

# Successful Management of Hypothyroidism through Ayurveda: A Case Study

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## Abstract

Hypothyroidism is the major endocrine disorder seen in general population. It is characterized by the deficiency of thyroid hormones to abnormal levels. This condition leads to the reduction in Basal metabolic rate, affects physical and mental growth during infancy or childhood. Its prevalence is 4.6% in the developed world. Modern line of management includes the use of synthetic thyroxine drugs (levothyroxine) or hormone replacement therapy which causes a patient to develop dependency on the drug for life time. Hence a better line of management is the need of this present era which not only helps managing the disease but also not develops dependency. A Hindu, married, 45yr old Female patient visited the outpatient department of the institute, Rishikul, with complaint of k/c/o Hypothyroidism with Sudden Weight gain, hair fall, Anxiety. After administration of Virechana, much better results were seen in just 7 months. During the entire treatment procedure, patient didn't take any allopathic medication.

**Keywords:** Hormone replacement therapy • Hypothyroidism • levothyroxine • Virechana

## Introduction

Thyroid disorders are the most common among all endocrine diseases in India. Hypothyroidism is a progressive disorder of Thyroid gland due to an insufficient amount of thyroid hormone. It is characterized by a broad clinical spectrum ranging from an over state of myxedema, end organ effects and multisystem failure to an asymptomatic or subclinical condition with normal levels of thyroxin and triiodothyronine and mildly elevated levels of serum thyrotropin. The thyroid is an important part of the human endocrine system, which are responsible for regulation of oxygen use, basal metabolic rate, cellular metabolism and growth and development. The thyroid gland secretes thyroxine (T4) and triiodothyronine (T3), which are needed for proper growth and development and which are primarily responsible for determining the basal metabolic rate. The thyroid hormones are transported through the blood and act at the cellular level. Through the activation of genes, thyroid hormones stimulate protein synthesis, promote maturation of nervous system, and increase the rate of cell respiration in tissues, thus elevating the BMR. According to a recent projection from various studies, it has been estimated that about 42 million people in India suffer from thyroid diseases. About 1 to 2% of the adult population is known to suffer from thyroid disorders. Auto immunity plays a significant role in the etiology of hypothyroidism. Every one out of five patients presents with one or other autoimmune disorder. The disease hypothyroidism causes complications like dyslipidemia which is a major risk factor for many serious illnesses. The hypothyroidism itself in its peak can result in life threatening condition. The treatment ties of the hypothyroidism are also having many adverse effects like depression, nervousness and anxiety. So it is the need of time to look for a safe and effective treatment of hypothyroidism in Ayurveda [1-4].

## Case History

A 45-year-old, Female patient visited the Panchkarma OPD of Rishikul

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Campus, U.A.U, Haridwar with complaint Sudden Weight gain, hair fall, Anxiety. She was a known case of Hypothyroidism and was taking allopathic medicine (levothyroid 12.5 mg) for 11 months but not having any relief in above symptoms or thyroid profile. Her diet pattern was Vegetarian and had no family history of hypothyroidism.

## Complaints

Patient complaint of weight gains of 10 kg in past 4 months. Also, she had complaints of hair-fall, mood swings, fatigue and drowsiness.

## Clinical Findings

Clinical findings reveal that she had disturbed TSH levels. Last finding reveal normal levels of Free T3 & T4 but increased levels of TSH (5.79). All other clinical findings were also noted.

B.P: 110/78 mm of Hg

PULSE: 88/min

R/R: 14/min

HEIGHT: 150 cm

WEIGHT: 68 kg

SYSTEMIC EXAM.: Systemic examination reveals no abnormality.

## Diagnosis and assessment

The patient was diagnosed as Hypothyroid on the basis of clinical signs and symptoms as well as laboratory finding All these procedures were done consecutively. After 3 days of Sarvanga Abhyanga (oil application all over body) and Swedana (fomentation), on 4th day, Virechana Karma (therapeutic purgation) was done (after Sarvanga Abhyanga-Swedana). Virechana (therapeutic purgation) was given with Trivrita Avleha. Anupana (substance which are drink with or along the medicine) given was Luke warm water(k-oshna-Jal). Total Vega (number of motions) were 22. After completion of Virechana karma, patient was advised to follow restricted diet-chart (Samsarjana Krama) for a period of 05 days. After that, patient was advised to have normal diet.

A total of 02 Virechana were given to the patient during 06-month period and follow up period was of 1 month. After 7-month period, patient was asked to have laboratory investigation for TSH profile which shows very much satisfactory results as TSH which was previously 5.79 was reduced to its normal range i.e. 3.9. Also, Hair-fall was reduced to a significant extent. HARS was applied for estimation of anxiety before and after Virechana. During the entire course of study, the patient was asked not to take any allopathic medicine.

## Discussion

The concept of Agni (Fire) is very much unique in Ayurveda. Based on these symptoms, Hypothyroidism in Ayurveda it can be considered under a disease arising from malfunctioning of Agni (Fire) or Agnidushti (Malfunctioning of Fire). As said by Acharya Charaka, Jatharagni (Principal Fire) is the reason de etre of life, color, strength, health, enthusiasm, plumpness, complexion, Ojas (Immunity), Tejas (Luster), other varieties of Agni (Fire) and Prana (Life). Extinction of this Jatharagni (Principal Fire) leads to death; its proper maintenance helps a person to live a long life, and its impairment gives rise to diseases<sup>5</sup>. Due to various ill dietary habits and lifestyle modifications, the Agnidushti (Malfunctioning of Fire) occurs and thus there is the formation of Ama (Undigested Food) as described by Acharya Vagbhata. The Sama Dosh (Humors with undigested food) Lakshana (symptoms) include<sup>6</sup>:

1. Obstruction of the channel
2. Loss of strength
3. Feeling of heaviness in the body
4. Inactivity of vata (Air element in our body)
5. Lassitude
6. Loss of digestive power
7. More of expectoration
8. Accumulation of wastes
9. Anorexia
10. Exhaustion

Clinical presentation of hypothyroidism also exhibits same symptoms like lethargy, fatigue, heaviness in the body, sleepiness, loss of appetite.

Acharya Vagbhata considered the treatment of Ama Dosh into 3 categories depending upon the severity of Doshas involved. In case of involvement of Alpa(Less) Doshas, Langhana (Fasting) is advised. In case of Madhyama(moderate) Doshas, Langhana(Fasting) as well as Pachana (proper Digestion) is advised and in case of Bahu Doshas (maximum), Doshavsechan (expulsion of toxins from body) is preferred line of treatment<sup>7</sup>. Doshavsechan (expulsion of toxins from body) is the other term for Samsodhana (Purification Process) i.e. Either Vaman (therapeutic emesis) or Virechana (therapeutic purgation). As in case of Hypothyroidism, there is involvement of Bahu Doshas (Maximum Vitiated Humors) or the Agnidushti (Malfunctioning of Fire) was very much severe, so Doshavsechan (expulsion of toxins from body) in the form of Virechana (therapeutic purgation) was planned. It was planned so as Hypothyroidism is basically a metabolic disorder with disturbed metabolism at cellular level. Virechana works on this condition by correcting the altered metabolism by means of correcting Agni Dushti (Digestive Fire) [5,6].

### Mode of action of virechana karma

Virechana drug possessing the properties Ushna (Hot), Tikshna (Sharp), Sukshma (Minute), Vyavayi (quick absorption) & Vikasi (that causes loosening of bonds); reaches the Hridaya (Heart) by virtue of its veerya (active principles) and then following the dhamni (Major channel), it pervades the whole body through large and small Srotas (Small channels). Due to vyavayi guna of Virechana dravyas, they are quickly absorbed. Vikasi guna causes softening and loosening of the bond by Dhatu-shaithilya karma (Property of loosening bonds). Ushna guna

(Hot property) causes vishyandana (liquefaction) of sanghatha (compact) Doshas(Humors). Tikshna properties of Virechana drugs do chedana (fragmentation) of the Doshas, which are already softened due to oleation therapy. According to Dalhana, this action is due to quick excretion (Doshasravana-Karatvam). Thus liquefied Doshas are dragged towards the Koshtha (Gut). Due to Sukshma property by reaching in micro channels, disintegrates endogenic toxins, which are then excreted through micro channels. Due to dominance of prithvi (Earth) and jala (Water) mahabhootas (elements) in the Virechana drugs and their potent Adhobhagahara Prabhava (active principle that propels Vitiated Humors from body into Gut), the vitiated Doshas are made to pass through anal route and are expelled out of the body<sup>8</sup>.

In modern science while explaining laxatives said that they probably induce limited low grade inflammation in the small and lower bowel to promote accumulation of water and electrolytes and stimulate intestinal motility. From the above view we can say that purgative drugs are mild irritant to the stomach and the intestinal mucosa respectively, to cause inflammation. Due to this, the permeability of the membrane changes and those substances come out due to the changed permeability which cannot come out in normal condition. This medically produced mild inflammation facilitates quick absorption of the active principles (veerya) of the drug in initial stage. Later on, it facilitates the excretion of the morbid matters, which generally are not supposed to be excreted through the mucosa of the gut. It is possible only because inflammation increases the permeability of the capillaries, which in turn allow the absorption, as well as excretion of such substances which are not allowed in the normal condition [7,8].

## Conclusion

Hypothyroidism can be considered as condition which results due to Agni Dushti (Malfunctioning of Digestive Fire). Agnimandya (Low Digestive Fire) is precursor factor of all the diseases resulting in Ama (Undigested food) formation. Symptoms of Ama (Undigested food) and hypothyroidism are almost similar. Treatment of Ama (Undigested food) gives significant result in hypothyroidism.

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