



Journal of Ayurveda and Integrated Medical Sciences

www.jaims.in

Indexed

An International Journal for Researches in Ayurveda and Allied Sciences





REVIEW ARTICLE

June 2022

Understanding of Primary Hypothyroidism Induced Obesity through Ayurveda

Mukta¹, Madhusudhan Kulkarni², S. G. Chavana³

¹Post Graduate Scholar, Department of Kayachikitsa, Ayurveda Mahavidyalaya & Hospital, Hubbali, Karnataka, India. ²Assistant Professor, Department of Kayachikitsa, Ayurveda Mahavidyalaya & Hospital, Hubbali, Karnataka, India. ³Professor, Department of Kayachikitsa, Ayurveda Mahavidyalaya & Hospital, Hubbali, Karnataka, India.

ABSTRACT

Ayurveda known as Mother of all healing, places a great emphasis on prevention and encourages the maintenance of health through proper attention to balance in one's life, diet, lifestyle and use of herbs. Ayurveda has been practiced since ancient time in the form of eight major clinical specialties. Ayurveda gives important to metabolic disorders as it's says all Vyadhis are produced due to Agnimandya. In present days incidents of Thyroid hormone dysfunction drastically increased leading to obesity. According to common perception, Hypothyroidism is held responsible for obesity. As Hypothyroidism is associated with modest weight gain. In novel view indicates that change in thyroid stimulating hormone (TSH) could be secondary to obesity. As a contemporary science available is hormone replacement therapy which only decreases or increases Thyroid hormone. But according to Ayurveda we don't just normalize Hypo and Hyper secretion of Thyroid hormone, but treat the abnormal secretion of Thyroid gland.

Key words: Vyadhi, Agnimandya, Ayurveda, Hypothyroidism, Obesity

INTRODUCTION

Everybody constituents have specific proportions and specific function in the body. They will perform their functions only in their optimal levels. The normal level is maintained by controlling the metabolism. The metabolism is normally regulated by a well-developed controlling system functioning in the healthy body. Healthy state is maintained by keeping the equilibrium of various constituents of the body. Any abnormalities in the controlling system will lead to abnormalities in

Address for correspondence:

Dr. Mukta

Post Graduate Scholar, Department of Kayachikitsa, Ayurveda Mahavidyalaya & Hospital, Hubbali, Karnataka, India. E-mail: muktakallandan@gmail.com

Accepted Date: 13/05/2022 Submission Date: 02/04/2022



this equilibrium and thus leads to various diseases; Most of the metabolic disorders are the burden of lifestyle disorders is rapidly increasing worldwide. Modernization, affluence technological development leads to still more sedentary life style. By exposing oneself to all these factors human beings unknowingly invited a number of disease, in this category Hypothyroidism and Obesity also fits.

Obesity and hypothyroidism are two common clinical conditions that have been linked together. To the hypothyroidism common perception is held responsible for obesity. Hypothyroidism is associated with modest weight gain, Thyroid hormones are important determinants of energy expenditure, and adipose tissue affects thyroid hormone homeostasis via leptin signaling. By moderate weight loss is sufficient to affect thyroid hormone homeostasis and inhibit its peripheral conversion.^[1]

Where the obesity is one of the symptoms which is comes under the Hypothyroidism by this can clearly say that obesity can consider as a symptoms and also it is an Independent disease. Hypothyroidism is associated

ISSN: 2456-3110

with weight gain, decreased metabolic rate and thermogenesis. The hormone produced by the thyroid gland helps in regulation of metabolism in the body. Whenever the levels of T_4 fall and the level of TSH raises, results in primary hypothyroidism.^[2] It is estimated that prevalence is more than 1.5 billion in more than 110 countries. The global goiter prevalence is more than 40 million (400lakh) in India with ratio of 6 : 1, female and males respectively.^[3]

In Ayurveda there is no direct correlation regarding Hypothyroidism induced Obesity but on the basis of its clinical presentation it can be correlated with different entities as symptoms or as a disease, so it is difficult to give a single Ayurvedic term as there are many systems are involved in the pathogenesis of Primary Hypothyroidism Induced Obesity. Hence, can be correlate with Rasapradoshaja Vikara,[4] Astanindita Purusha,^[5] Galaganda,^[6] Kaphavruddhi Lakshana.^[7] As the cardinal symptoms of Primary hypothyroidism are weight gain, fatigue, cold intolerance, hoarseness of voice, Dryness of skin, Hair fall, Pallor, Muscle aches and puffiness of face, weakness, lethargy, Menstrual Distributions.^{[8],[9]} In present article Primary Hypothyroidism induced Obesity can be correlated to Rasapradhosaja Vikara.

Nidana Panchaka in Primary Hypothyroidism Induced Obesity

Nidana

Nidana Parivarjana or discontinuation of the etiological factors serves as the first line of treatment in many diseases.

The Lakshanas of Rasava Srotodusti are almost similar to Primary Hypothyroidism, The Agni vitiation can also be considered as the main cause for Primary Hypothyroidism Induced Obesity. Hence, the factors cause Agnimandya can be considered as the Nidana of Primary Hypothyroidism Induced Obesity.

Classification of Nidana

- 1. Aharaja Nidana
- 2. Manas Nidana
- 3. Anya Nidana

REVIEW ARTICLE June 2022

- 1. Aharaja Nidana : can be classified further as-
- a) Guna Pradhana Ahara : Guru, Sheeta, Snigdha, Ati Matra, Sandra.
- b) Rasa Pradhana Ahara : Madhura Rasa

These qualities (*Guna* and *Rasa*) are present in *Dravyas* having a dominance of *Prithvi* and *Apa Mahabhuta*. Due to similar *Bhoutika* composition the above substances are seen to cause a direct increase in the *Kapha Dosha* and *Rasa Dhatu* and *Meda Dhatu*.

- Manasa Nidana : Ati Chintya is enumerated as the causative factor by Acharya Charaka which are conducive to Rasavaha Srotodusti. (Cha.Vi 5/12)
- Dravya Pradhana Ahara: Navanna, Navamadya, Gramyaudaka Rasa, Mamsa Sevana, Paya Vikara, Dadhi, Sarpi, Ikshu Vikara, Guda Vikara, Shali, Godhuma, Masha, Varuni Madya.

The above stated foods like Navanna, Ikshu, Guda Vikara, Shali, Godhuma, and Masha are Guruguna Ahara which can cause Agnimandhya at the level of Rasadhatu leads to Uttarottara Dhatwagni Mandya hence, these Aharaja Nidana causes Santarpana Janya Vyadi (Metabolic Disorder).

Purvarupa

The symptomology, which appears before complete manifestation of the disease is known as *Purvarupa*. These *Purvarupa* are those signs and symptoms, which appears during the process of *Dosha Dhusya Sammurchana* i.e., by the vitiated *Dosha* and *Dooshya*. The knowledge of *Purvarupa* is important for differential diagnosis and to treat the disease in its beginning. So, that disease can be controlled easily and cannot develop further.

In the context of Primary Hypothyroidism Induced Obesity, *Purvarupa* are not mentioned separately and so the initial manifestations of *Rasavaha Srotos* related symptoms can be considered. *Rasavaha Srotodushti Lakshanas* which are also mentioned like *Aruchi*, *Agnimandhya* due to *Shleshma* and *Rasadhatwagni Mandya* (Hypo functioning of *Rasa Dhatu*). *Agnimandya* is also known as *Mandagni*. Hence,

Mukta et al. Understanding of Primary Hypothyroidism Induced Obesity through Ayurveda

ISSN: 2456-3110

REVIEW ARTICLE

Jun<u>e 2022</u>

Due to Nidana Sevana

 \downarrow

Jatharagni Mandya

 $\mathbf{1}$

Samanavata Pranavata and Kledaka Kapha Vikruti

 $\mathbf{1}$

Combines with Udana Vata

 \checkmark

Prakupita Udanavata takes shelter in Gala Pradesha

 \checkmark

Causes the Rasavaha Dhusti

 \checkmark

Leads to the Rasa Sneha Vruddhi

 $\mathbf{1}$

Produces the Lakshana of Rasa Pradoshaja Vyadhi along with

 $\mathbf{1}$

Sthoulya

Samprapti Ghataka

Dosa	Vata (Samana Vata, Prana Vata, Udana Vata) Kapha (Kledaka Kapha)
Dusya	Rasadhatu and Medadhatu
Agni	Jatharagni, Rasadhatvagni, Meda Dhatvagni
Ama	Jatharangnimandhyajanya Ama and Dhatavagni Mandyajanya Ama
Srotas	Rasavaha, Medavaha
Srotodusti	Sanga
Udbhavasthana	Amashaya
Sanchara Sthana	Rasayini
Adhisthana	Sarvanga

Mandagni Lakshanas are also consider as *Poorvaroopa* of Primary Hypothyroidism induced Obesity.

Rupa

The signs and symptoms of the diseases seen in the body are *Vyakta*. The diagnosis of the disease is mainly done by assessing the Thyroid Profile and with the help of BMI, Mid arm Circumference, Mid-thigh circumference, Hip and waist ratio. If at all symptoms appear, they are considering as Clinical manifestations in the patients with severity.

Most of the patients with raised levels of TSH have no specific symptoms or signs. The vast majority of patients with Thyroid abnormalities are detected by the laboratory, either as part of the workup of a patient with selected subjective symptoms, as a part of a preventive screening strategy, or on a routine chemistry panel.

Bhojana Asradha (aversion to food), Gaurava (heaviness of the body), Pandu (anemia), Angasada (lethargy), Agninasha (loss of digestive power), Ayatakala Vali and Palita (premature graying of hairs and wrinkling). These are the subjective symptoms appears in the Primary Hypothyroidism Induced Obesity.

Samprapti

Dhusti of Rasadhatu plays an important role in pathogenesis i.e.. Rasa Dhatvagnimandya (Hypofunctioning of Rasa Dhatu) is a major feature of the disease. Etiological factors aggravate Kaphadosa resulting Jatharagnimandya (Hypofunctioning of Jataragni) and Dhatvagnimandya (Hypofunctioning of Dhatu). In Primary Hypothyroidism Induced Obesity, hormonal disturbances make many metabolic rate which leads to this pathogenesis. Many signs and symptoms are related with decreased metabolism. Vagbhata has mentioned this pathogenesis clearly. According to him, the part of the Jathragni, its exacerbation and diminution causes respective Dhatuvrddhi and Dhatuksaya. And as Acharya Susruta says in a Sutrasthana of 15th chapter is by the Rasa Sneha Vruddhi also manifestes Sthoulya.[10]

ISSN: 2456-3110

Vyaktasthana	Sarvasharira
Roga Marga	Abhyantara Rogamarga
Vyadhi Swabhava	Chirakari

Chikitsa

Nidana Parivarjana

Nidana Parimarjana is the main method of keeping oneself free from disease. Nidana Parivarjana Chikitsa means avoiding all the Aharatmaka, Viharatmaka Manasika and Anya Nidana responsible directly or indirectly for the manifestation of a disease. All the Nidana mentioned in Santarapanajanya Vyadhi, such as Ati Madhura, Guru, Snigdha, Abhishyandi Ahara Sevana, Divaswapna^[11] etc. should be avoided in case of Primary Hypothyroidism induced Obesity.

Langhana^[12]

Langhana is the line of treatment in Rasapradoshaja Vikara and it is the best remedy for the Sama condition of the disease. So, all the ten types of Langhana can be applied for the patients suffering from Rasa Vridhi according to Rogi and Roga Bala.

As it is Kapha Pradhana and Samana Vata is involved, hence, Dravya which are Kapha Shamaka and Samana Vata Vardhaka (Aghni Vardhaka) should be selected.

Shothahara Dravyas such as Gomutra Haritaki, & Trikatu, Shadushnaguggulu, Chitrakadi Vati, Varunadi Kashaya etc.

Udvartana^[13]

Act as Kaphahara and Meda Pravilayana and according to Ashrya Ashryee Bhava of Kapha, Rasa and Meda, Udvartana is indicated.

Shodana

Shodana therapy such as Shirovirechana (Tikshana Nasya) and Vamana are beneficial in Hypothyroidism Induced Obesity.

Vamana

Vamana has its own importance. For *Urdwajatru Gata Vyadi* and *Kaphaja d*isorders *Vamana Karma* is considered as best line of purificatory measure and best *Srotoshodaka*. In the treatment of hypothyroidism induced Obesity, considering the *Kapha Dosha* dominance, *Dusti* of *Rasa*, thereby keeping the impairment of metabolism as base. Where as in conditions like *Kapholbana* and *Urdwajatru Gata Roga*, *Vamana*^[14]could be advised.

June 2022

REVIEW ARTICLE

Nasya

As Adhistana of Vyadhi is in Kanta Pradesha, it is considered as Urdwajaturgata Vikara.^[15] Hence, the Nasya can also be helpful to treat the condition of Rasa Pradoshaja Vikara.

DISCUSSION

Most of the Nidana of hyperthyroidism induced obesity can be correlated to Santarpan Janya Vyadhi such as Prameha, Sthoulya, Shotha and Rasavahasroto Dushti Karana are considered. And in the Samprapti, Acharya Sushruta and Madhavakara says as Rasa Snehavruddhi leads to the Sthoulya. And in the modern concept the characteristics of the Primary Hypothyroidism compromises all Lakshana of the Rasapradhosaja Vikara excepts Krusha, Klebhyatva. According to Dosha Dushya Samurachana, the treatment protocol should be carried. In Ayurveda, Prana Vata plays major role in endocrine system. TRH is secreted by a Hypothalamus, TSH releases from Anterior pituitary gland, and Prana Vata present in a Murdhanga^[16] i.e., In head region which regulates the secretion of TSH level and Samanavata regulates the Pachana i.e., metabolism,^[17] so, here the axis of Pranavata and Samanavata is important in regulation & secretion of TSH. In Pranavata and Samanavata there is Avarana by Kapha, hence, Chikitsa should be Kapha Shamaka and Agni Vardhaka.

CONCLUSION

Hypothyroid has a wide range of perceptions in Ayurveda, which can be correlated to various condition. According to that specific condition, perception and understanding of disease goes. In various different angles researchers have correlated the Hypothyroid induced Obesity, and it clears the line of treatment should be *Agni Vardhaka* and *Kapha Shamaka*. As the Thyroid gland plays vital role in

REVIEW ARTICLE June 2022

ISSN: 2456-3110

metabolic functions and which can be the reason in the gain of weight, slight change in the weight gain causes the change in a TSH level.

REFERENCES

- 1. http://www.ncbi.nim.nih.gov
- http://www.ncbi.nlm.nih.gov/pmc/ articles/PMC3169866
- 3. https;//www.health line.com
- Agnivesh, charaka samhita Ayurveda deepika tika of chakrapani, chaukhambha publications New Dehli edition 2016 sutra sthana 28th chapter, verse -9,10 pg -179
- Agnivesh,charaka samhita Ayurveda deepika tika of chakrapani,chaukhambha publications New Dehli edition 2016 sutra sthana 21st chapter, verse -15.
- Agnivesh, charaka samhita Ayurveda deepika tika of chakrapani,chaukhambha publications New Dehli edition 2016 sutra sthana, galaganda
- Vagbhata, -Astanga Hrudaya, Sarvanga Sundara of Arunadatta and Ayurveda Rasayana of Hemadri Chaukhamba, Varanasi. edition 2015 Sutrasthana 20th chapter Sloka no. 2 pg no.456
- Davidsons principle and practice of medicine edited by Nicholas A.Boon, Nicki R.Walker 20th Edition ,2006 page no752,753
- 9. www.ijem.in>Article Hypothyroidism and obesity
- Susruta-Susruta samhita, Dalhana of nibhnda sangraha, Chaukhmba Varanasi edition 2015 sutrasthana 15th chapter Sloka no. 32 Pg no.73
- 11. Agnivesh, charaka samhita Ayurveda deepika tika of chakrapani, chaukhambha publications New Dehli

edition 2016 sutra sthana 23^{rd} chapter sloka no.3-4 pg no-

- Agnivesh, charaka samhita Ayurveda deepika tika of chakrapani,chaukhambha publications New Dehli edition 2016 sutrasthana 28th chapter sloka no.24 pg no.246
- Vagbhata, Astanga Hrudaya, Sarvanga Sundara of Arunadatta and Ayurveda Rasayana of Hemadri Chaukhamba, Varanasi. edition 2015 Sutrasthana 2nd chapter Sloka no. 15pg no.28
- Vagbhata, -Astanga Hrudaya, Sarvanga Sundara of Arunadatta and Ayurveda Rasayana of Hemadri Chaukhamba, Varanasi. edition 2015 Sutrasthana 18th chapter Sloka no.1 pg no.260
- Vagbhata, -Astanga Hrudaya, Sarvanga Sundara of Arunadatta and Ayurveda Rasayana of Hemadri Chaukhamba, Varanasi. edition 2015 Sutrasthana 20th chapter Sloka no.1 pg no.289
- Vagbhata, -Astanga Hrudaya, Sarvanga Sundara of Arunadatta and Ayurveda Rasayana of Hemadri Chaukhamba, Varanasi. edition 2015 Sutrasthana 12th chapter Sloka no. 4 pg no.193
- Vagbhata, -Astanga Hrudaya, Sarvanga Sundara of Arunadatta and Ayurveda Rasayana of Hemadri Chaukhamba, Varanasi. edition 2015 Sutrasthana 12th chapter Sloka no. 7pg no.193

How to cite this article: Mukta, Madhusudhan Kulkarni, S. G. Chavana. Understanding of Primary Hypothyroidism Induced Obesity through Ayurveda. J Ayurveda Integr Med Sci 2022;5:119-123.

Source of Support: Nil, Conflict of Interest: None declared.

Copyright © 2022 The Author(s); Published by Maharshi Charaka Ayurveda Organization, Vijayapur (Regd). This is an open-access article distributed under the terms of the Creative Commons Attribution License (https://creativecommons.org/licenses/by-nc-sa/4.0), which permits unrestricted use, distribution, and perform the work and make derivative works based on it only for non-commercial purposes, provided the original work is properly cited.
