

STUDY OF HYPOTHYROIDISM AS AN ANUKTA VYADHI**Dr. Kalaskar Anand V¹, Dr. Sonawane Sarika P², Dr. Chatuphale Gajanan D³,
Dr. Zawar Rahul⁴**¹Associate professor, Dept. of Rognidan Vikritivigyan, ²P.G Student of Rognidan Vikritivigyan, ⁴Ex P.G student of Rognidan Vikritivigyan Sumatibhai Shah Ayurved Mahavidyalay, Malwadi, Hadapsar, Pune, Maharashtra, India;³Associate professor, Dept. of Agadtantra, M.D Agadtantra . DYA, PGDEMS. Parul institute of ayurveda, Baroda, Gujarat, India**ABSTRACT**

Thyroid gland is one of the important and sensitive endocrine glands. The major function of thyroid gland is to control the rate of metabolism. These functions can be said to be similar to the functions of *Agni*. Hypothyroidism results from inadequate production of thyroid hormone. There is no direct mention of thyroid gland in *Ayurveda*, but disease by the name *Galaganda* is mentioned in *Ayurvedic samhitas*. Hypothyroidism has many symptoms related to many systems of the body. So it is better not to restrict comparison of hypothyroidism to *Galaganda* only. As *Kapha Dosha* is predominant in *Urdhvajatrugata pradesh* and *ura* is the *Sthana* for *Udana Vayu*, vitiated *Kapha* obstructs the *Gati* of *Udana* and it leads to *Kaphavritta Udana* and shows symptoms of *Kaphavritta Udana* viz. difficulty in speech and voice (*Vaksvara Graha*), heaviness of body (*Guru Gatrata*), debility (*Daurbalya*), discoloration (*Vaivaranya*) and anorexia which are similar to the symptoms of hypothyroidism. It is observed that there are some symptoms of vitiated *Vata Dosha* in hypothyroidism but as no *Vata Dosha* vitiating *Hetu* is seen in the present study it can be concluded that the *Dushti* of *Vata Dosha* may be due to *Avarana* of *Vata* by vitiated *Kapha*. After review of literature regarding *avritta vata* we found that the symptoms of *Kaphavritta Udana* and hypothyroidism are similar hence the *Samprapti* (pathogenesis) of hypothyroidism has been explained in the terms of *Avritta Vata*.

Keywords: Hypothyroidism, *Galaganda*, *Avarana*, *Avritta vata*, *Kaphavritta udan*, *samprapti*.**INTRODUCTION**

Thyroid gland is one of the important and sensitive endocrine glands. The major function of thyroid gland is to control the rate of metabolism.^[1] These functions can be said to be similar to the functions of *Agni*. Hypothyroidism results from inadequate production of thyroid hormone. There is no direct mention of thyroid gland

in *Ayurveda*, but disease by the name *Galaganda* is mentioned in *Ayurvedic samhitas*.^[2] Hypothyroidism has many symptoms related to many systems of the body. So it is better not to restrict comparison of hypothyroidism to *Galaganda* only.

Hence this article endeavours to put forward and name a disease along

Ayurvedic principles which can aptly explain the *Samprapti* of hypothyroidism with an Ayurvedic perspective. This shall definitely help to shed light on not only diagnosis but also the prognosis as well as help formulate the guidelines for the treatment of hypothyroidism in *Ayurveda*.

AIM & OBJECTIVES

AIM

To study and elaborate the *Nidan panchak* of an *Anukta vyadhi* hypothyroidism with an Ayurvedic perspective

OBJECTIVES

To study *Samprapti* of hypothyroidism so that it might be helpful to treat the patients according to Ayurvedic principles.

MATERIALS AND METHODS

Study was conducted in two phases.

1. Conceptual

2. Clinical

1. CONCEPTUAL

a) Literary review

1) All the references of hypothyroidism were studied from modern medical text books and related web sites.

2) The *Samprapti* of an *Anukta vyadhi* hypothyroidism is attempted according to Ayurvedic principles.

HYPOTHYROIDISM AND AGNI

Normalcy of *Agni* is a definite prerequisite for rhythmic body functions. Majority of the body's metabolic activity is controlled by thyroid hormones according to modern medicine and through *Jatharagni*, *Bhutagni* and *Dhatvagni* according to *Ayurveda*. Hence the cause of alteration in metabolic activity according to *Ayurveda*, is by vitiation of *dhatvagni*.^[3]

This vitiation can occur in two ways – when *Jatharagni* gets impaired, on one hand, its moieties which are distributed to *Dhatvagnis* get impaired disturbing the status of *Dhatvagnis* too, while, on the other hand, this *Jatharagnimandya* leads

to formation of *Ama* (undigested moieties) which in turn causes *Srotorodha*.^[4]

Due to above pathological sequences, vitiated *rasa Dhatu* is formed causing impairment of other *Dhatus* too and thus, a chain of pathological events is initiated. *Jatharagni mandya* can be corrected at an earlier state but once the vitiation of *Dhatvagnis* is set in, it cannot be rectified easily.

GALAGANDA

Galaganda has been defined as the swelling, big or small, which hangs like scrotum in the neck. *Charaka* attributes *Galaganda* only to vitiated *kapha dosha*^[5] but *Sushruta* and *Vagbhata* describe three types of *Galaganda*.

AVRITTA VATA

The term *Avarana* implies, to cover, to mask or to obstruct. Here *Gati* is unique feature of *Vata*, whenever its *Gati* is disturbed due to *Avarana* then its vitiation occurs.

2. CLINICAL

STUDY DESIGN

1) Patients were selected irrespective of age, sex caste, religion, social status etc.

2) Total number of 30 patients aged above 18 years diagnosed as hypothyroidism by TFT (Thyroid Function Test) was selected.

3) Valid written informed consent was taken from each patient prior to case taking.

4) Detail case of the patients was taken with the help of a specially designed case paper to find out the *Hetus*, *Purvaroop*, *Roopa* of hypothyroidism.

5) Further with the help of above data, *Samprapti* of hypothyroidism was established on the Ayurvedic basic principles.

SELECTION OF PATIENTS

I. INCLUSION CRITERIA

1) Patients in age group: 18 years and above suffering from hypothyroidism.

2) Patients of both the gender.

3) All the patients from OPD/IPD who have already been diagnosed as hypothyroidism by pathological investigations viz. TFT

II. EXCLUSION CRITERIA

- 1) Patients below 18 years.
- 2) All the patients suffering from heart disease, any major illness like cancer, TB, AIDS and pregnant women.

CRITERIA FOR ASSESSMENT:

Dosha, dushya, dhatu, mala, Ama, agni, ashaya, avayava, strotasa pariksha, strotodushti, dushti prakara, vyadhimarga, utpattisthana, vyaktisthana, sadhyasadhya, vyadhiswarupa, adhishtana, avarana, ashayapakarshaka gati, and dheedhruti-smruti

Nidan panchak:- Hetu, purvaroop, roopa, upashay/anupashay and samprapti.

HYPOTHYROIDISM - In hypothyroidism there is decrease in level of T3 and T4 and increase in level of TSH. Normal values of thyroid hormones in adults are:^[6]

T3: 86 -187 ng/dL

T4: 4.5-12.5 ug/dL

TSH: 0.3-5. UIU/mL

NIDAN

Adhyatmika vyadhi hetus are:

1. **Adibala pravritta hetu-** This *nidana* is found in patients of congenital hypothyroidism.
2. **Janmabala pravritta hetu-** Here *jada* (mandabuddhi) can be correlated with the condition of cretinism in young children.
3. **Doshabala pravritta hetu-** *Ama dosha* acts as the basic factor for the occurrence of hypothyroidism. Secondly *nidana* can be discussed as *vyadhi hetu* and *dosha hetu*.
 - a. **Vyadhi hetu:** Improper functioning of *avatu* (thyroid gland) is taken as *vishesh hetu*.
 - b. **Dosha hetu:** This includes the factors which cause *pitta kshaya* and *kapha vridhi, jatharagnimandya* and formation of

Ama dosha. It can be classified as a) *aharaja hetu* (dietary causes) b) *viharaja hetu* (causes related with life style) c) *manasika hetu* (psychological factors).^[7]

Kaphavrita udana – As *kapha dosha* is predominant in *urdhvajatrugata pradesh* and *ura* is the *sthana* for *udana vayu*, vitiated *kapha* obstructs the *gati* of *udana* and it leads to *kaphavritta udana* and shows symptoms of *kaphavritta udana* viz. difficulty in speech and voice (*vaksvara graha*), heaviness of body (*guru gatrata*), debility (*daurbalya*), discoloration (*vaivarnya*) and anorexia which are similar to the symptoms of hypothyroidism.^[8]

Ojovyapat —The symptoms of *ojovyapat* like *sthabdhagurugatrata, vatajashotha, varnabheda, glani, tandra, nidradhikya* are also observed in these patients of hypothyroidism.^[9]

Samprapti is defined as the manner in which the *doshas* are vitiated and traverse through the body and produce the disease.^[10] *Madhura, sheeta, guru, abhishandyadi ahara* and *divaswaap, avyayam* like *vihara* cause vitiation of *kapha dosha*. This vitiated *kapha dosha* is responsible for *samprapti* (aetiopathogenesis) of hypothyroidism in following different perspectives.

1. *Kledaka kapha vikruti*
2. *Jatharagnimandya* -Formation of *Ama*
3. *Sthansanshraya* at *galapradesha*
4. *Kaphavrita udana*
5. *Rasavaha* and *medovaha strotas dushti*

This *avarana* also impairs the normal function of *udan vayu* like *prayatna, urja* etc. Thus in hypothyroidism there may not be a direct *dushti* of *vata dosha* but as *vata* gets *avrutta* by vitiated *kapha* it causes pathogenesis and shows symptoms of *kaphavritta udana*.

All these above different pathogenesis collectively results in the disease called hypothyroidism.

1. Symptoms of Ama

Sr. No.	Symptoms of Ama	No. of patients	%
1.	<i>Balabhransha</i> (Loss of strength)	22	73.33
2.	<i>Gaurava</i> (Heaviness in the body)	20	66.66
3.	<i>Anil mudhata</i> (Delayed tendon reflexes or decreased bowel sound)	00	00
4.	<i>Alasya</i> (Lassitude)	12	12
5.	<i>Apakti</i> (Improper Digestion)	20	66.66
6.	<i>Nishthivana</i> (Spit Out)	00	00
7.	<i>Mala sanga</i> (Constipation)	13	43.33
8.	<i>Aruchi</i> (dysgeusia)	13	43.33
9.	<i>Klama</i> (Tiredness)	19	63.33

2. Symptoms of Ojovapat

Sr. No .	Symptoms of ojovapat	No. of patients	%
1.	<i>Stabdhatta</i> (stiffness)	00	00
2.	<i>Gurugatrata</i> (heaviness in the body)	20	66.66
3.	<i>Vataja shotha</i> (oedema)	09	30
4.	<i>Varna bheda</i> (discoloration of skin)	14	46.66
5.	<i>Glani</i> (fatigaibility)	22	73.33
6.	<i>Tandra</i> (drowsiness)	00	00
7.	<i>Nidra</i> (sleepiness)	19	63.33

3. Symptoms of kaphavritta udana

Sr. No.	Symptoms of kaphavritta udana	No. of patients	%
1.	<i>Vaksvara graha</i> (difficulty in speech and voice)	03	10
2.	<i>Guru gatrata</i> (heaviness of body)	20	66.66
3.	<i>Daurbalya</i> (weakness)	22	73.33
4.	<i>Vaivarnya</i> (discoloration)	14	46.66
5.	<i>Annanabhilasha</i> (Anorexia)	20	66.66

4. Symptoms of Rasa dhatu dushti

Sr. No.	Symptoms of Rasa dhatu dushti	No. of patients	%
1.	<i>Ashraddha</i>	06	20
2.	<i>Aruchi</i> (dysgeusia)	13	43.33
3.	<i>Arasadnyata</i> (loss of taste)	02	6.66
4.	<i>Hrillasa</i> (nausea)	01	3.33
5.	<i>Gaurava</i> (heaviness in the body)	20	66.66
6.	<i>Tandra</i> (drowsiness)	00	00
7.	<i>Angamarda</i> (bodyache)	08	26.66

ism has been explained in the terms of *avritta vata*.

Out of all symptoms of *Ama*, 73.33% patients showed *balabhransha* [loss of strength], 66.66% patients showed *gaurava* [heaviness in the body], 66.66% patients showed *apakti* [improper digestion]. Out of all symptoms of *ojovyapat*, 73.33% patients showed *glani* [fatigability], 66.66% patients showed *guru gatrata* [heaviness in the body]. Out of all symptoms of *kaphvritta udana*, 73.33% patients showed *daurbalya* [weakness], 66.66% patients showed *guru gatrata* [heaviness in the body] and 66.66% patients *agnimandya* [anorexia]. Out of all symptoms of *rasa dhatudushti*, 66.66% patients showed *gaurava* [heaviness in the body], 66.66% patients showed *agnimandya* [loss of appetite]. Out of all symptoms of *medo dhatudushti* 73.33% patients showed *daurbalya* [weakness].

CONCLUSION:

- The patients of hypothyroidism have to take the thyroid extract as a treatment throughout their life.
- In this disease the vitiation of *agni* not only takes place at *jatharagni* level but also at *dhatwagni* level hence long term management is required.
- Though the *udbhavasthana* of the disease is at *galapradesha* it cannot be restricted to *galganda* only.
- Observations highlight that major etiological factors found responsible in the occurrence of the disease in this study was *kapha prakopaka ahara, vihara*.
- Shedding light on the symptomatology of the disease on the basis of *Ayurvedic* fundamentals it becomes evident that *kaphadosha* is the chief culprit along with vitiation of *vata dosha*.
- Basically hypothyroidism can be correlated to *vatavyadhi*; especially of *ava-*

ranajanya vata vyadhi; wherein *udana* *vayu* gets *avritta* by *kapha dosha*. Hence hypothyroidism can be compared to *kaphavritta udana*.

- *Pradhan dosha* is *kapha dosha* and *pradhan dushya* is *rasa dhatu* and *medo dhatu*.
- The *udbhavasthana* is at *galapradesha*.
- *Adhishthana* and *vyaktisthana* of hypothyroidism is *sarva sharir*.
- The prognosis of disease is it is a *yapya vyadhi*.
- The management of hypothyroidism includes treatment of *agnimandya*, which includes multifactorial approaches i.e *nidan parivarajana*, use of *deepana, pachana* drugs and symptomatic treatment.
- The *dravyas* acting on *rasa dhatu* and *medo dhatu* along with the treatment of *kaphavritta udana* in the management of hypothyroidism may help in *samprapti bhanga*.
- Finally hypothyroidism may be correlated with *kaphavritta udana*.

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