

## “Hypothyroidism” An Ayurvedic Perspective: A Critical Review

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### Abstract

**Purpose:** Thyroid problems are the most common endocrine disorders presently seen worldwide and Hypothyroidism is one of the most common functional disorders of thyroid gland. The prevalence of Hypothyroidism is about 4 – 5 % globally. There is no direct reference of thyroid disorder in Ayurvedic classics. **Methods:** Ayurvedic texts, journals and other research articles were reviewed for establishment of Ayurvedic Nidan panchak and Chikitsa of Hypothyroidism. **Results:** Clinical features comprises of tiredness, weakness, weight gain, loss of appetite, feeling cold, peripheral oedema etc. In Ayurveda the condition has similar pictures with Dhatwagnimandhya, Sthaulya, Shotha, Galganda etc. In this condition Kapha dosha Vriddhi and Pitta Dosha kshaya are seen. While analysing the signs and symptoms of Hypothyroidism in Ayurvedic literature mainly Rasa and Medovaha Srotas Dushti Lakshana is observed. Based on Dosha - Dushya involvement Agnidipana, Kapha – Medahara Chikitsa Shaman and Shodhan principles are usefull in Hypothyroidism. **Conclusion:** The incidence of hypothyroidism is increasing day by day, and there is increasing demand to treat the disease through the Ayurvedic system of medicine. Hence, here is an attempt to get the understanding of disease Hypothyroidism as per Ayurveda through various Ayurvedic principles so as to set its management strategies.

### Keywords :

### Introduction

The Thyroid gland is considered to be one of the most important organs of the endocrine systems. It regulates almost all the body functions including metabolic, cardiovascular, respiratory, digestive, nervous and reproductive system either directly or indirectly. The prevalence of Hypothyroidism in urban India is 12.95%.<sup>(1)</sup> Hypothyroidism refers to insufficient production of thyroid hormone due to various causes. Most significant cause of Hypothyroidism is auto immunity. Hypothyroidism causes complication like dyslipidaemia which is crucial risk factor for many serious illnesses.<sup>(2)</sup> Person having hypothyroidism relying on hormonal replacement throughout his life. Untreated Hypothyroidism increases morbidity and mortality. Hence Hypothyroidism possessing major challenge and need to understand the it in term of Ayurveda Principles and to establish the management through Ayurvedic System of Medicine. On reviewing the clinical presentation from all classical texts, it is found that in Hypothyroidism there is abnormality of Jatharagni (substance responsible for the metabolic transformation) along with Dhatwagni as well as abnormality of Dosha (regulatory factors of the body) mainly Kapha Vata and multiple Srotas (systems) involment. Thus, line of treatment involves Agni Deepana, Aama Pachana, Kapha-Vata Shamana and Srotoshodhana. It is sometimes referred as

'Silent disease' as the symptoms of the symptoms of Hypothyroidism are notorious for their non-specific nature and for the way in which they mimic symptoms of other diseases. So, it often remains undiagnosed or misdiagnosed.<sup>(3)</sup>

### Materials and Methods

This review is carried out with an aim to understand the disease Hypothyroidism in Ayurvedic principles and to establish the management protocol through Ayurveda.

This study is carried out by literature search and data is reviewed critically. The clinical presentation of hypothyroidism was studied from modern pathology textbooks and by searching various online medical research databases like Google Scholar, Pubmed, Ayucare and other national research databases. The study of various Ayurvedic texts were made critically and an effort is made to understand the complete pathogenesis of Hypothyroidism in terms of Dosha, Dushya, Agni and Srotas.

### Observation and Discussion

Ayurveda doesn't emphasize the exact nomenclature of the diseases; rather it insists on the diagnosis of the constitutional status of the diseases as mentioned in Ashtang Hridaya.<sup>(4)</sup>

Based on Ayurvedic principles, the fallowing conditions are corelated with Hypothyroidism according to its clinical presentation.

Clinical presentation of Hypothyroidism according to Dosha and Srotas involvement. [ Table 1]

Clinical presentation <sup>(5)</sup>	Dosha involved <sup>(6)</sup>	Srotas <sup>(7,8)</sup>
Fatigue, loss of energy	Vata, Kapha	Rasavaha
Dry Skin	Vata	Rasavaha
Decreased vision, decreased hearing	Vata	Rasavaha
Increased sensitivity to cold	Vata, Kapha	Rasavaha
Paraesthesia, Nerve entrapment syndrome	Vata	Rasavaha, Medovaha, Majjavaha
Muscle pain, joint pain	Vata	Mansavaha, Asthivaha
Hair loss, coarse, brittle, straw like hair	Vata	Asthivaha
Dull facial expression, depression, mental impairment, forgetfulness, inability to concentrate	Vata	Manovaha
Constipation	Vata	Purishvaha
Menstrual disturbance, impaired fertility.	Vata	Rasavaha, Artavavaha, Shukravaha
Pericardial effusion, abdominal distension, non-pitting edema	Kapha	Rasavaha
Hoarseness of voice	Kapha, Vata	Pranavaha
Weight gain	Kapha	Rasavaha, Medovaha
Decreased appetite	Kapha	Annavaha, Rasavaha
Periorbital puffiness	Kapha	Rasavaha
Goiter (simple or nodular)	Kapha	Rasavaha, mamsavaha, Medovaha

Diagnosis of Hypothyroidism as per Swatantra vyadhi and Partantra vyadhi. [Table 2]

Diagnosis of Hypothyroidism as Swatantra vyadhi (Primary Disorder) <sup>(9,10,11)</sup>	Diagnosis of Hypothyroidism as Partantra vyadhi (Secondary Disorder) <sup>(12,13)</sup>
Galganda	Ajeerna
Kaphavrut vat	Grahanipradosha Kapha and kapha vata
Kaphavrut vyana	Agnimandya
Kaphavrut udana	Krimikostha
Kaphavrut Samana	Pandu
Shotha- Kaphaj/ Kapha-vataj	
Rasapradoshaja vikaras	

**Pathogenesis (Samprapti) of Hypothyroidism as per Ayurved**

1. Hypothyroidism is primarily under activity of Agni. Due to Kapha-Vata Prakopaka, Agnimandya Janaka and Rasapradoshaka nidana sevana and Bijadosha, there is Thridosha dushti leading to Jatharagni mandya which causes Dhatwagni mandya. Manda guna of Kaphadosha is the key property in vikalpsamprapti. Along with this Vata gets involved making it a more or less Vata-Kapha sansarga condition.

The yogavahi property of Vata has strong contribution in this particular Roga Samprapti. Vata aggravates Kaphadushti in Hypothyroidism. Various Srotas like Annavaha, Udakavaha,

Rasavaha, Raktavaha, Mamsavaha, Medovaha, Asthivaha are affected by Sanga type of Srotodushti in this condition. Due to the multiple Srotas involvement, related Dhatu involvement, related Dhatu functions are also impaired. As a result of various Dhatu involvement, these dhatus get compromised leading to both physical and mental features in Hypothyroidism Dosha – Dooshyasammurchana in different Dhatus result in a systemic manifestation of the disease.

2. Hypothyroidism as Swatantra vyadhi: Charakacharya mentioned Galganda as a solitary swelling.<sup>(14)</sup> Whereas in Harit Samhita it is described as the role of dushtambu (contaminated water) and krimidosha (infection) in the precipitation of Galganda.<sup>(15)</sup>

In Ayurveda Galganda is due to vitiation of the Kapha dosha mainly but also of Vata and Meda dhatu.<sup>(16)</sup>

In Charak Samhita, symptoms of Kaphavrut vat, Kaphavrut vyana, Kaphavrut udana, Kaphavrut Samana, Shotha-Kaphaj/ Kapha-vataj, Rasapradoshaja vikaras are correlated with clinical presentation of Hypothyroidism such as Shaitya (Increased sensitivity to cold), Gaurav (Heaviness), Sarv Sandhi Asthi Ruja (Muscle pain, joint pain), Daurbalya (Fatigue, loss of energy), Vanhi Mandya (Decreased appetite), Shotha (Edema) etc.

3. Hypothyroidism as Partantra vyadhi: While diagnosis of Hypothyroidism as Partantra Vyadhi conditions like Ajeerna, Agnimandya, Grahanipradosha Kapha and kapha vata, Agnimandya, Krimikostha and Pandu etc. can be consider.

#### Samprapati factors-

1. Dosha: Vata- Primarily Vyana, Samana, Udana  
Pitta- Primarily Pachak, Sadhaka, Ranjaka  
Kapha- Primarily Kledaka, Sleshaka, Tarpaka
2. Dhatu: all seven but specifically Rasa, Rakta, Meda, Mamsa, Asthi, Shukra
3. Srotasa: Anna, Udaka, Rasa, Rakta, Mamsa, Meda
4. Agni: Dhatvagni esp. Rasa, Rakta, Medovaha, Bhutagni: Parthiva and Jala
5. Aam: Usually Present
6. Updhatu: Raja and Snayu
7. Gunas: Vitiation Snigdha, Manda, Picchila, Guru, Ruksha and Sheeta

#### Principle of Management (Chikitsa)

On the basis of above discussion, the line of treatment with specific target to Agni along with Dhatwagni, Rasavaha, Mamsavaha, Medovaha, Manovaha Srotas as well as Tridosha specifically Vata and Kapha Dosha should be administered in Hypothyroidism.

1. Nidan parivarjana
2. Shamana: Vata Kapha Dosha Shamana
3. Agni Deepan, langhana at the beginning and repeatedly.
4. Dhatugatha Malapachana
5. Shodhana: Strotoshodhana
6. Rasayana
7. Yogasana

**1. Nidan Parivarjana:** This means avoidance of the various causative factors of the disease. It is the first line of treatment of any disease. Hypothyroidism manifests as a result of Kapha-vatavridhi, Agnimandya, formation of Amadosha and Rasa Dhatudushti

## 2. Shamana, Agni Deepan, Dhatugata Malapachana:

#### Single herbs: -

**Kanchnara** (Latin Name - Bauhinia variegata Lin) Kanchnara is considered as a drug of choice for Granthi vikara and Galagand due to its action like kapha-Pittahara External application of Kanchanara bark is done in Gandmala. Fresh bark of Kanchanara is grinded with Tanduodaka (Rice water) and mix with Shunthi and used internally.<sup>(17,18)</sup>

**Shigru:** (Latin Name- Moringa oleifera Lam) Shigru leaf extracts can be used in Hypothyroidism condition to normalize hormone levels<sup>(19)</sup>

**Ashwagandha:** (Latin Name- Withania somnifera Linn) Ashwagandha is an adaptogenic popular herb that has shown incredible results for lowering cortisol and balancing thyroid hormones. It has adaptogens which works well with the hormones of the endocrine system which brings balance to the thyroid hormonal level. It increases the hormones which are secreted by thyroid gland. Ashwagandha is an immunomodulator herb so it is useful in autoimmune thyroid conditions.<sup>(20)</sup>

#### Polyherbal drugs like: -

**Triphala:** It is one of the most popular herbal remedies which cleanse by promoting bowel movement. It is having Deepana, Pachana, Vatanulomana and Strotoshodhana properties. Hence it helps digestion and assimilation. It significantly reduces serum cholesterol and lipid levels (as hypercholesterolemia occurs due to Hypothyroidism).<sup>(21)</sup>

**Trikatu:** Trikatu is having katu Rasa, katu vipaka and ushana virya, ushna, tikshna, laghu, ruksha guna therefore it having properties like Deepan, Pachana and Strotoshodhana along with it pacify the Kapha-Vata. It is commonly used to treat the condition of Mandagni and Aamdosha hence effective in correcting the dysfunction of Agni seen in Hypothyroidism.<sup>(22)</sup>

**Panchkola:** It comprises of five drugs i.e., Pippali, Pippalimula, Chavya, Chitraka and Sunthi. Panchkola is predominantly having ushna, tikshna, laghu, ruksha, katu rasa and vipaka, ushna virya. Panchkola is considered as one of the excellent drugs to treat the condition of Mandagni along with Aamdosha and Kapha-Vata disorders.<sup>(22)</sup>

#### Yogas like:

Kanchanar Guggul, Kaishor Guggul, Triphala Guggul are usefull for treatment of Hypothyroidism

**Triphala Guggul:** It has Deepana, Pachana and Vatanulomana Properties. It relieves Aama and gives strength to Agni.<sup>(23)</sup>

**Kanchnar Guggul:** It is an amazing formulation that helps in maintaining the secretion of thyroid hormones. It also regulates the functioning of the thyroid gland and improves

the conditions. In addition, it enhances the glandular functioning to reduce the swelling caused due to goitre. It has the properties like Agni Deepan, Aam Pachan and Raktaprasadana.<sup>(24)</sup>

**Kaishor Guggul:** It have properties like Dhatwagni deepan, Rasa-Rakta Pachana and Prasadana, Kledghna, Kaphavata shamana, Medoghna, also use in chronic constipation, joint pain, diabetic condition, Anaemia, menstrual related problems. This can be use when Hypothyroidism diagnosed as Partantra vydhi (Secondary disorder).

### Shodhana:

**Vamana-** For Kapha chedana and removing Avarana according to Bala of rugna and disease condition.

**Virechana-** It maintains Pitta- Rakta Shuddhi. It brings Vatanulomana and Srotoshudhi.

**Nasya-** It is good to eliminate sanchita mala from uthamanga in Hypothyroidism. It brings Indriyabala and Manobala.

### Rasayana:<sup>(25)</sup>

Rasayana are to be given after Samyak Shodhana in Hypothyroidism. Rasayana work at Dhatwagni Level correcting Dhatwagni mandya which are seen in Hypothyroidism.

Shilajatu is most commonly used in Hypothyroidism.

### Yogasan:<sup>(26)</sup>

Sarvangasana (Shoulder stand) and Surya Namskar (Sun salutation) are the most suitable and effective asana for the thyroid gland.

### Conclusion:

Hypothyroidism is not described in classical Ayurvedic texts. It is a condition primarily under the activity of Agni. Due to various hetus there is aggravating Kapha-Vata Dosha and diminished Agni at dhatu level. The Various systemic manifestations of the disease are due to Dosha-dushya involment at various Dhatus along with mainly Rasa, Rakta Mansa srotas involment. During the treatment of Hypothyroidism all these pathogenetic factors have to be targeted. So, drugs having Agni along with Dhatwagni Deepana, Pachana, Kapha shamana, Vata anulomana and Srotoshodhana properties seems to be effective in this condition along with Rasayana and proper lifestyle as described in Ayurvedic text.

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