

ORIGINAL RESEARCH PAPER

Ayurveda

A REVIEW ON HYPOTHYROIDISM – AN ANUKTAVYADHI IN AYURVEDA

KEY WORDS:

Hypothyroidism, Jatharagni, Dhatwagni, Aunkta vyadhi.

Dr. Seema H. Thakare

Assistant Professor Department of Rognidan Vikriti Vigyan

Dr. Rajni K. Gurmule*

Assistant Professor Department of Rachana Sharir *Corresponding Author

BSTRAC

Hypothyroidism is a growing health issue worldwide. It results from lack of thyroid hormones secreted by thyroid gland which regulates basic metabolic rate in our body. There is no exact term of thyroid disorders in Ayurveda but Ayurvedic system of medicine is very futuristic & doesn't emphasize on naming disease. It rather insists of understanding the constitutional status of disease & adopting an appropriate treatment principle. Majority of body metabolic activities are controlled by thyroid hormone, In Ayurveda it can be correlated with functions of Agni. According to Ayurveda, pathogenesis of hypothyroidism is considered due to hypofunctioning of agni & imbalanced state of doshas. To understand & appreciate the pathogenesis of anukta vyadhi hypothyroidism, it is essential to consider basic concepts of ayurveda like dosha, dhatu, agni, srotas. Understanding of hypothyroidism from Ayurvedic perspective helps to give safe and alternative ayurvedic management.

INTRODUCTION:

Hypothyroidism is the most common metabolic disorder we see in today's world. The metabolism of the body is maintained by thyroid hormones produced by thyroid gland. Hypothyroidism results from any variety of abnormalities that leads to insufficient synthesis of thyroid hormones. It is more prevalent among the females. Ratio of occurrence of the disease among males and females is 6:1. It is not only confined to metropolitan population but also extended to the rural and urban areas. The prevalence of hypothyroidism is 10 - 50 patients per thousand populations. [1]

Ayurvedic texts, although are silent about wide knowledge of the disorder. Anukta vyadhi is neither elaborated nor described by their name in classical text of ayurveda. There is no direct mentioning of hypothyroidism in Ayurveda but the disease by the name Galaganda is mentioned in Ayurvedic samhita. On the basis of clinical presentation of hypothyroidism it is better not to restrict comparison of hypothyroidism to Galaganda only. To understand and appreciate the concept of anukta vyadhi, it is essential to consider basic concepts of ayurveda like dosha, dhatu, agni, srotas, and manas. Though anukta vyadhi are not interpreted by their names, the cluster of signs and symptoms and underlying pathology can be understood by the basic principles stated above which not only helpful in understanding the pathogenesis but also gives a direction to think in terms of treatment for the same. [2]

Main action of thyroid hormone is to maintain proper metabolism in the body. In Ayurveda it can be correlated with actions of agni. If we try to understand pathogenesis of hypothyroidism according to principles of ayurveda, we find that it is caused due to dysfunctioning of Agni. At first functions of jatharagni get reduced which further affects dhatvagni. Hypo functioning of Agni generates symptoms as that of hypothyroidism.

Hypothyroidism causes various complications like dyslipidemia which is major risk factor for many serious illnesses; also hypothyroidism itself in its peak can result in threatening condition. Thus, it leads to long life pathological events and make affected person dependent on hormonal supplement throughout his life.[3] Hence it is necessary to understand the disease in Ayurvedic perspective and to establish the management through Ayurvedic system of medicine.

Pathogenesis of disease involved basic factors like Dosha,

Dhatu, Mala, Agni, Srotas; without involvement of these, disease cannot get manifested and hence thorough knowledge of these basic factors helps to understand the pathogenesis and accordingly treatment can be planned. Though all terms and condition of hypothyroidism cannot be explained as it is according to Ayurveda but concept of Ayurveda for development of any disease can help to understand the hypothyroidism. Here an attempt has been made to understand hypothyroidism from Ayurvedic perspective to give safe and alternative management.

AIM

 $To \, study \, Hypothyroidism \, as \, an anukta \, vyadhi \, in \, Ayurveda.$

OBJECTIVE:

- To study etiopathogenesis of Hypothyroidism in Ayurvedic perspective.
- 2. To study sign and symptoms of Hypothyroidism according to Ayurvedic view.

MATERIAL AND METHODOLOGY:

- Literary study of Hypothyroidism was done from modern medical texts and searching research databases.
- Literary study of various Ayurvedic texts was done to understand the pathogenesis of anukta vyadhi hypothyroidism according to Ayurvedic principles.

Thyroid hormone and Agni:

Majority of body metabolic activities are controlled by thyroid hormones according to modern and through Agni according to Ayurvda. Metabolic effects of thyroid hormones can be seen on nearly every cell in the body similarly effect of agni also seen on each & every cells of the body. Thyroid hormone can helps in protein, carbohydrate & fat metabolism. Jathargni digest these substances in the gut, while samanvayu helps in absorption of these substances. Heterogeneous substances are converted into homogeneous substances by Bhutagni which then utilized at cellular level. Dhatwangi helps in metabolism of these homogeneous substances at cellular level. Normal levels of thyroid hormones help in growth, development & maintenance of body tissues, Maintains normal sexual function, sleep & thought pattern. Similarly normal levels of agni in body is responsible for good health, strength & longevity of life. Increase or decrease in thyroid hormone disrupts the normal metabolism & produces diseases which can lead to either hypothyroidism or hyperthyroidism. Vitiated angi is the root cause of all diseases in body. Diminished Agni causes vitiation of doshas &

produces symptoms similar to hypothyroidism. Symptoms of hypothyroidism resemble the symptoms produced by kapha & wata increment

Hypothyroidism from ayurvedic perspective: Etiological factors/Nidan:

Primary hypothyroidism is caused due to inadequate functioning of thyroid gland itself while Secondary hypothyroidism is caused due to deficiency of thyroid stimulating hormone (TSH). Primary hypothyroidism is may be due to iodine deficiency, autoimmune diseases, congenital, radiation therapy etc. 4]

According to Ayurveda, Adhyatmika vyadhi (Psychosomatic diseases) are the diseases manifesting in body & mind.

Adhyatmika vyadhi are- adibalapravritta, Janmabalap ravritta & doshabalpravritta.

- a. According to modern, inheritance may be the cause of disease (Cong. Hypothyroidism) which can be correlated with adibalapravritta vyadhi caused due to morbidity of sperm and or ovum.
- b. Cretin baby (neonatal Hypothyroidism) mentioned in modern science can be correlated with Jada (mandabuddhi) type of Janmabalapravritta vyad hi(diseases present in the individual right from birth).
- c. Doshabalapravritta hetus are the factors causing vitiation of sharirik and mansik doshas. This includes factors which causes kaphavriddhi, jathargnimandya & production of aam. They can be classified as a) aaharaj hetu (dietary causes) b) viharaj hetu (related with life style). c) mansik hetu (psychological factors) [5]

Pathogenesis / Samprapti:

Primary hypothyroidism results from either deficiency of thyroid hormone caused by destruction of thyroid follicle as in Hashimoto's thyroiditis (Autoimmune disease) or by resistance of peripheral tissue by thyroid hormone. Functions of thyroid hormones are similar to the functions of agni. Agni in body causes transformations/ tissue metabolismat various levels & maintains BMR. Kaphakara aahar-vihar causes jathagnimandya which results in formation of aam (undigested material). Aam causes obstruction in strotas. If process of aam formation gets continued it leads to dhatwangimandya which increases dhatugata malasanchay & causes morbid dhatu formation, vata also get involved in pathogenesis as it get obstructed by aam & kapha. Vitiated kaphadosha, sluggish vayu, and agnimadya lower the metabolic processes throughout body. Componants (vyadighatak) which contributes for manifestation of the disease are as follows;

Dosha – Kapha, Vata
Dushya–Rasa &meda (Predominantly)
Agni – Jatharagni, Dhatwagni
Strotodushti – Sanga, Vimarggaman
Adhisthan–
SarvaSharir
Udhavsthana–Aamashaya
Vkyatisthan – SarvaSharir

Clinical presentation / Rupa:

The symptoms of hypothyroidism are very nonspecific. However common clinical sign and symptoms of hypothyroidism along with its Ayurvedic perspective are tabulated as follows,

Table no. l

Sign/Symptom[6, 7, 8,]		Strotas involved [10]
Abnormal Weight Gain	Kapha	Rasavaha, medovaha

Totalic o Issue o Jane 10	10 1111111 15	B11 1101 DE00 100
Loss Of Apetite	Kapha	Annavaha, Rasavaha
Constipation	Vata	Purishvaha
Puffy Appearance Of Body Features	Kapha	Rasavaha
Sluggishness	Kapha	Rasavaha
Fatigue /Tiredness	Vata	Rasavaha
Dry,Coarse Skin / Hair, hair loss	Vata	Asthivaha
Anemia(pallor)	Pitta	Rasavaha, Rakavaha
Hoarsensess Of Voice	Kapha	Pranavaha
Generalized pain, Muscle pain, Joint pain	Vata	Asthivaha, mamsavaha
Menstrual Disturbances	Vata	Artavavaha
Cold Intolerance	Kapha, Vata	Rasavaha
Sleepiness	Kapha	Rasavaha
Slow pulse rate(bradycardia) Decreased cardiac output	Vata	Rasavaha, raktavaha
Decreased perspiration	Vata	Medovaha
Decreased vision, decreased hearing	Vata	Rasavaha
Muscle Cramps / Stiffness	Vata	Asthivaha, mamsavaha
Non pitting oedema, pericardial effusion, abdominal distension	Kapha	Rasavaha
Dull facial expression, Depression, impaired memory, inability to concentrate	Vata	Manovaha

From above table it is observed that all the symptoms are produced due to kapha-vata increment & decreased agni. Rasavaha & Medovaha strotas get predominantly vitiated along with raktavaha, mamsavaha, ashthivaha, shukravaha, manovahastrotas. Hypothyroidism causes decreased cardiac output, cardiac contractility & increased systemic vascular resistance these facts supports morbidity of rasavaha strotas in hypothyroidism. Decrease in thyroxin secretion increases body weight because of fat deposition. Varied alterations in lipid parameters are also observed in hypothyroidism including elevated total cholesterol, low-density lipoprotein (LDL) cholesterol, and apolipoprotein B. These findings indicate abnormality of medovaha strotas in hypothyroidism. In men hypothyroidism leads to complete loss of libido (sexual drive) which indicates shukravaha strotodushti.

DISCUSSION:

Though exact term for hypothyroidism is not described in Ayurveda, the sign and symptoms produced due to hypothyroidism are described in Ayurveda under its classical terms. Agni is the prime factor for causation of diseases including hypothyroidism. Agni is the principle component of body for every physiology. Metabolism, catabolism, transformation, digestion, destruction of toxins all are brought about by agni. Agni in body is responsible for good health, strength, luster & longevity of life. Vitiation of doshas also depends on the vitiations of agni. If functioning of agni is deteriorated, all goodness in the body will be lost & body gets prone to various diseases. Thus agni act in the same way as the thyroid hormone does for the body.

Hypothyroidism results in various signs & symptoms which are similar to symptoms of vata-kapha dosha. Vata symptoms like fatigue, loss of energy, constipation, dry-coarse skin, hair, cold intolerance, muscle-joint pain, menstrual disturbances, bradycardia, Decreased perspiration, Muscle Cramps, Dull facial expression, Depression, impaired memory & Kapha symptoms like Abnormal Weight Gain, Loss of Apetite, Puffy Appearance of Body Features, Sluggishness & Hoarsensess of Voice etc. All these symptoms are produced due to kapha –vata increment & decreased agni.

CONCLUSION:

There is no direct mention of thyroid gland in ayurveda. But

ayurvedic system of medicine doesn't emphasize on naming the disease. It rather insists on understanding the constitutional status of disease and adopting an appropriate treatment principle. Functions of thyroid hormones are similar to functions of agni. Agni in body causes transfor mations / tissue metabolism at various levels & maintains BMR. Diminished Agni causes vitiation of doshas & produces symptoms as that of hypothyroidism. In hypothyroidism vitiation of agni occurs at both jatharagni & dhatwagni level hence long term management is required. Hypothyroidism is mainly occurs due to kaphaprakopaka, agnimandyajanaka & rasapraodshaj aahar-vihar. Rasa & meda are predominantly vitiated. All these factors help during safe and alternative management of hypothyroidism.

REFERENCES:

- Nicholas A.Boon, N. R. (2006). Davidson's Principles and Practise of Medicine. (J. A. Hunter, Ed.) Philadelphia: Elsevier's Health Sciences. Page no. 746
- Aacharya Vidyadhar Shukla, p. R. (2011). Charak Samhita (Vol. 1). New Delhi: Chaukhamba Sanskrit Pratisthan. Page No. 281
- Luboshitzky R, H. P. (2004). Cardiovascular Risk Factors in Middle aged Women with Subclinical Hypothyroidism. Neuroendocrinol letters, 262-6.
- Diez, J. J. (May 2002). Hypothyroidism in the Patientts Older Than 55 Years An Analysis Of The Etiology And Assessment Of The Effectiveness Of The Therapy. The Journals Of Gerontology, M315-M320.
- Aacharya, V. Y. (1996). Sushrut Samhita With Nibandh Sangraha. Varanasi: Chaukhamba Orientalia.
- Garber JR, C. R. (2012). Clinical Practise Guidlines For Hypothyroidism in Adults cosponsored by The American Association Of Clinical Endocrinologists And the American Thyroid Association. Endocrine Practice: Official journal of the American college of Endocrinology and the American Association of Clinical Endocrinologists., 988-1028.
- Saito I, I. K. (1983). Hypothyroidism as a cause of Hypertension. Hypertension (Dallas, Tex: 1979), 112-5.
- Duyff RF,V.d. (2000). Neuromuscular findings in thyroid dysfunction. Journals of neurology, neurosurgery and psychiatry, 750-5.
- Acharya Vidyadhar Shukla, P. R. (2011). Charak Samhita (Vol. 1). Delhi: Chaukhamba SanskritPratishtan.Page293-296.
 Aacharya Vidyadhar Shukla, P. R. (2011). Charak Samhita (Vol. 1). Delhi:
- Aacharya Vidyadhar Shukla, P. R. (2011). Charak Samhita (Vol. 1). Delhi: Chaukhamba Sanskrit Prakashan. Page 429-430.