

A Silent Thyroid Disorder: A Case Study on Subclinical Hypothyroidism Through Ayurveda

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Abstract

Subclinical hypothyroidism (SCH) is a common endocrine disorder characterized by Normal Thyroxine (T₄), Triiodothyronine (T₃) levels with elevated Thyroid stimulating hormone (TSH) levels. In Ayurveda, its clinical manifestations correlate closely with *Agnimandya*, *Kapha-Vata*, *Medo Dushti* and resembling the condition of *Galaganda* in description. It is quoted as silent disorder as symptoms are not manifested in most cases. The rising incidence and prevalence of SCH in the present era is a growing concern.

This case report presents a 41-year-old female diagnosed with Subclinical Hypothyroidism (SCH) and was managed with *Pachana-Deepana, Koshta Shodana (Virechana)* followed by *Shamaushadis*. Over a period of six months, a marked reduction in serum TSH levels (from 49.46 μ IU/mL to 3.76 μ IU/mL) was observed, along with significant improvement in clinical symptoms and quality of life. While contemporary medicine primarily offers lifelong synthetic hormone replacement, this case demonstrates the potential of Ayurveda to restore functional equilibrium of the thyroid gland.

Keywords: Hypothyroidism, Endocrine, Metabolism, *Galaganda*, *Panchakarma*

Introduction

Subclinical hypothyroidism (SCH) characteristically presents with normal Thyroxine (T₄), Triiodothyronine (T₃) levels and elevated Thyroid stimulating hormone (TSH) levels. Minor fluctuations in T₄ levels result in considerably larger changes in TSH level¹. Although TSH levels exhibit wide variability (0.4 to 5.0 μ IU/ml) across the population, intra-individual variation remains minimal, which is secondary to a unique individual set point within the hypothalamic-pituitary axis for each person².

Various clinical and epidemiological studies conducted across India have shown a prevalence rate varying between 6% and 15%. Moreover, its incidence increases with advanced age, female gender, and greater dietary iodine intake³. The most important implication of SCH is high likelihood of progression to clinical hypothyroidism¹. Observational studies have shown that Subclinical hypothyroidism correlates with an increased risk of fatal and non-fatal coronary artery disease (CAD) events, Congestive heart failure, and fatal Stroke². There are several meta-analysis studies and randomized trials, confirming that SCH and thyroid autoimmunity are strongly associated with preterm deliveries and miscarriages⁴.

The most common cause of SCH is chronic autoimmune thyroiditis (Hashimoto's disease or autoimmune atrophic thyroiditis). Both exogenous and endogenous factors cause SCH. The endogenous factors include sub-acute thyroiditis, and chronic autoimmune thyroiditis, whereas, the exogenous include inadequate therapy with the thyroid replacement, the effect of antithyroid drugs, thyroidectomy, thyroid infiltration,

occupational exposure to pesticides, chronic excessive iodine intake, external radiation, and radioiodine therapy⁵. The most frequent symptoms reported are memory impairment, slow thinking ability, weight gain, muscle cramps, muscle weakness, tiredness, dry skin, feeling colder, hoarseness of voice, puffy eyes, And constipation⁶.

Hypothyroidism can be comprehensively understood in Ayurveda as a *Kapha–Vata* predominant disorder arising from *Agnimandya* and *Ama* accumulation, leading to *Medo-dushti* and *Srotorodha*³. The *Guru guna* of the *kapha dosha* is present in SCH. It also possesses the *Manda*, or dullness, attribute. Reducing *Manda* guna of the *Kapha* dosha should be the primary goal of ayurvedic treatment for thyroid problems like hypothyroidism⁷. The patient was treated with a sequence of treatments including *Deepana-pachana*, *Virechana* followed by *Samsarjana krama* and *Shamaushadis*.

PATIENT INFORMATION

A 41-year-old female patient presented to the OPD of SDM Institute of Ayurveda and Hospital, Bengaluru, on 05/05/2025, with complaints of recurrent pus-filled boils over the body, lethargy, and weight gain for four months. She was admitted the same day for management through *Panchakarma* treatments.

Demographic Details:

Religion	Hindu
Occupation	Software engineer
Socio-economic status	Rich
Marital life	Married

Past Medical History:

Past Medical history	K/C/O SCH for 1 month
Past Surgical history	No surgical history
Family history	No incidence of thyroid disorders in the family
Personal history	Diet-Mixed Appetite: Good Sleep: Sound Micturition: 4 to 5 times/day Bowel: Once daily- Mildly constipated Habits: Tea/Coffee-Twice a day

DASHAVIDHA PAREEKSHA:

<i>Prakriti: Pitta Vata</i>	<i>Vikriti: Kapha vata</i>
<i>Sara: Madhyama</i>	<i>Samhanana: Madhyama</i>
<i>Pramana: Madhyama</i> <i>Weight: 75kg Height: 5.2feet</i>	<i>Satmya: Pravara</i>
<i>Satwa: Pravara</i>	<i>Ahara Shakti:</i> <i>Abhyavarana: Pravara</i> <i>Jarana: Madhyama</i>
<i>Vyayama shakti: Pravara</i>	<i>Vaya: Madhyama - 41years</i>

ASHTASTHANA PAREEKSHA:

<i>Nadi: Vata Pitta</i>	<i>Mala: Constipated</i>
<i>Mutra: 4 times/day</i>	<i>Jihwa: Lipta</i>
<i>Shabdha: Prakruta</i>	<i>Sparsha: Ruksha</i>
<i>Drik: Prakruta</i>	<i>Akruti: Madhyama</i>

SYSTEMIC EXAMINATION:

CVS: S1 S2 heard, No added murmur

CNS: Conscious and oriented to time, place and person

RS: NVBS heard

Skin: Healed hyperpigmented lesions and 2-3 active boils over the gluteal and lower back region.

NIDANA PANCHAKA:

Nidana – Intake of junk foods, oily foods, processed foods added with preservatives

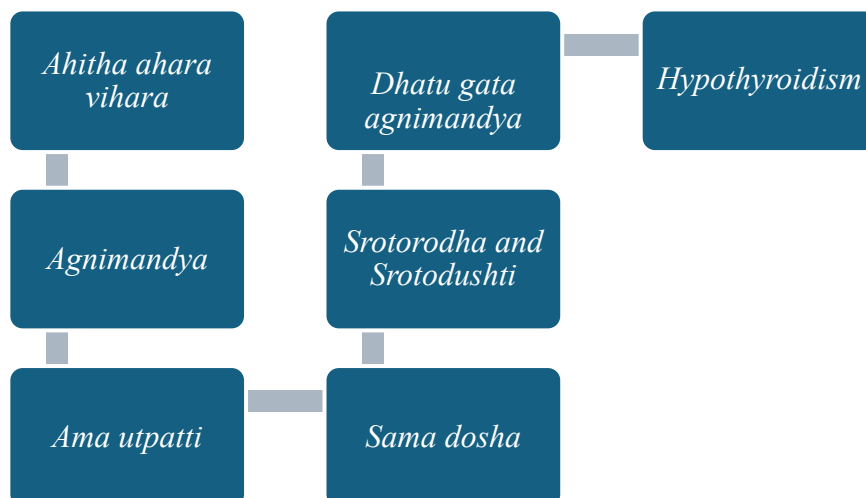
Lack of exercise and sedentary lifestyle

Poorvaroopa - Lethargy

Roopa - Recurrent episodes of pus-filled boils all over the body, Malaise, Lethargy, Weight gain

Upashaya – Avoiding the foods mentioned in *Nidana*, *Aushada*

Samprapti³



Laboratory investigations:

CBC, LFT, RFT, Diabetic profile was within respect to the normal limits.

Anti TPO antibody : Negative

T3	81.25 ng/dL
T4	5.1 ug/dL
TSH	49.46 uIU/ml

Total cholesterol	286mg/dl
Triglycerides	198mg/dl
LDL	208mg/dl
HDL	38mg/dl
VLDL	39.60mg/dl

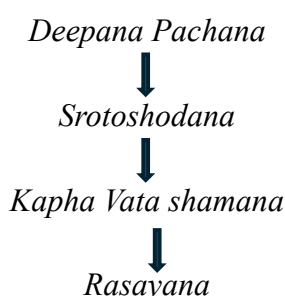
INTERVENTION

Day 1-5	<i>Pachana-deepana</i>	<i>Chitrakadi vati</i> 1-1-1 A/F <i>Agnitundi vati</i> 1-1-1 B/F
	<i>Sarvanga Udwartana</i> followed by <i>Bashpa sweda</i>	<i>Udwartana choorna</i> (SDM pharmacy)
Day 6-10	<i>Snehapana</i>	<i>Patoladi ghrta</i> + <i>Indukanta ghrta</i>
Day 11-13	<i>Sarvanga Abhyanga</i> followed by <i>Bashpa sweda</i>	<i>Triphala taila</i>
Day 14	<i>Virechana</i>	70 grams of <i>Trivrut lehya</i> with 100ml <i>Triphala kashaya</i>
	1 month of <i>Shamanaushadis</i>	<i>Tab.Kanchanara guggulu</i> 1-1-1 A/F <i>Varunadi kashaya</i> 15ml-0-15ml A/F
	3 months of <i>Shamanushadis</i>	<i>Tab Kanchanara guggulu</i> 1-1-1 A/F

RESULTS:

	3/3/2025 (Before <i>Virechana</i>)	10/04/2025 (After <i>Virechana</i>)	7/05/2025 (1 month of <i>Shamanushadi</i>)	14/08/2025 (3 months of <i>Shamanushadi</i>)
TSH (μIU/mL)	49.46	19.30	7.41	3.76
Pus filled boils	Multiple	No	One episode (On intake of junk foods)	One episode
Body weight and BMI(kg/m ²)	75kg 30.8	69kg 28.4	70kg 28.8	68.4kg 28
Lethargy	Present	Lightness of the body	Energetic	Energetic
Mental well- being	Increased stress, reduced clarity of mind	Feels clarity of mind	Reduced feeling of stress	Clarity of mind improved
Constipation	Almost everyday	Easy bowel movement	Easy bowel movement	Easy bowel movement
Quality of life	Hampered	Better	Improved	Significantly improved

DISCUSSION:



Considering the risk factors that SCH can pose in the long run, it is important to treat the condition without delay. The *Chikitsa krama* we adopted was *Pachana Deepana* and *Rukshana* initially, which was aimed to correct the state of *Dhatugata agnimandya* seen in this condition⁸. *Snehapana* with *indukanta ghrta* and

patoladi ghrta was adopted owing to its Pachana deepana nature, which can reduce the srotorodha. This was followed by *Shodana*⁹. It is important to remember that *Vamana* is the best line of treatment as the condition is *Kapha vata* predominant and because the thyroid gland is situated in *Kapha sthana*¹⁰. However, *Virechana* was adopted because the patient had a history of recurrence of boils and the patient was of *Pitta Vata prakruti*. *Virechana* improves metabolic efficiency, reduces inflammation and fat accumulation, and enhances peripheral utilization of thyroid hormones, making it an effective *Shodhana* therapy in SCH. This was followed by *Samsarjana krama* and *Shamanushadis*.

*Kanchanara guggulu*¹¹ is considered as drug of choice for *Granthi vikara* and *Galaganda*. It has *Ruksha*, *Laghu Gunas*, *Kashaya rasa*, *Katu vipaka* but its *Prabhava* is *Gandamalanashana*. It has great ability to dry up the vitiated *Kapha* and *Medha* because of its potent astringent property. Its *Grahi* property helps to remove excess fluid from swollen tissue. Ethanolic and aqueous extracts of the stem bark and root of *Bauhinia variegata* effectively decreases plasma cholesterol, triglyceride, LDL, and VLDL and increases plasma HDL levels. It has a balancing activity on thyroid production, increasing any deficient production and decreasing any excess¹². *Varuṇadi Kaṣaya*¹³ contains *Varuṇa*, *Gokṣura*, *Suṇṭhi*, and *Haritaki*, which act biochemically as metabolic regulators. It enhances basal metabolic rate and mitochondrial ATP production, improves lipid and glucose metabolism, and reduces inflammation and oxidative stress, thereby improving tissue responsiveness in hypothyroidism¹⁴.

The initial laboratory reports of the patient showed a TSH levels of 49.46μIU/mL with normal T3 and T4 levels. The lipid profile of the patient also was raised which is commonly seen in the condition of Hypothyroidism as a result of impaired *Dhatu poshana*. Thyroid function tests and lipid profile repeated at regular intervals showed tremendous improvement. The patients Physical condition improved Significantly. She had no fatigue at all. She was energetic both mentally and physically. Gradual weight loss was noted, the recurrence of boils reduced completely. The treatment was successfully in eliminating all the dilemmas of the patient.

CONCLUSION

Subclinical hypothyroidism represents an early stage of thyroid dysfunction characterized by subtle metabolic derangement without overt clinical features. From an Ayurvedic standpoint, this condition can be correlated with *Agnimandya*, *Kapha* predominance, and *Meda Dhatu Dushti*, where timely *Shodhana* therapy plays a crucial role. The present case study demonstrates the effectiveness of *Virechana Karma* as a *Shodhana* modality in correcting the underlying metabolic imbalance. Administration of *Virechana*, preceded by appropriate *Pachana deepana* and *Snehana*, followed by *Shamanaushadis* over a period of time resulted in significant improvement in clinical symptoms and normalization of thyroid function parameters. *Virechana* likely acted by eliminating vitiated *Doshas*, improving *Dhatvagni*, and restoring metabolic homeostasis, thereby preventing progression to overt hypothyroidism. In everyday practice a good clinician should not neglect the variations in thyroid function parameters as the outcome of such negligence can be severe in the long run.

Although limited to a single case, the findings suggest that *Virechana Karma* may be a safe and effective therapeutic approach in the early management of Subclinical hypothyroidism. This case highlights the importance of early Ayurvedic intervention using *Shodhana* therapy. However, further clinical studies with larger sample sizes are necessary to substantiate these observations and to develop evidence-based Ayurvedic treatment guidelines for subclinical hypothyroidism.

REFERENCES

1. Fatourech V. Subclinical hypothyroidism: an update for primary care physicians. Mayo Clin Proc. 2009;84(1):65-71. Doi: 10.4065/84.1.65. PMID: 19121255; PMCID: PMC2664572.
2. Gosi SKY, Kaur J, Garla VV. Subclinical Hypothyroidism. [Updated 2024 Feb 15]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan. <https://www.ncbi.nlm.nih.gov/books/NBK536970/>
3. Agrawal V, Patil V, Kshirsagar A. A clinical-epidemiological analysis Of subclinical hypothyroidism in a tertiary care health center. Int J Adv
4. Koyyada A, Orsu P: Role of hypothyroidism and associated Pathways in pregnancy and infertility: Clinical insights. Tzu Chi Med. J. 2020; 32: 312.
5. Palakurthi AK, Alam KC. A hospital-based cross-sectional study on subclinical hypothyroidism in females over fifty years of age and its relation to hypertension, diabetes mellitus, and ischemic heart disease at a tertiary care hospital, Hyderabad. Int J Adv Med 2021;8:1060-4.
6. Rajput R, Bajaj S, Kalra P, Menon AS, Pillai MG, Ghosh S, et al. Subclinical hypothyroidism in adults: Consensus statement Of Indian thyroid society. Thyroid Res Pract 2022;19:8-23.
7. Smita Naram, Komal Gawali, Hemang Parekh. Management of Hypothyroidism with Ayurveda A Case Study. J Ayurveda Integr Med Sci 2024;3:267-272.
8. Ranajan M, Rajkala R, Anup BT. Review on Ayurvedic Management Of Hypothyroidism with Critical Analysis. International Journal of Ayurveda and Pharma Research. 2015;3(9):83–88.
9. Vagabhata, Ashtanga Hridaya with the commentaries Sarvangasundara of Arundatta and Ayurveda Rasayana of Hemadri, edited by Pandit Hari Sadasiva Sastri Paradakara Bhisagacarya; Chaukhamba Orientalia, Varanasi, Reprint -2011; Chikitsa Sthana 4/8, p603.
10. Dhote V, More A, Chaudhari N et al. Case Report: Ayurvedic Vamana and Virechana treatment in Hypothyroidism and conception in a woman seeking infertility treatment at an ART clinic [version 1; peer review: 2 approved With reservations] F1000Research 2023, 12:886.
11. Acharya sharangadhara, sharangadhra samhitha, annotated with deepilka commentary by brahmananda tripath, 3rd edition, varanas, chaukambha surabharathi prakashana madhyama khanda 7th chapter, 207pp.
12. Dr. Pavithra G | Dr. Laxmi. B. Kurle "A Critical Review of Kanchanara Guggulu- A Poly Herbal Formulation" Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456- 6470, Volume-6 | Issue-2, February 2022, pp.1275- 1280.
13. Acharya vagbhata, Astanga Hridaya, Sutra Sthana, Shodanadi gana sangrahniam, 15/21-22, edited by prof K.R. Srikanthamurthy, english text, published by choukambha krishnadas academy, varanasi, vol-3, 7th edition 2010
14. Dr. Ankita Jagdish Ballal and 2Dr. Jayashree. Ayurvedic management of hypothyroidism by managing TSH level – A Case report. wjpmr, 2024, 10(11), 195-197