

## A REVIEW ARTICLE ON GALGANDA W.S.R. HYPOTHYROIDISM

Dr. Raman Sharma\*<sup>1</sup> and Dr. Pratibha<sup>2</sup><sup>1</sup>M.D (Swasthavritta), Assistant Professor, Department of Swasthavritta and Yoga, Shiv Shakti Ayurvedic Medical College and Hospital, Bhikhi, Mansa, India.<sup>2</sup>M.D (Rachna Sharir), Assistant Professor, Department of Rachna Sharir, Shiv Shakti Ayurvedic Medical College and Hospital, Bhikhi, Mansa, India.**\*Corresponding Author: Dr. Raman Sharma**M.D (Swasthavritta), Assistant Professor, Department of Swasthavritta and Yoga, Shiv Shakti Ayurvedic Medical College and Hospital, Bhikhi, Mansa, India. DOI: <https://doi.org/10.17605/OSF.IO/9D6PN>

Article Received on 29/12/2020

Article Revised on 19/01/2021

Article Accepted on 09/02/2021

**ABSTRACT**

As *Ayurveda* is an ancient holistic science yet it faces major challenges in modern world. In *Ayurveda*, endocrinological disorders are difficult to understand as the concept of hormone over production or under secretion is somewhat missing. In *Ayurveda*, thyroid gland disorders are correlated with *Galgand*, *Gandmaala* etc. Hence in this article we are trying to get the understanding of Hypothyroidism with *Galganda* through various *Ayurvedic* principles.

**KEYWORDS:** Endocrinological disorders, Thyroid gland, *Galgand*, *Gandmaala*, Hypothyroidism.**INTRODUCTION**

In modern world, *Ayurveda* is facing a major challenge in fundamental terms like *Dravyas* for making herbal preparation & the various *Yogas* i.e. formulatory compositions implication into various disorders.

Endocrinological disorders are one of them which are not completely described in *Ayurvedic* texts. Diseases of thyroid gland are not well understood. *Acharya Charaka* described *Galganda*, *Gandmaala* etc. as *Ek-deshiye sotha* in *Trisothiya Adhyaya* & also elaborated the concept of *Sotha* in its *Chikitsa Sthana*,<sup>[1]</sup> but lacks the certainty of disorders caused by thyroid gland. *Acharaya Charaka* also includes *Galgand* in *Nanatmaja Kaphaja Roga*,<sup>[2]</sup>

In *Ayurveda*, the concept of hormone over production or under secretion is somewhere missing. Hence, through this article we are trying to get the understanding of hypothyroidism with *Galganda* through various *Ayurvedic* principles.

**AIMS AND OBJECTIVES**

1. To find out the factors involved in hypothyroidism as per *Ayurvedic* principles.
2. To develop the concept of hypothyroidism in terms of *Ayurveda*.

**MATERIALS AND METHODS**

All valid books viz. *Samhitas* & their respective commentaries have been referred for the specific

materials & the topics are discussed on the basis of its conceptual part to draw out ultimate conclusion.

**Principles**

Thyroid hormones functions as a controller of pace of all of the processes in the body. This pace is known as metabolism, if there is underproduction of thyroid hormones every function of the body tend to get down.<sup>[3]</sup>

In *Ayurveda*, *Galganda* occurs when there is vitiation of *Vata* and *Kapha Doshas*, predominantly *kapha* which further results in disturbances of *Meda* and *Majja Dhatus*, resulting in formation of *Galganda*.<sup>4</sup> *Dushti* of *Rasadhatu* plays a major role in pathogenesis. Many of *Rasaja Vikaras*,<sup>[5]</sup> which have been mentioned in *Charak Samhita* are similar to the clinical features of hypothyroidism i.e. *Asradhdha*, *Aruchi*, *Gaurava*, *Tandra*, *Angamarda*, *Panduroga*, *Klabya*, *Srotorodha*, *Agnimadhya* etc. Hormonal disturbances are the dysfunction of *Agni*. *Rasadhatvagni-mandhyata* leads to *Rasa Vridhi* and over production of *Mala* of *Rasadhatu* i.e. *Mala Kapha Vridhi*. *Dhatvagnimandhya* is also the major features of the disease,<sup>[6]</sup> and all these features contribute with the modern concept of metabolism i.e., decreased Basal Metabolic Rate.

The vary commonest etiology of hypothyroidism is spontaneous atrophic hypothyroidism with a prevalence of 20-50 yrs of age and commonly among females resulting in non-goitrous type of hypothyroidism,<sup>[7]</sup> whereas Hashimoto's thyroiditis is another common example for goitrous type of hypothyroidism which is an

autoimmune disorder with no specific causes.<sup>[8]</sup> In *Sushruta Samhita* at different places, under different topics few references for *Galganda Nidana* are available.<sup>[9]</sup> Since *Galganda* is considered as *Nanatmaja* type of disease of *Kapha*, the provocative factors of *Kapha* can also be taken as the cause of it. All etiological factors given either for *Sotha Roga* or *Kapha Prakopa* have also been reviewed. In *Rasavishesiya Adhyaya* of *Sutrasthana*, *Sushruta* mentions that excessive use of *Madhur Rasa* can produce *Galganda*,<sup>[10]</sup> *Charaka* has the opinion for *Madhura Rasa*.<sup>[11]</sup> In *Drava Dhavya Vidhi Adhyaya* of *Sutrasthana*, while describing the quality of water, *Sushruta* mentions that, water of river of Himalaya Pradesh produces *Galgand*.<sup>[12]</sup> Today in mountaining region of Himalaya and Himachal Pradesh endemic Goiter is more common. It is due to the less iodine content in water.

### Sign & Symptoms of Hypothyroidism<sup>[13]</sup>

- Anorexia
- Weight gain
- Hoarseness of voice
- Anaemia
- Constipation
- Excessive sleep
- Bradycardia
- Coarse and dry skin
- Menstrual disturbances
- Generalized pain
- Weakness
- Myxedema

The involvement of *Dosha*, *Dhatu* and *Dhatvagni* are more clear by following comparison of signs and symptoms of hypothyroidism with an *Ayurvedic* approach.

1. **Anorexia:** It is due to *Mandagni* by influence of *Kapha Dosha* and *Rasa Dhusti*.
2. **Weight Gain:** Because of *Guru Guna* of *Kapha Dosha* and *Pruthvi* and *Jala Mahabhuta* involved in *Kapha Dosha*, the weight gain occur. It can also be considered as, hypometabolism i.e. hypofunctioning of *Dhatvagni*. *Dhatvagnimandhya* leads to less formation of *Dhatu*s and thus, accumulation of *Upadhatus* and *Mala* which may result in weight gain.
3. **Hoarseness of voice:** It can be also said that, due to increase in *Manda Guna* of *Kapha*, Hoarseness of voice appears. *Sharangdhara* has mentioned hoarseness of voice as a *Kaphaja Vikara*.<sup>[14]</sup>
4. **Anaemia:** According to *Ayurveda*, *Panduta* is due to *Rasa Dushtijanya* as well as *Kapha Dosha*.<sup>[15]</sup>
5. **Constipation:** From the *Ayurvedic* point of view, the *Appakarshani Gati* of *Mahasrotasa*, which plays a role in *Anulomana* of *Mala* and *Vayu*, gets to slow down, owing to the aggravated *Kapha* in *Pakvashaya* with increase of *Manda Guna* of *Kapha*.
6. **Excessive sleep:** *Kapha Vriddhi* causes *Tandra* and

*Atinidra*.<sup>[16]</sup> *Rasa Vridhi* also leads to excessive sleep.<sup>[17]</sup>

7. **Bradycardia:** Bradycardia may result from propagation of *Kapha* with its *Mandaguna*.
8. **Coarse and Dry Skin:** Augmented *Rasa* cannot nourishes *Rakta Dhatu* leads to dryness and coarseness of skin.<sup>[18]</sup>
9. **Menstrual Disturbances:** *Rasa Vridhi* occurs in hypothyroidism as augmented *Rasa* is in *Asthayi Avastha*. It may be unable to nourish *Upadhatu Artava* and *Uttar Dhatu Rakta*. As a result of this *Artava Pravriti* may be disturbed.
10. **Generalised pain:** Hypothyroidism can be considered as *Dhatvagnimadhyajanya Vikara*. Aggravations of *Vata* by *Vaishmya* of *Dhatu*s create generalized aches and pain. *Angamarda* is mentioned as a *Rasaja Vikara*.<sup>[19]</sup>
11. **Weakness:** Capability for work or for exercise or strength depends upon the normal state of *Dehadhatu*. *Dhatu Vaishmya* leads to *Daurbalya* and *Klama*.
12. **Myxedema:** This non-pitting type of oedema found in hypothyroidism is due to increase in mucoprote in ground substance. This is due to *Sthira Guna* of *Kapha Dosha*. All the above symptoms indicate the involvement of *Kapha Dosha*, *Rasa Dhatu*, and *Rasa Dhatvagni* in the hypothyroidism. Above all *Kapha Dosha* plays a major role in the disease hypothyroidism.

### CONCLUSION

Time to time it is proved that fundamentals of *Ayurveda* are very strong and deep rooted. Some topics like endocrinological disorders are over looked and completely explained in the texts. After making some efforts we correlate the *Galganda* with hypothyroidism. Thereby future aspects of treating such conditions through *Ayurveda* must be carried out.

### REFERENCES

1. Charak Samhita-Elaborated vidyotini hindi commentary part-2, by Pt. Kashinath Panday & Dr. Gorakhnath Chaturvedi, Chaukhambha Bharti Academy, Varanasi, 2013; Chikitsa Sthana, Chapter, 12.
2. Charak Samhita-Elaborated vidyotini hindi commentary part-1, by Pt. Kashinath Panday & Dr. Gorakhnath Chaturvedi, Chaukhambha Bharti Academy, Varanasi, 2013; Sutra Sthana, Chapter-20, Slok no, 17.
3. Hypothyroidism-Wikipedia, the free encyclopedia, en.m.wikipedia.org/wiki/hypothyroidism.
4. Susruta Samhita-Ayurveda-Tattva-Sandipika, Hindi Commentary part-1, by Kaviraj Ambikadutt Shastri, Chaukhambha Sanskrit Sansthan, Varanasi, 2006 Reprint, Nidana Sthana, Chapter-12, Slok no.23.
5. Charak Samhita-Elaborated vidyotini hindi commentary part-1, by Pt. Kashinath Panday & Dr.

- Gorakhnath Chaturvedi, Chaukhambha Bharti Academy, Varanasi, 2013, Sutra Sthana, Chapter-28, Slok no.9.
6. Ashtang Hridya, Hindi Commentary Part-1, by Dr Brahmanand Tripathi, Chaukhambha Sanskrit Pratishthan, Delhi, 2011 Reprint, Nidana Sthana, Chapter-12, Slok no.1.
  7. Davidson's principles & practice of Medicine, 19th edition, 2002, P.699.
  8. Davidson's principles & practice of Medicine, 19th edition, 2002, P.701.
  9. Susruta Samhita-Ayurveda-Tattva-Sandipika, Hindi Commentary part-1, by Kaviraj Ambikadutt Shastri, Chaukhambha Sanskrit Sansthan, Varanasi, 2006 Reprint, Sutra Sthana, Chapter-42, Slok no.12 & Chapter-45, Slok no.21.
  10. Susruta Samhita-Ayurveda-Tattva-Sandipika, Hindi Commentary part-1, by Kaviraj Ambikadutt Shastri, Chaukhambha Sanskrit Sansthan, Varanasi, 2006 Reprint, Sutra Sthana, Chapter-42, Slok no.12.
  11. Charak Samhita-Elaborated vidyotini hindi commentary part-1, by Pt. Kashinath Panday & Dr. Gorakhnath Chaturvedi, Chaukhambha Bharti Academy, Varanasi, 2013, Sutra Sthana, Chapter-26, Slok no. 41- 42.
  12. Susruta Samhita-Ayurveda-Tattva-Sandipika, Hindi Commentary part-1, by Kaviraj Ambikadutt Shastri, Chaukhambha Sanskrit Sansthan, Varanasi, 2006 Reprint, Sutra Sthana, Chapter-45, Slok no.21.
  13. <https://www.healthline.com/health/hypothyroidism>.
  14. Sarangadhara, Sarangadhara Samhita, Poorvkhanda by Prof. K.R. Srikantha Murthy, Chaukhamba Orientalia publications, Varanasi, 2007, chapter -7, Slok no.27.
  15. Susruta Samhita-Ayurveda-Tattva-Sandipika, Hindi Commentary part-1, by Kaviraj Ambikadutt Shastri, Chaukhambha Sanskrit Sansthan, Varanasi, 2006 Reprint, Sutra Sthana, Chapter-24, Slok no.10.
  16. Susruta Samhita-Ayurveda-Tattva-Sandipika, Hindi Commentary part-1, by Kaviraj Ambikadutt Shastri, Chaukhambha Sanskrit Sansthan, Varanasi, 2006 Reprint, Sharir Sthana, Chapter-4, Slok no.55.
  17. Ashtang Hridya, Hindi Commentary Part-1, by Dr Brahmanand Tripathi, Chaukhambha Sanskrit Pratishthan, Delhi, 2011 Reprint, Sutra Sthana, Chapter-11, Slok no.7-8.
  18. Ashtang Sanghra-Hindi commentary, by Dr.Ravidutt Tripathi, Chaukhambha Sanskrit Pratishthan, Delhi, 2005 Reprint, Sutra Sthana, chapter-19, Slok no.10.
  19. Charak Samhita-Elaborated vidyotini hindi commentary part-1, by Pt. Kashinath Panday & Dr. Gorakhnath Chaturvedi, Chaukhambha Bharti Academy, Varanasi, 2013, Sutra Sthana, Chapter-28, Slok no.9.