

AN OVERVIEW OF GALGANDA (HYPOTHYROIDISM) & ITS AYURVEDIC
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ABSTRACT

In Indian population, Hypothyroidism is a common prevailing disorder among adults. It is the second most common endocrine disorder. In *Ayurveda*, thyroid gland disorders are correlated with *Galganda*, *Gandmaala* etc. The analysis of the pathogenesis & manifestation of hypothyroidism in the light of *Ayurvedic* principles showed that hypothyroidism occurs due to dysfunction of Agni. Hence, here is an attempt to get the understanding of disease hypothyroidism with *Galganda* with its *Ayurvedic* treatment goals.

KEYWORDS: Hypothyroidism, Endocrine disorder, Thyroid gland, *Galganda*.

INTRODUCTION

Ayurveda is a science of life with sole aim of providing health to the mankind. It can offer new dimensions towards understanding the aetiopathogenesis and successful management of hypothyroidism. As far as the name of disease is concerned, no specific term is found for Hypothyroidism in *Ayurvedic* classics. Though many diseases of current era do not find mention in *Ayurvedic* texts, yet they can be successfully treated due to deep insight provided by the *Ayurvedic* principles. According to *Acharya Charak*, it is not necessary that every disease manifestation must have certain name, but it is more important to understand the possible pathogenesis of the disease in terms of involved factors like *Dosha*, *Dushya* etc. After knowing that, it can be successfully treated.^[1]

Hypothyroidism is a clinical syndrome resulting from deficiency of thyroid hormones due to their insufficient synthesis which in turn results in a generalized slowing down of metabolic processes.^[2] It is characterized by a broad clinical spectrum ranging from an asymptomatic or subclinical condition with normal levels of thyroxine (T4) and triiodothyronine (T3) and mildly elevated levels of serum TSH to an overt state of myxedema, end-organ effects and multi-system failure.^[3,4,5,6]

Correlation of Thyroxine and Agni

The principal function of Thyroxine is to stimulate basal rate of metabolism. Thyroxine acts as a catalyst for the maintenance of cellular oxidative processes throughout

the body. Hence, it has profound influence on tissue metabolism all over the body. These functions have striking similarity with the description of *Agni* in *Ayurveda*. Like Thyroxine, all the metabolic processes of the body are under the control of *Jatharagni*, and *Dhatvagni* as per *Ayurveda*.^[7] *Jatharagni* contributes parts of itself to *Dhatu*. Moieties of *Jatharagni* present in *Dhatu*(*Dhatvagni*) when hyperactive leads to wasting and when hypoactive leads to hypertrophy of *Dhatu*.^[8] These points, perhaps, can be illustrated with hyper and hypo-metabolism associated with hyper and hypo functioning of thyroid gland.

Sign & Symptoms of Hypothyroidism

Weight gain, tiredness & easy fatigability, swelling over face, hands & feet, menstrual irregularities, cold intolerance & dry rough skin, thin brittle hair & hair fall, muscle stiffness & pain, weakness in the extremities, constipation, decreased appetite, mood disturbances, forgetfulness, inability to concentrate, goitre, hoarseness of voice are major presentations of Hypothyroidism. In due course of time, untreated hypothyroidism may lead to no. of health problems such as obesity, arthritis, heart disease, infertility etc.^[9]

Hypothyroidism – Ayurvedic overview

The analysis of the symptomatology of hypothyroidism in the light of *Ayurvedic* principles showed that the pathogenesis and manifestations of hypothyroidism occurs due to dysfunction of *Agni*. It all starts with improper diet (heavy, cold, sweet and saturated fat

containing food items) and sedentary lifestyle (lack of physical activity, sleeping after meals, sleeping during day time) which is nowadays very common. It leads to aggravation of *Kapha*. The increased amount of *kapha* impairs the *Jatharagni* with the formation of *Aamdosha*. As *Dhatvagni* depends on *Jatharagni Bala*, so impairment of *Dhatvagni* takes place in due course of time. The effect of hypothyroidism is alteration in metabolic activity which, according to *Ayurveda*, is vitiation of *Dhatvagni*. This *Dhatvagni* vitiation causes improper formation of *Sapta Dhatu* starting from *Rasa* to *Shukra*.^[10] It leads to improper nourishment to the body leading to symptoms of hypothyroidism along with swelling in neck described as '*Galganda*' in *Ayurvedic* texts.^[11] Thus, a chain of pathological events is started followed with complications like obesity and infertility. A critical conceptual analysis of hypothyroidism with reference to *Ayurvedic* principles of metabolism shows *Agnimandya* (*Dhatvagnimandya*), *Aam Doṣa*, *Kapha Prakopa* and *Rasa Dhatu Duṣṭi* as prominent pathological features in this condition.

Dhatvagnimandya (esp. *Rasa dhatvagnimandya*) leads to *Sama Rasa Vridhi* and over production of *mala* of *Rasadhatu* i.e. *Mala rupa KaphaVridhi*. Majority of the *Nanatmaja Roga* of *Kapha Dosh*^[12] can be included as signs and symptoms of Hypothyroidism i.e. *Tandra* (Drowsiness), *Atinidra* (Excessive sleep), *Staimitya* (Timidness), *Gurgatrata* (feeling of Heaviness), *Aalasya* (Laziness), *Balasaka* (Loss of strength), *Apachana* (Indigestion), *Hridayolepa* (feeling of heaviness over chest), *Galganda* (Goitre), *Atisthoulya* (Obesity), *Svetavbhasta* (Pallor). Many of *Rasaja Vikara*, which have been mentioned by *Acharya Charak*^[13] are similar to the clinical features of Hypothyroidism i.e. *Asradhdha* (Loss of desire for food), *Aruchi* (Anorexia), *Gaurava* (feeling of Heaviness), *Tandra* (Drowsiness), *Angamarda* (Malaise), *Panduroga* (Anemia), *Klaibya* (Impotency), *Srotorodha* (Obstruction of microcirculatory channels), *Agnimandya* (hypometabolic state) etc.

MANAGEMENT

Keeping in consideration the *Doshas & Dhatus*, concept of *Agni-Mandyata*, *Srotovoradha*, we can manage the symptoms of hypothyroidism with an effective *Ayurvedic* management.

- ✓ **Sodhana** (*Panchkarma* therapy/purification) particularly *Vamana* is indicated. *Acharya Susurta*, advised decoction of *Pippalayadi Gana Dravyas* along with *Panch Lavana* for the purification purposes. He also mentioned *Shiro- Virechna & Virechnic Dhoompaana* for the said purpose.^[14]
- ✓ **Raktamokshana** (Bloodletting) *Acharya Susurta* mentioned *Ansh Sandhi Siravedh karma* for *Raktmokshana* purpose.^[14]
- ✓ **Samana Chikitsa** is then important after completing *Sodhana* therapies.
- ✓ **Pathya-Apathya** *Parval, Makoi Shhak, Neem Leaves Shaak, Puran Shaali, Jaangal & Vishikar Prani*

Mansa should be taken as *Pathya*.^[14] Whereas the food which vitiates the *Kapha Doshas* likes *Guru, Snigdha, Sheeta Annapaana* etc should be avoided.

- ✓ Use of *Purana Ghrita/Langhana*(fasting)/*Pragharshana* (Rubbing with *Kalka/Churnas*) /*Kawal* etc. should be done on regular basis.^[14]
- ✓ *Trikatu Churna* with honey, *Yava* dipped with *Gomutra* or intake of *Gomutra, Mung Yusha*(soup) processed with *Neem-Patr Swarasa*(juice) along with regular use of *Yava* as a dietary recommendation is strongly recommended by *Acharyas*.^[14]
- ✓ **Ayurvedic formulations** like *Arogyavardhini Vati, Kshar Gutika Chitrikadi Vati, Shilajitwadi Vati, Agnikumar Rasa, Ras-parpati, Nityanand Rasa, Kanchnar Gugglu, Triyodashang Gugglu, Medohar Gugglu, Gandiraristha, Punarnavdiristha, Phalatrikaristha, Ashthsatharistha, Dashmool Kwath, Punarnavadi Kwath, Trinpanchmool Kwath, Rasnadi Kwath, Pippaliadi Kwath etc.*, are few *Ayurvedic* formulations, mentioned in different Classics at different places are effective at various levels in Hypothyroidism.
- ✓ **Rasayanas** *Vardhaman Pippali Rasayana, Chawanprash, Brahm Rasayana, Shilajit Rasayana, Bhallataka Rasayana.*

✓ Dietary And Life-Style Modifications

- Iodine rich foods such as fish, sea foods, beetroot, kelp, parsley, oatmeal etc. should be taken.
- Avoid Goitrogenic foods such as cabbage, cauliflower, broccoli, turnips, soybean products, peaches, pears, sweet potatoes, mustard, maize, cassava etc.^[15] Also minimize intake of Caffeine drinks like coffee, cola and Smoking.^[16] Diet should be high in fiber and low in calorie. Salt intake should be kept at a minimum.
- Heavy, fried food and high sugar diet should be avoided.
- Coconut oil which contains medium chain fatty acids is good in improving sluggish metabolism.
- Sedentary life style should be avoided. Patient should increase his physical activities.
- Aerobic exercises should be done regularly (increases tissue sensitivity to thyroid hormone and stimulates thyroid gland secretion).^[17]
- Physical and emotional stress should be reduced.

✓ Yoga And Pranayama^[18]

- **Yoga:** *Sarvangasana* is the most suitable and effective *asana* for the Thyroid Gland disorders. *Matsyasana, Halasana, Suryanamaskara* and *Suptavajrasana* are also found to be helpful in Hypothyroidism. In these yogic exercises an enormous pressure is placed on the gland that may lead to beneficial effects by improving circulation to the gland.

- **Pranayama:** The most effective *Pranayama* for thyroid problems is “*Ujjayi*”. It acts on the throat area as relaxing and stimulating effect.
- **Anuloma-Viloma** and **Kapalbhati**.
- *Pranayama* is useful in increasing the metabolic rate of the body.

CONCLUSION

Hypothyroidism is a clinical syndrome resulting from deficiency of thyroid hormones due to their insufficient synthesis which in turn results in a generalized slowing down of metabolic processes. As per *Ayurvedic* principles, Hypothyroidism occurs due to *Jatharagni mandhya & Dhatvagni Mandya* along with *Kapha Prakopa*. Increasing the quantum and quality of *Agni* is the mainstay of treatment so drugs having *Deepana, Pachana, Lekhana, Kaphashamaka* properties seems to be effective in this condition along with dietary rules and proper lifestyle. Thus a multifactorial and holistic approach is required in successfully managing the condition of hypothyroidism i.e., diet, drugs and yogic exercises all in combination helps in normalizing the thyroid function in hypothyroidism.

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