

ROLE OF AGNI IN HYPOTHYROIDISM

DR. JAYSHRI NAMDEO TAYADE

ASSISTANT PROFESSOR, DEPT. RACHANA SHARIR

DR. D. Y. PATIL COLLEGE OF AYURVED & RESEARCH CENTRE,
PIMPRI, PUNE

Abstract : *Ayurved* is a science of life with sole aim of providing health to mankind. It can offer new dimensions towards understanding aetiopathogenesis of different diseases.

In Indian population, Hypothyroidism is a common prevailing disorder among adults. It is the second most common endocrine disorder. As far as name of disease is concerned, no specific term is found for hypothyroidism in *Ayurved* classics. According to our *Ayurveda Acharya*, it is not necessary that every disease/manifestation must have certain name. In *Ayurveda*, Thyroid gland disorders are correlated with *Galaganda*, *Gandamala*, etc. But it is more important to understand the possible pathogenesis of such disease in terms of involved factors like *Dosha*, *Dushya*, *Agnidushti*, etc. After knowing the possible pathogenesis in a particular disease, it can be successfully treated. In hypothyroidism, there is low metabolism due to less production of Thyroid hormone. It can be compared with *Mandagni*. The analysis of pathogenesis and manifestation of hypothyroidism in the light of Ayurvedic principles showed that Hypothyroidism occurs due to dysfunction of *Agni*. Hence, here is the aim to understand the role of *Agni* in Hypothyroidism.

Introduction:- *Agni* represents (digestive/metabolic) biological fire in body. The Ingested food is to be digested (absorbed/assimilated) which is unavoidable for maintenance of life by *Agni*. Majority of health disorders are outcome of improper functioning of *Agni*. Any disturbance to digestion process due to *Agni Dushti*, either *Mandagni* or *Atyagni*, is causative factor for all diseases. Hampered digestion process leads to formation of *dushta aahar rasa* due to which malformation of subsequent *dhatu*s happens. This is often accompanied with *Jatharagnimandya*. First *dhatu* formed due to *dushta aahar rasa* is *Ama Rasa Dhatu*. From *Ama Rasa Dhatu*, all other *dhatu*s get affected due to drastic change in dietary habits and lifestyle of individual. According to modern science, metabolic disorders occur when abnormal chemical reactions in our body disrupt metabolic process. Diabetes, hypothyroidism, hyperthyroidism etc. are some of the metabolic disorders. Among them, Hypothyroidism is a clinical syndrome resulting from deficiency of thyroid hormone which

in turn results in generalised slowing down of metabolic process. As per ayurvedic principals, hypothyroidism occurs due to *Jatharagni mandya* and *Dhatavagnimandya* along with *kapha prakopa*. It is the objective of this study the role of AGNI in Hypothyroidism.

AIM AND OBJECTIVE

1. To review the available literature in Ayurvedic

text and correlation with modern literature on Hypothyroidism

2. To review *Dhatvagni mandya* and *Dhatu pradoshaja vikar* in the context of Hypothyroidism.

3. To review the management of Hypothyroidism

Materials And Methods:

This study is carried out by literature search and critical review of obtained facts. The study of various ayurvedic texts were made critically and an effort is made to understand the complete pathogenesis of hypothyroidism in terms of *Agni*.

AGNI

Term Agni is used for the digestive fire which plays a most important role in the digestion of food and the formation of metabolic products. According to Charaka Samhita (1), Agni is nothing but the Pitta in the body that produces wholesome or unwholesome effects in vitiated and unvitiated states respectively. It is responsible for digestion-indigestion, Vision-non vision, proper degree of temperature otherwise heats, normal-abnormal complexion, power-fear, anger- exhilaration, confusion and clarity, and other such duals. Importance of DEHA-AGNI (2)

आयुर्वर्णो बलं स्त्रास्यमुत्साहोपचयौ प्रभा ओजस्तेजोऽग्नयः प्राणाश्चोक्ता

देहाग्नहेतुकाः॥३॥

Dehagni is responsible for longevity, glowing healthyskin, good body strength and health, excitement in life, well growth, good radiancy, great ojas, normal body temperature, and managing various other forms of Agni. Even the very existence of a person is said to be of Dehagni.

शान्तेऽग्नौ गियते, युक्ते ग्वरं जीर्त्यनामयः रोगी स्यागिकृते,

मूलमग्नस्तस्माग्नरुच्यते॥४॥

When the Agni in the body subsides, it causes death and when it functions normally it provides health and longevity to the body. If the Agni is vitiated, then the person may suffer from various ailments therefore the Agni is said to be the foundation of a long health living. Body tissues are nourished by the food which promotes ojas, strength, radiance, etc only when the Agni is present. When there is improper or poor digestion, normal body tissues like rasa can neither be formed nor nourished.

Correlation of Thyroxine to Agni : Principal function of Thyroxine is to stimulate basal rate of metabolism. Thyroxine acts as a catalyst for 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 description of *Agni* in Ayurveda. Like Thyroxine, all the metabolic processes of the body are under the control of *Jatharagni* and *Dhatavagni* as per Ayurveda. *Jatharagni* contributes part of itself to *Dhatu*. Moieties of *Jatharagni* present in *Dhatu* (*Dhatavagni*) when get hyperactive leads to wasting and when hypoactive leads to hypertrophy of *Dhatu*. These points, perhaps, can be illustrated with hyper and hypo- metabolism associated with containing food items. Sedentary lifestyle, sleeping after meals, sleeping during day time leads to aggravation of *kapha*.

Increased amount of *kapha* impairs the *jatharagni* with the formation of *Aamdosha*. As *Dhatavagni* depends on *Jatharagni Bala*, so impairment of *Dhatavagni* takes place in due course of time. The effect of hypothyroidism is alteration of metabolic activity. This, according to *Ayurveda*, is vitiation of *Dhatvagni*. *Dhatvagni* vitiation causes improper formation of *sapta dhatu* starting from *RASA* to *SHUKRA*.

It leads to improper nourishment of the body leading to symptoms of hypothyroidism along with swelling in neck described as *Galganda* in ayurvedic text.

A critical conceptual analysis of hypothyroidism with respective to Ayurvedic principles of metabolism shows *Agnimandya* (*Dhatavagni Mandya*), *Aam dosha*, *Kapha prakopa*, *Rasa Dhatu dushti*.

Dhatvagnimandya leads to *Sama Rasa Vridhi* & over-production of *mala* of *Rasadhatu* that is *mala rupa kapha vridhi*. Majority of *Namatmaja Roga* of *Kapha Dosha* can be included as sign and symptoms of hypothyroidism. These are as follows –

- *Tantra* (Drowsiness)
- *Atinidia* (Excessive sleep)
- *Staimitya* (Timidness)
- *Gurugatrata* (Feeling of heaviness)
- *Aalasya* (Laziness)
- *Balasaka* (Loss of strength)
- *Apachana* (Indigestion)
- *Hridayolepa* – (Feeling of heaviness over chest)
- *Atisthouya* (Obesity),
- *Svetaavabhasata* (Pallor)

Many *Rasaj vikara* which are similar to clinical features of hypothyroidism that is *Aruchi* (Anorexia), *Gaurava* (feeling of heaviness), *Tandra* (Drowsiness), *Angamarda* (malaise), *Panduroga* (Anaemia), *Klaibya* (impotency), *Strotorodha* (obstruction of microcirculatory channels), *Agnimandya* (hypometabolic state), etc.

Etiology / *Nidana*:

Hypothyroidism caused by inadequate functioning of thyroid gland is called primary hypothyroidism. Not getting enough stimulation by thyroid stimulating hormones is called secondary hypothyroidism. As far as *Ayurvedic Nidana* is concerned, etiological factors related to *Kapha vata prakopa*, *Agnimandya janaka* and *Rasapradoshaka Nidan* may be responsible for genesis of hypothyroidism.

PATHOGENESIS / SAMRAPTI:

In Ayurveda we can consider these two pathologies in following ways:

- 1) *Dhatukshaya janya (Beejadosha Janita)*: Due to *Apathya Nidan sevana* and also *Bijadosha*, there is *Tridosha Dushti* leading to *Uttarrotar dhatu vikruti*, ultimately causing *oja vikruti*. This *vikrita ojas* affects the *Vyadhi kshamatva* of the body, attacking the thyroid gland and autoimmune condition develops. Thus, it is a *Kapha pitta samsarga* condition.
- 2) *Avarana Janya*:

Functions of Thyroid hormone are similar to functions of *Agni (Jathargni, Dhatvagni and Bhootagni)* in our body, causing transformations/tissue metabolism at various levels

and thus maintaining the BMR (Basal Metabolism Rate). *Agni mandya* at any level due to *kaphakara nidana* results in increased *Dhatugat malasanchaya*, resulting in *strotorodha* causing compromised *Dhatu saras* which ultimately results in sign and symptoms which correlates to hypothyroidism. *Vata* acts as *yogvahi* in aggravating the *kapha dushti*. Thus, it is *Vata kapha samsarga* condition.

SAMRAPTI GHATAKAS:

Dosha – Vata, Kapha

Dushya – Rasa, Rakta, Mansa, Meda, Asthi, Shukra

Agni – Jatharagnimandya, Dhatavagnimandya

Clinical Presentation / *Roopa*:

As discussed above, hypothyroidism results in slowing down of metabolic process. As due to reduced power of *agni*, digestion process is hampered and there is formation of *dushta aahar rasa* which results into malformation of subsequent *dhatu*s.

Clinical symptoms of thyroid disorder can be correlated to *rasadi dhatu dushtijanya vikaar*

<i>Rasa</i>	<i>Rakta</i>	<i>Mansa</i>	<i>Meda</i>
1. Anorexia 2. Loss of appetite 3. Anaemia 4. Weight gain 5. Heaviness 6. Lethargy 7. Menstrual disorders 8. Infertility	1. Pimples 2. Blue moles 3. Dry skin 4. Vyanga 5. Tilkalak (black mole) 6. Menorrhagia	1. Muscle ache 2. Puffiness of face 3. Goitre	1. Tiredness 2. <i>Prameha</i>
<i>Asthi</i>	<i>Majja</i>	<i>Shukra</i>	
1. Morbidity of head, nail & beard	1. Pain in Joints 2. Giddiness	1. Impotency	

Conclusion:

Hypothyroidism is clinical syndrome resulting from deficiency of thyroid hormones due to their insufficient synthesis which in turn results in generalised slowing down of metabolic processes.

As per ayurvedic principals, hypothyroidism occurs due to *Jatharagni mandya* and *Dhatavagnimandya* along with *kapha prakopa*. If specific etiological factors are known, increasing the quantum and quality of **AGNI** is mainstay of treatment so drugs having *Deepana*, *pachana* and *lekhana* seems to be effective in this condition along with dietary rules and proper lifest

References:

- 1) Caraka Samhita of Agnivesa revised by Caraka and Dridhabala with Vidyotini Hindi commentary by Pandit Kashinath Shastri Dr. Gorakhnath Chaturvedi, Publisher Chaukhamba Bharti Academy, Reprint-2009, Sutrasthana, Adhyaya 12/11, page no 251
- 2) Caraka Samhita of Agnivesa of Chakrapanidatta with Vidyotini Hindi Commentary by Pandit Kashinath Shastri Part-2, Published by Chaukhamba Sanskrita sansthan, Edition: reprint 2012, Adhyaya 15/3
- 3) Caraka Samhita of Agnivesa of Chakrapanidatta with Vidyotini Hindi Commentary by Pandit Kashinath Shastri Part-2, Published by Chaukhamba Sanskrita sansthan, Edition: reprint 2012, Adhyaya 15/4
- 4) Caraka Samhita of Agnivesa of Chakrapanidatta with Vidyotini Hindi Commentary by Pandit Kashinath Shastri Part-2, Published by Chaukhamba Sanskrita Sansthan, Edition: reprint 2012, Adhyaya 15/9,10,11
- 5) Ashtanga Hridayam of Shrimada Vagbhatta by Brahmananda Tripathi, Published by Chaukhamba Sanskrita pratishtahana, Reprinted in 2012, Adhyaya 13/25
- 6) Caraka Samhita of Agnivesa of Chakrapanidatta with Vidyotini Hindi Commentary by Pandit Kashinath Shastri Part-1, Published by Chaukhamba Sanskrita Sansthan, Edition: reprint 2007, Adhyaya 9 to 18

7) Essentials of Medical PHARMACOLOGY seventh edition by KD TRIPATHI Published by JAYPEE BROTHERS MEDICAL PUBLISHER'S (P) LTD Reprint year

2014, Chapter no 18 Thyroid Hormones and Thyroid inhibitors, Page no 249 -250.

8) API Textbook of medicine, ninth edition Editor in Chief Yash pal Manjula, Published by the association of physicians of india, Reprint-2012, Chapter no 6, Disorder of thyroid gland, page no 425

9) Caraka Samhita of Agnivesa of Chakrapanidatta with Vidyotini Hindi Commentary by Pandit Kashinath Shastri Part-1, Published by Chaukhamba Sanskrita Sansthan, Edition: reprint 2007, Adhyaya 28 /33

10) Caraka Samhita of Agnivesa of Chakrapanidatta with Vidyotini Hindi Commentary by Pandit Kashinath Shastri Part-1, Published by Chaukhamba Sanskrita Sansthan, Edition: reprint 2007, Adhyaya 28 /25-28

11) Bhaishajaya Ratnavali of Govinda Dasji Bhisagratna Commented upon by Vaidya Shri Ambika Datta Shastri English Translation by Dr. Kanjiv Lochan Volume -1 edited and enlarged by Bhisagratna Shri Brahmashankar Mishra chapter no 10 Mandagni (Dyspepsia)

12) A textbook of Swastha avritta by Prof. Subhash Ranade published by chaukhamba Sanskrit Pratisthan Delhi

13) Harrison's principles of internal medicine twentieth edition editors J. Larry Jameson, Dennis L. kasper, Dan L.Longo, Anthony S Fauci, Stephen L. Hauser, Joseph Lenvescalzo, Published by Palatino by Cenveo Publisher services, Chapter no 375, Thyroid Gland Physiology and the testing page no 2696.

14) Sharirkriyavidnyan, Part 1st, by Dr.Subhash Ranade, Pro.Dr. Swati Chobhe, Profishant publishing, edited 2013, 19th chapter-Agni, p. 289.

15) Chobhe Swati K, Thyroid Disorder from Ayurvedic Perspective. PDEAS International Journal of Research in Ayurved and Allied Sciences, 1(1); April 2018, pg.34-40.