- Nil.

ETHICAL CONSIDERATIONS:

Written informed consent was obtained from the patient. Identity was concealed in accordance to ethical guidelines.

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