

# WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.084

Volume 12, Issue 18, 346-354.

**Review Article** 

ISSN 2277-7105

# HYPOTHYROIDISM- AYURVEDIC VIEW

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Article Received on 26 August 2023,

Revised on 16 Sept. 2023, Accepted on 06 Oct. 2023

DOI: 10. 20959/wjpr202318-29929

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#### ABSTRACT

Hypothyroidism occurs when your body doesn't produce enough thyroid hormone, which is a common endocrinal disorder seen all over the world. It affects the metabolism of the body even at cellular level and can affect any organ virtually. The incidence of hypothyroidism is rising rapidly. It is more prevalent among females. Prevalence of hypothyroidism was the highest in the age group 44-54yr (13.11%) and lowest in 18-35yr (7.53%). The overall prevalence of hypothyroidism was 10.95%. Hypothyroidism is thought to be caused by combination of many factors. Primary hypothyroidism(thyroprivic) caused due to pathology of thyroid gland and secondary (trophoprivic) when the pituitary or hypothalamus is the cause. The other cause of hypothyroidism is iodine deficiency, chronic autoimmune thyroiditis, hereditary defect in thyroid hormone synthesis, underactive of thyroid

gland, thyroid removal, radiation treatment of certain cancers. Hypothyroidism is leading cause of many disorder, As symptoms of hypothyroidism develop slowly often over several years. At first you may feel tired and sluggish later you may develop other sign and symptoms of a slowdown metabolism. Thus, there is an increasing demand to understand the disease in view of Ayurveda 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 and Dhatwagni along with abnormality of Kapha and Vata Dosha as well as Rasavaha, Raktavaha, Medovaha and Manovaha Srotases. Dosha-dushyasamoorchhana in various Dhatus results in the systemic manifestation of the disease. Thus, the line of treatment involves Agnivardhan, Deepana, Pachana, Srotoshodhana and Kapha vata shamana.

**KEYWORDS:** Hypothyroidism, Agnimandya, Dhatwagni Mandya, Vata-Kapha, Aam, Rasa, Rakta, Mansa, Meda, Strotoshodhan.

#### INTRODUCTION

In endocrine disorders thyroid disorders are more common, There are two conditions one condition which is called as Hyperthyroidism and another condition is Hypothyroidism. In hypothyroidism body doesn't produce enough thyroid hormones(TSH,T3,T4). Thyroid is responsible for providing energy to nearly every organ in your body, it regulates metabolism. Regulation of hormone is done by HPT axis with its negative feedback mechanism helps in maintaining normal level of hormone. Hypothyroidism in adult it is called Myxoedema.

#### **PURPOSE**

- The Global incidence of Hypothyroidism is increasing very rapidly in people.
- Endocrine problems are new emerging problems and if once acquired, difficult to treat.
- Hypothyroidism is leading cause of many disorder.
- Treatment is life long.
- Side effects of modern medicines.
- Modern doctors facing problems of recurrence.
- So to avoid these problems ayurvedic point of view is required to diagnose and to treat the Hypothyroidism is very essential.

#### MATERIALS AND METHODS

- This paper presentation is conceptual paper presentation, it is not a clinical or drug administrative study.
- Conceptual is done with taking the material of ayurvedic literature from ayurvedic Samhitas and other available books also.
- The pathogenesis of hypothyroidism was studied from modern textbooks of various authors and by searching various online medical research databases like pubmed, Google scholar.
- The study of various Ayurvedic Samhitas and other books to understand the pathogenesis
  of hypothyroidism in terms of Dosha, Dushya, Agni, and Srotas.
- Observed patient.

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#### **DISCUSSION**

- Thyroid hormone the main function is to maintain the basal metabolic rate.
   Hypothyroidism- Basal metabolic rate is low.
- Metabolism-Conversion
- Metabolism –Transformation
- Metabolism –Digestion
- All these process is also taking place at cellular level-Sukshmapachan(secondary digestion)
- According to ayurved conversion, transformation and digestion can not take place unless and until your Agni status is good.
- Agni is very important. As there is low BMR-Thyroid Agni is not functioning well(Thyroid gland is not functioning well)
- Not proper synthesis of T3 and T4 in collidal solution or in the thyroid follicle.
- Why that process is not taking place, why iodine is not trapped, why iodine not bound with protien, why T3 is not generated.
- Here comes Ayurvedic concept of Agni.
- Because of Agni cellular transport, cellular permiability is hampered.
- Its Sang and Vimarg-gaman accrding to ayurveda.
- So we want to improve Active and passive transport in the thyroid gland.
- Hypothyroidism-Agni will be pathophysiologically low in GI tract as well as at tissue level.
- Agnimandya- because of Kapha dosha
- Kapha dosha-Shit, Manda, Guru, Snigdha because of these excessive anabolic properties your original fire/Agni is lost.
- Kapha(Prithvi+Jal) = Udak Dhatu excessive water content damaging your Agni.
- So main culprit is Kapha dosha.
- Ayurveda belives in Vat, Pitta and Kapha bioenergies. Vat dosha act as a catalyst.
- So Kapha and Vat both are responsible for lowering Agni.
- At psychological level Tama-lowerside, darkness, lethargy, laziness, ignorance, all the negative aspects of mind.
- Physical level- Kapha And Vat
- Mental level-Tama

- Kapha and Vat are disturbed so they attacked on weaker tissue of the body it attacks on Ras, Rakt, Mansa and Meda- Dushya.
- Digestive fire is low i.e Mandagni it will create some toxins in the body according to ayurved it is called Aam.
- Aam is sticky, heavy in nature-so it blocks micro and macro channels of your body-Strotorodh, Strotosang, Strotodushti.
- Disease process is spread all the margas(bhayamarga, abhantarmarga) and it produce symptoms.

#### SIGN AND SYMPTOMS OF HYPOTHYROIDISM

- 1. Puffiness of face (Myxoedematous face)-
- 2. Intolerance to cold temp-(Sweater in summer season)
- 3. Unexplained and rapid increase in weight-
- 4. Physical and mental slowing
- 5. Dry skin and loss of sweating
- 6. Horseness of voice
- 7. Lethargy
- 8. Fatigue
- 9. Menstrual disturbance, Infertility, PCOS
- 10. Bradycardia
- 11. Depression

#### **CAUSES OF HYPOTHYROIDISM**

# A] Primary

- 1. Ioine Deficiency
- 2. Thyroid ablation
- 3. Genetic abnormalities
- 4. Excess iodine intake

# **B]** Secondary

- 1. Hypopitutarism
- 2. Adenoma
- 3. Pitutory distruction

# **C]** Tertiary

1. Hypothalamic Dysfunction

# D] Rare cause

- 1. Thyroid hormone resistance syndrome.
- 2. Autoimmune Disease

#### CLINICAL PRESENTATION/ ROOPA

The severity of the signs and symptoms depends on the degree of thyroid dysfunction and the time course of development of the disease. Common presentations of hypothyroidism along with its Ayurvedic perspective are tabulated below

Clinical presentation	Dosha involved	Srotas
Fatigue, loss of energy	Vata, Kapha	Rasavaha
Lethargy, sleepiness	Kapha	Rasavaha
Weight gain	Kapha	Rasavaha, Medovaha
Decreased appetite	Kapha	Rasavaha
Cold intolerance	Vata, Kapha	Rasavaha
Dry skin	Vata	Rasavaha
Hair loss, coarse, brittle, straw like hair	Vata	Asthivaha
Dull facial expression	Vata	Manovaha
Slowed movements	Kapha	Rasavaha, Raktavaha, Mamsavaha
Menstrual disturbances, infertility, PCOS	Vata	Artavavaha, Shukravaha
Constipation	Vata	Purishavaha
Hoarseness of voice	Kapha, Vata	Pranavaha
Bradycardia	Kapha	Rasavaha, Raktavaha
Non-pitting oedema,	Kapha	Rasavaha

# **DIAGNOSIS**

Diagnosis is usually based on the TFT(Thyroid function test), that of the Thyroid Stimulating Hormone(TSH),T3(Tri-iodothyronine) and T4(Tetra-odothyronine/Thyroxine).

TSH is High and T4 and T3 low is Diagnostic of Hypothyroidism.

## PRINCIPLE OF MANAGEMENT / CHIKITSA

# **Ayurvedic management Principles**

1. Agnivardhan Chikitsa. This is first principal of Myxoedema. We will improve his Agni and where, everywhere in GI tract koshtamarga, we will improve his agni in Shakhamarga and also in all the dhatus i.e Dhatwagnivardhan Chikitsa is their. We will improve Rasa,

Rakta, Mansa, Meda this tissue we will concentrate. So we will use Agniwardhan Chikitsa and another word for Agniwardhan Chikitsa is pharmacological action.

Agniwardhan in ayurved it is called Deepan and Pachan. Deepan is stimulating the fire and Pachan means basically Aam Pachan so you have to select herbs or metals or hypomineral compounds etc you can use number of medicine which will stimulate Deepan Pachan.

- 2. Strotoshodhan As there is blockages in the Strotas their must be Strotoshodhan and that will be done by Aam Pachan because Strotas are blocked by Aam so we have to Aampachan and Strotoshodhan i.e cleansing but remember when there is blockages these Strotas try to find their way by Vimargagaman, Vi-pathological way. In ayurved normal way is called as Anulom gati.
- 3. Vatanuloman is treatment for myxoedema
- 4. Vatkaphaghna treatment wii be there and another word is Shitaghna, anti Vat and anti Kapha medicine I will select to treat myxoedema.

Because of all these treatment your basal metabolic rate is normal and our principal is to maintain BMR at normal level. Normal BMR-Normal thyroid function, Excessive BMR-Hyperthyroidism, Low BMR-Hypothyroidism.

# 1. Removal of the cause

Naturally in myxoedema iodine deficiency is there, Samvayikaran i.e Immidiate cause .You must supplement iodine along with you must find out what is the rare reason for his low BMR why his BMR is reduced, why is thyroid Agni is not functioning well (thyroid gland is not functioning well) and therefore there is not proper synthesis of T3 and T4 in colloidal solution or in the thyroid follicles. All these happens according to histology. Why that process is not properly taking place, why iodine is not trapped, why iodine is not bound with protein, why the T3 is not generated, here comes ayurvedic Agni concept, that means there is some problem with Agni, that's why there is no cellular transformation, cellular permeability is hampered i.e Sang according to ayurveda i.e Vimarg-gaman according to ayurveda. So we want to improve cellular transport, active and passive transport in the thyroid gland. So here we want to remove obstruction with the help of Vaman and Virechan is required i.e Shodhan karma is essential. Kapha dosha predominant so treatment is more in favor of Kapha dosha i.e Vaman. One of the best treatment for Aam is Tikta Ras. Tikta ras is very helpful to

controle Aam so naturally for Snehapan Tiktakghrut is preferred. If patient is Vamanarh then go for Virechan.

As Tamo gun is their, Myxoedematous patient there are always heavy and slow in everything about speech, about action, about facial expression so for that matter you have to give Nasya which will stimulate your brain cell, which will remove Tamavaran i.e coating of Tama dosha, lethargy and your brain cells are stimulated by Virechan Nasya. Shadbindu oil is specially for Virechan Nasya in high doses.

Takradhara it is medicated buttermilk is prepared from Musta and Nagarmotha these two dravyas are number one in Aam pachak according to ayurved.

Udvartan dry powder message with triphala/calamus, rasna, jinger is very important to remove Strotosang, macro and micro channel will be cleaned and their will be Vatanuloman, proper conduction, proper cell permeability will be their.

#### 2. Does and Donts about food and lifestyle

- 1. As Shit guna is problematic in myxoedema case, so he should not eat cold substances. He should avoid to living in cold climate and could not take bath with cold water.
- 2. He should not work more in Ac rooms or in air conditioning atmosphere.
- 3. In myxoedema we want to increase BMR and how it is going to increase the answer is exercise, exercise is mandatory to myxodematous patient. Suryanamskar is also going to help for myxodema patient.
- 4. He should make habit to drink warm water at least in cold and rainy season.
- 5. Myxoedema patient never go for high calorie diet.
- 6. Myxodema patient perform Fasting(Langhanchikitsa) at least ones in week or in 15 days.
- 7. Vagbhat mentioned that diet should have Adrak+Lavan begin with first bolous of food while starting the lunch or dinner he must take fresh ginger and salt to stimulate digestive fire.
- 8. He should always eat cooked food nad never used staled food.
- 9. Ayurveda has special recommendation about how to take food i.e Aharvidhivisheshyatan. Incompatable food i.e Virrudhanna also make Aam in the body. Never go for combination of milk+fruit, acid and alkali combination is not allowed in myxoedema patient.
- 10. Never eat late night.(after 8.30pm)

11. Yoga is also beneficial to myxodema patient for example Pavanmuktasan is helpful to stimulate fire.

#### 3. Internal medicine

# Classical Yogas which may be used to treat Hypothyroidism

- 1. Tab Trikatu-Vati- 2 BD after meal for Aampachan
- 2. Tab Arogyawardhini-Vati-2BD to stimulate metabolic process, liver tonic as well as Rasayan
- 3. Kumariasay-It will also stimulate metabolic process
- **4.** Kanchanar Guggulu-2 TDS with 4tsf Varunadi kwath+ 4 tsf water for removing Strotosang by Lekhan karma of Aam and Kapha

# 5. Rasayan Chikitsa or Apunarbhava Chikitsa

- 1. Shilajatvadi Vati-
- 2. Chitrakavleh-
- 3. Lashunkshirpak-

# **CONCLUSION**

- 1. Anukta Vyadhi (Not described in Samhita) can be treated according to ayurvedic principles i.e Dosha, Dhatu Agni concept etc.
- 2. Doses of modern medicine can be reduced by treating route cause of disease (Here Agnimandya).
- 3. Long term treatment can be avoided if route cause is treated properly.

### **REFERENCES**

- 1. Dr. Garde G K. Ashtang Hrudaya. Anmol Prakashan, Pune, 2002; Ash.Hru.3/82-104, 140-42.
- 2. Dr Ghanekar B G. Sushruta Samhita. Meharchand Laxmandas Publication, 2006; Su.sha. 4/62-76,140-42.
- 3. Dr Tripathi B.Charak Samhita. Chaukhamba Surbharti, Varanasi, 2003; Ch vi 8/95-98,758-62.
- 4. Christopher H, Chilvers ED, Colledge NR, et al. Endocrine Disease: Davidson's Principle and Practice of Medicine. Elsevier, 2002; 19<sup>th</sup> edition: 699-02.

- 5. Siddharth N Shah. Disorders of Thyroid Gland: API Textbook of Medicine. The Association of Physician of India. National Book Depot Mumbai 2003; 7<sup>th</sup> edition: 1057-61.
- 6. Dr Sembulingam K, Dr Sembulingam P. Thyroid Gland: Essential of Medical Physiology. Jaypee, 2012; 6<sup>th</sup> edition: 388-91.
- 7. Unnikrishnan AG, Kalra S, Sahay RK, et al. Indian Journal of Endocrinology and Metabolism, Jul, 2013; 17(4): 647-52.