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# A Critical Review of Subclinical Hypothyroidism in Ayurveda

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## ABSTRACT

*Subclinical Hypothyroidism* is a clinical syndrome which result from the deficiency of Thyroid hormones. Usually, it runs a chronic course with slow and insidious onset. Sometimes it is only accidentally diagnosed. Thyroid gland abnormality where, on one hand influences body metabolism up to a great extent, on the other hand, it is found more in females with ratio of male to female being 1:6, if left untreated it can lead to severe complication. In Ayurveda there is no direct comparison regarding symptoms of Subclinical Hypothyroidism but on the basis of clinical presentation it can be correlated with different entities as syndrome, so it is difficult to give a single Ayurvedic term for it, as there are many systems which are involved in the pathogenesis of Subclinical Hypothyroidism. Hence the symptoms of Pre-clinical and post clinical findings are compared with *Rasapradoshaja Vikaras*.

**Key words:** Subclinical Hypothyroidism, *Rasa dhatu*, *Agni*, *Agnimandhya*.

## INTRODUCTION

*Subclinical Hypothyroidism* is one of the conditions where a biochemical diagnosis in patients with or without normal T3 and T4 and raised TSH levels up to 10 IU/dl with specific cardinal symptoms.<sup>[1],[2],[3]</sup>

Curse of modern life style makes man suffer with various kinds of diseases that are often caused by physical and mental disturbances. The great numbers of such disturbances are contributed in hampering of endocrinal functions of the body.<sup>[4]</sup>

*Agni* is the important source for the proper digestion,

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assimilation and absorption of the food consumed by its nature it is very subtle. Any disturbance in its function due to any cause leads to the formation of *Aama* which inturn disturbs the metabolism of the whole body. Along with *Jataragni* other forms of *Agni* i.e. *Dhatwagni* and *Bhootagni* if disturbed also produces *Aama* in their respective abode.

Since many studies were carried out on Hypothyroidism by comparing *Medhovruddi*, *Galaganda* and *Kaphaja Shota*.

In Ayurveda there is no direct comparison regarding symptoms of *Subclinical Hypothyroidism* but on the basis of clinical presentation it can be correlated with different entities as Syndrome, so it is difficult to give a single Ayurvedic term for it, as there are many systems which are involved in the pathogenesis of *Subclinical Hypothyroidism*. Hence the symptoms of Pre-clinical and post clinical findings are compared with *Rasapradoshaja Vikaras*.

### Signs and Symptoms

| Signs                       | Symptoms         |
|-----------------------------|------------------|
| Cool peripheral extremities | Loss of appetite |
| Puffy face, hands & feet    | General Weakness |

|                          |                        |
|--------------------------|------------------------|
| (myxedema)               |                        |
| Bradycardia              | Sudden Weight gain     |
| Peripheral edema         | Hair fall              |
| Muscle aches / stiffness | Cold intolerance       |
| Carpal tunnel syndrome   | Forgetfulness          |
| Pallor                   | Puffiness of the face  |
| Forgetfulness            | Menstrual disturbances |

### Ayurvedic Perspective

In Ayurveda there is no clear cut comparison for *Subclinical Hypothyroidism*, but on the basis of its clinical presentation, it can be correlated with different entities which one explained either as symptoms or diseases, so it is difficult to give a single Ayurvedic term for it. The mixed signs and symptoms of all these systems leads to a complex clinical picture of *Subclinical Hypothyroidism*. The various entities which correlate with the *Subclinical Hypothyroidism* in this contest is *Rasapradosajavikara*.

### Rasapradosaja Vikaras<sup>[5]</sup>

1. *Bhojana Asradha* (aversion to food)
2. *Aruchi* (anorexia)
3. *Asya Vairasya* (tastelessness)
4. *Rasajnata* (loss of taste perception)
5. *Hrullasa* (nausea)
6. *Gaurava* (heaviness of the bodyache)
7. *Tandra* (drowsiness)
8. *Angasada* (body ache)
9. *Pandu* (anaemia)
10. *Srotorodha* (blockage of micro-nutrient channel)
11. *Klaibya* (infertility)
12. *Agninasha* (loss of digestive power)
13. *Ayathakala Vali* and *Palita* ( premature graying of hairs and wrinkling).

### General Symptoms

*Subclinical Hypothyroidism* presents signs and symptoms in many systems. For the critical study of the signs and symptoms in the light of Ayurvedic principals, and relationship of *Dosha* and *Dushya* in

each sign and symptoms of *Subclinical Hypothyroidism* has to be studied.

### Loss of appetite

It is due to *Mandagni* by influence of *Kapha Dosha* and *Rasa Dushti*.

### General weakness

Capability or strength for doing work / exercise depends upon the normal state of *Dehadhatu*. *Dhatuvaishmya* leads to *Daurbalya* and *Klama*. *Balakshaya* is included in a *Nanatmaja Vyadhi* of *Kapha Dosha*.

### Sudden weight gain

Weight gain occur because of *Guru Guna* of *Kapha Dosha* and *Pruthvi* and *Jala Mahabhuta* involved in *Kapha Dosha*. It can also be considered as *Subclinical Hypothyroidism* i.e. hypo functioning of *Dhatvagni*.

### Pallor

According to Ayurveda, *Pandutva* is due to *Rasadustijanya* as well as *Kapha Dosajanya*.

### Cold intolerance

Propagation of *Rasadhatu* and *Kapha Dosha* with its *Sheetaguna* leads to cold intolerance.<sup>[6]</sup>

### Puffiness of the face

Vitiated *Kapha* obstructs *Rasavaha Srotas*. As *Kapha* is composed by *Apa* and *Pruthvi Mahabhutas* and dominated by properties of heaviness and steadiness, Thickened features and puffy features appear.

In other words it is also correlated as *Kaphaja Shotha Lakshanas* viz., *Gaurava* (heaviness), *Anavasthitatva* (irregularity in onset and relief of inflammation), *Utsedha* (swelling), *Ushma* (local rise of temperature), *Sira Tanutva* ( dilatation of veins), *Lomaharsha* (horripilation), *Angavivarnata* (discolouration of the affected site) are the generalized signs and symptoms of *Shotha*.

According to our *Acharyas*, *Vata* and *Kapha* with *Pitta Anubandha* along with *Rakta*, *Mamsa*, *Meda* are responsible for manifestation of *Shotha*.<sup>[7]</sup>

### Hair loss

*Dhatvagnimandhya* (hypofunctioning of *Dhatu*) leads to augmentation of *Dhatu* which cannot nourish

Uttaradhatu i.e. *Asthi* which results in coarse and hair loss.<sup>[8]</sup>

### Forgetfulness

It is said that, natural state of *Kapha* is strength (*Bala*) for the body. But in Subclinical Hypothyroidism, *Kapha* is in vitiated state and *Manobala* is diminished. Abated *Manobala* may cause forgetfulness.

### Menstrual disturbances

*Rasavrudhi* occurs in Hypothyroidism as augmented *Rasa* is in *Asthayi Avastha* (unstable state). It may be unable to nourish *Upadhatu Artava* and *Uttara Dhatu Rakta*, As a result of this *Artava Pravrutti* (menstruation) is disturbed.

### Generalised pain

*Subclinical Hypothyroidism* can be considered as *Rasa Dhatvagni Mandya Janya Vikara* (hypofunctioning of *Rasa Dhatvagni*). Aggravation of *Vata* by *Vaisamaya* of *Dhatu* creates generalized aches and pain. *Angamarda* is mentioned as a *Rasaja Vikara*.

### Ayurvedic view

*Dushti* of *Rasadhatu* plays an important role in pathogenesis. *Dhatvagnimandaya* (hypofunctioning of *Dhatu*) is a major feature of the disease. Etiological factors aggravate *Kaphadosha* resulting in *Jatharagnimandya* (hypofunctioning of *Jatharagni*) and *Dhatvagnimandya* (hypofunctioning of *Dhatu*). In *Subclinical Hypothyroidism*, 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*.

### Dosha

Clinical picture shows the dominance of *Kaphadosha*. Majority of the *Nanatmaja Roga* of *Kaphadosha* can be included as a signs and symptoms of Subclinical Hypothyroidism. As Charaka opines that, *Sneha*, *Shaitya*, *Shukla*, *Gourava*, *Madhurya*, *Sthairyra*, *Pichchila* etc. are the effects produced in the body by

the action of *Kapha*; the condition accompanied with any of the above symptoms should be diagnosed as a *Kapha* disorder.<sup>[9]</sup>

### Dushya

*Dushti* of *Rasadhatu* plays a major role in pathogenesis. Many of *Rasajavikaras* as mentioned by Charaka are similar to the clinical features of Subclinical Hypothyroidism, as mentioned above. *Rasadhatvagnimandya* (hypofunctioning of *Rasa Dhatu*) leads to *Rasavruddhi* and over production of *Mala* of *Rasadhatu* i.e. *Mala Kapha-Vruddhi*.

### Samprapti Ghatakas

For the study of manifestation of Subclinical Hypothyroidism, in the light of Ayurvedic concepts of *Dosha*, *Dhatu*, *Upadhatu* and *Srotas*, involvement the following factory play their role in *Samprapti* of Subclinical Hypothyroidism.

- *Dosha* - a) *Kapha* – *Avalambaka Kapha*, *Kledaka Kapha*, b) *Vata* – *Samana Vata*, *Vyana Vata*
- *Dusya* – *Rasadhatu*
- *Agni* – *Jatharagni*, *Rasadhatvagni*, *Bhutagni* (mainly *Pritvi* and *Jala*)
- *Srotas* – *Rasavahasrotas*, *Manovahasrotas*.
- *Srotodusti* – *Sanga*
- *Adhithana* – *Sarvanga* specially in *Gala Pradesha*
- *Udbhavasthna* – *Amashaya*
- *Sanchara Sthana* – *Rasayani*
- *Ama* – *Jatharagnimandyajanya Ama*, *Dhatvagni Mandyajanya Ama*.
- *Vyaktasthana* – *Sarvasharira*

### Sadhyasadhya

The prognosis of the disease is *Sadhya* and *Kruchra Sadhya*, the cause behind the disease should be detected first, then the regime of the *Ausadha* (medicine), *Ahara* (diet) and *Vihara* (activities) should be decided. Since the main causative factor is *Agnimandya* and if the management is quite effective

in dealing with the proper management of the *Agni*, then it is prognosed as *Sadhya*.

According to modern science, the prognosis is good in case of Adult Subclinical Hypothyroidism, which return to normal health after treatment. In cretinism, the condition should be diagnosed before neurological damage and treated as early as possible, otherwise neurological abnormalities may be not reversible with therapy.

### Management

The line of treatment for *Rasadhatu Janita Vikara* told as *Langhana*<sup>[10]</sup> i.e. *Dashavidha Langanas* are explained according to *Roga-Rogi Bala*, Basically the idea behind the treatment is *Kapha* – dominated *Vatadosa Chikitsa*.

### Lakshanika Chikitsa (symptomatic treatment)

- Anorexia - *Agni Uttejaka, Amapachaka (Arochaka Chikitsa)*
- Weight gain - *Sthula Chikitsa*
- Anemia and Menstrual disturbances - could be corrected by *Pandu Chikitsa (Punarnava Manduram* is a liver stimulant, diuretic and iron supplement).
- Cold intolerance - *Svedana (Sagni and Niragni)*
- Hair loss - Corrected by *Siroabhyanga* and *Nasya*.
- Weakness - *Rasayana* as Immunomodulator.
- Generalised pain - *Snehana* and *Swedana*.
- Puffiness of the face and Myxedema - (*Kaphaja Sotha* and *Pandu Chikitsa*) Diuretics, *Swedana*

### CONCLUSION

The Thyroid gland produces two related hormones Thyroxin [T4] and Triiodothyronine [T3]. These hormones play a critical role in cell differentiation during development and help maintain thermogenic and metabolic homeostasis in the body. Deficiency of these hormones is known as Subclinical Hypothyroidism. It occurs due to the hypo functioning of Thyroid gland which results in decrease in body's basal metabolic rate (BMR). So keeping the metabolism

as a base Hypothyroidism can be understood in better way in terms of *Dhatwagnimandya* in Ayurveda. Hence medicines which are *Jataragni Vardhaka, Rasadhatwagni Vardhaka* are helpful to treat the condition. Although, after mere knowledge of disorders pertaining to Thyroid gland from the view of modern system of Medicines, one cannot directly correlate the disease in Ayurveda as a whole. Subclinical Hypothyroidism is not a single disease entity, there are many systems involved in the pathogenesis of Subclinical Hypothyroidism, hence we can consider as Syndrome i.e. group of symptoms.

### REFERENCES

1. Anthony S Fauci & Dennis L Kasper, Eugene Braunwald, Stephen L.Hauser, Joseph Loscalzo. Harrison's Principles of Internal Medicine, Volume-II, 17<sup>th</sup> edition, 2233.
2. David A.Warrell, Timothy M.Cox, John D.Firth. Oxford Text Book of Medicine. Vol-II, 5<sup>th</sup> Edition, 2010:1833.
3. Davidson's Principle and practice of Medicine edited by Nicholas A.Boon, Nicki R, Brain R.Walker 20<sup>th</sup> Edition, 2006:752,753
4. Aryavaidyan- A Quarterly Journal of The Arya Vaidya Sala- Kottakkal. ISSN 0970-4086, Vol XXIII, No 4 May-July 2010:245-251
5. Charaka samhita, with English translation by Prof.P.V.Sharma Vol I, Reprint 2008, Chaukamba Orientalia Varanasi. Sutrasthana,Chapter-28 Verse-9-10, Pp-228
6. Astangahrdaya Vagbhata Sutrasthanam-I English Translation and Commemetry by Dr.T.Sreekumar Vol I, Print 2013 Harisree Hospital Publications Thrissur, Chapter 11 Verse 7-8 Pp 250&251
7. Charakasamhita of Agnivesha Edited by Acharya Vidyadhar Shukla Vol-I Reprint 2011,Chaukamba Sansrit Pratisthana, Delhi Sutrasthanam, Chapter No 20 Verse-18 Pp 296.
8. Charakasamhita of Agnivesha Edited by Acharya Vidyadhar Shukla Vol-I Reprint 2011,Chaukamba Sansrit Pratisthana, Delhi Sutrasthanam, Sutrasthanam Chapter No-17 Verse-67 Pp 265.
9. Charakasamhita of Agnivesha Edited by Acharya Vidyadhar Shukla Vol-I Reprint 2011,Chaukamba Sansrit

Pratisthana, Delhi Sutrasthanam, Chapter No 20 Verse-18 Pp 296.

10. Charakasamhita of Agnivesha Edited by Acharya Vidyadhar Shukla Vol-I Reprint 2011,Chaukamba Sansrit Pratisthana, Delhi Sutrasthanam, Chapter No 28 Verse-25 Pp 431.

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