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Case Study

STEADFAST AYURVEDIC MANAGEMENT IN HYPOTHYROIDISM

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ABSTRACT

Hypothyroidism is an endocrine disorder that mainly occurs due to insufficient thyroid gland stimulation or primary gland failure by pituitary or hypothalamus gland. It is estimated to have affected 2-5% of world population. It is quite challenging to decipher the symptoms of hypothyroidism from other systemic disorders as they have quite similar presentation. The chaotic lifestyle, faulty food habits, reduced physical activity, over exertion at work, subjection to various environmental changes have created a vicious cycle disrupting the endocrine functioning of body. With rapid rise in incidence, dependency on lifelong thyroid hormone replacement therapy is preferred. Ayurveda being ancient system of medicine is highly efficient in healing the endocrine dysfunction. In context of Ayurvedic review the symptoms of hypothyroidism clearly depicts the involvement of *Mandha agni.* This particular case can be correlated with *Galaganda.* Case intervention: A 50-year-old- female patient visited the ENT OPD of Patanjali Ayurveda Hospital, Haridwar, with diffuse thyroid swelling and the thyroid profile test revealing increased TSH level of 8.12 uIU/ml for 12 years. The patient presented with USG neck suggestive of diffuse thyroid nodule. She earlier visited various allopathic clinics and was diagnosed with hypothyroidism and was currently taking Thyroxine sodium tablet 75 mcg. **Conclusion:** Ayurvedic protocol aimed at holistic approach by pacifying the vitiated *Doshas* and showing significant reduction in level of TSH and providing symptomatic relief. It helped the patient in withdrawing from dependency on thyroid hormone replacement medicines.

INTRODUCTION

Thyroid gland produces 2 related hormones i.e. Thyroxine (T_4) and Triidothyronine (T_3). These hormones play a crucial role in cell differentiation during growth and development & helps to maintain the thermogenic and metabolic homeostasis in adult by acting through thyroid hormone receptors (alpha and beta receptors).[1] Thyroid hormone is derived from Tg, a large iodinated glycoprotein. After secretion into thyroid follicle, Tg is iodinated on tyrosine residues that are subsequently coupled via an ether linkage. Reuptake of Tg into thyroid follicular cell allows proteolysis & release of newly synthesized T_4 & T_3.[2] Thyroid disorder is one of the prime health disorders having global affect. A study published in 2011 reported that there were 42 million out of total population suffering from thyroid disorders, out of which subclinical hypothyroidism is most common with prevalence of 5.4%.[3] Hypothyroidism is a common condition with various cause like autoimmune, congenital, idodine deficiency, iatrogenic cause. Iodine deficiency is the most common cause of hypothyroidism worldwide. As per WHO reports about 2 billion people are iodine deficient globally.[4] Prevalance of hypothyroidism increases with age and females are affected more than males.[5]

It is mainly of 3 types- Primary (occurs due to abnormalities in thyroid gland)[6], Secondary and Tertiary (occurs due to impairment of pituitary and hypothalamus gland).[7] Clinical symptoms include fatigue, dry skin, brittle nails, weight gain, constipation, cold intolerance, loss of libido, muscle stiffness and

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menorrhagia. Sign present are periorbital oedema, hoarse voice, anaemia etc. For hyperthyroidism, anti-thyroid medications and surgery are viable options while in case of hypothyroidism, lifelong thyroid hormone replacement therapy is preferred.[8] These medications cause several inevitable side effects such as hair loss, muscle weakness, loss of appetite.[9] The American Thyroid Association (ATA) has listed Ayurveda as a choice of complementary and alternative medicine.[10] Ayurvedic protocol is highly efficient in providing treatment without causing any adverse effects.

MATERIAL AND METHODS

Case Report

Patient information and Clinical findings

A 50- year-old female patient visited the ENT OPD of Patanjali Ayurveda Hospital, Haridwar, with chief complaints of weakness, lethargy, irregular menstruation, weight gain, dry skin, hair loss, excessive sweating, poor memory since 12 years. She was a known case of hypothyroidism since 12 years. On examination, a localised soft painless swelling was present in anterior region of neck. The patient had no history of hypertension, diabetes, cardiac problems, or any other complicated diseases. Upon general examination bowel movements, micturition and appetite were all normal. Vitals signs were also within normal limits. The patient was previously on homeopathic medications.

Diagnostic Assessment

The patient underwent investigation including CBC, thyroid profile, USG Neck. The reports revealed raised TSH value of 8.12uIU/ml and USG findings showed diffusely enlarged thyroid gland and heteroechoic with coarse echotexture and increased vascularity. The right lobe measured 5.6x 3.8x 3.3cm and left lobe measured 6.1x 3.1x 3.2 cm.

Timeline

The patient visited the ENT OPD of Patanjali Ayurveda Hospital on 26 April 2023. She was prescribed oral medications for 1 month. She made second visit to the OPD on 31 May 2023 and was advised same oral medications along with some dietary and lifestyle modifications like regular exercise, proper sleep schedule, avoiding stale, spicy, sour, non-veg and fast food.

Treatment

The Ayurvedic intervention was planned according to *Rogabala* (strength of disease) and *Aturbala* (strength of patient). The following medication was administered to patient are mentioned in Table no 1.

Table 1

Date	Name of Drug	Dose	Route
26/04/23 to 31/05/23 onwards same medication continued	1. *Kanchnaar Ghanvati* 2. *Thyrogrit (Dhanyak, Kanchnaar twak, Singhada, Baheda, Punarnava, Trikatu, Shuddh guggl)*	2 tab each twice a day after meal with lukewarm water	Oral
	3. *Ekangveer Rasa* 10 gm *Swarnamakshik Bhasm* 5gm *Praval Pishti* 10 gm *Godanti Bhasm* 10 gm	Mixing all the contents together and taking 1 tsf BD before meal with lukewarm water	Oral
	4. *Dashmool Kwath*	Mix 1 tsf of with 4 cups of water reduce it ¼ and take it twice a day before meal	Oral
12/09/23 to 27/04/24	1. *Kanchnaar Gugglu* 2. *Thyrogrit (Dhanyak, Kanchnaar twak, Singhada, Baheda, Punarnava, Trikatu, Shuddh guggl)*	2 tab each twice a day after meal with lukewarm water	Oral
27/04/24	1. *Kanchnaar Ghanvati*	2 tablet twice a day after meal with lukewarm water	Oral
	2. Divya Phyter Tablet (*Haritaki, Vibhtaki, Amlaki)*	2 tablet twice a day after meal with lukewarm water	Oral

Follow up

Patient visited the OPD for first follow up on 12/09/2023 and second follow up on 27/04/2024.

RESULT

As per patient's previous reports, T_3 & T_4 level were within normal biological reference range whereas TSH level was found to be very high i.e., 8.12uIU/ml in January 2023. After taking oral Ayurvedic medications and properly following the *Pathya ahara* and *vihara* for 4 months and 14 days, there was significant reduction in TSH levels from 8.12 uIU/ml to 4.207 uIU/ml enlisted in table no 2 along with major relief in symptoms like weakness, hair loss, lethargy, skin dryness etc. Overall, a satisfactory result was observed in patient's clinical condition. After treatment USG revealed right lobe 3.3cm, left lobe 3.2cm.

Table 2

S.No	Date	TSH
1.	28/01/2023	8.12 uIU/ml
2.	31/05/2023	7.84 uIU/ml
3.	09/09/2023	4.207 uIU/ml
4.	06/04/2024	4.709 uIU/ml

DISCUSSION

The primary cause of hypothyroidism is the vitiation of the *Vata* and *Kapha doshas*. The *Jatharagni* is deranged by the vitiated *Doshas*, which finally results in the generation of *Ama* and vitiating the *Rasa* and *Meda dhatu*. The body channels are blocked *Srotorodha* by this *Ama.* Accumulation of *Kapha* and *Meda dhatu* leads to symptoms like lethargy, fatigue, weight gain, glandular enlargement. Hormonal disturbances are due to dysfunction of *Agni*. Due to various *Hetus,* diminution of *Agni* at *Dhatu* level occurs along with *Sanga* in various *Srotas* hence, impairing the related *Dhatu* functions which compromise *Dhatu Saras* leading to both physical and mental symptoms. Thus, the conceptual analysis of symptomatology of hypothyroidism helps us to identify it as *Kapha Pradhan Tridosha Vyadhi* with *Rasa* and *Medo dushti. Galaganda* mentioned in Ayurvedic texts has similar symptoms as hypothyroidism. *Acharya Charak* mentioned it under 20 *Nanatmaja sleshma vikaras*.[11] According to *Acharya Sushruta, Galaganda* is described as swelling around the neck region. He classified *Galaganda* into 3 types *Vataja, Kaphaj, Medoja galganda.*[12] *Acharya Vagbhata,* explained *Galaganda* as painless, slow growing swelling around the neck region resembling scrotal sac caused due to vitiation of *Vata, Kapha* and *Meda*.[13]

The fundamental treatment principle of Ayurveda is *Nidan parivarjan* which means restraining from unhealthy food habits (*Apathya ahara*) and lifestyle (*Apathya Vihar*). *Kanchnar* (*Bauhiniua tormentosa)* is considered as drug of choice in both thyroid gland enlargement as well as hypothyroidism. It has *Ruksha, Laghu gunas, Kashaya rasa, Katu vipak* but its *Prabhava* is *Gandamala nashan*. Because of its strong astringent properties, *Kanchanar* has a tremendous potential to dry out the vitiated *Kapha* and *Meda*. Its ability to enhance absorption, or *Grahi*, aids in the removal of extra fluid from tissues.[14] *Kanchnaar gugulu* is indicated in *Apachi* & *Arbuda chikitsa*.[15] Considering the qualities of *Gugglu* as *Ruksha, Laghu, Sukshma gunas, Ushna virya, Katu vipaka*, and *Lekhana* (scraping), is regarded as the best *Vata shamak* and *Medohara* (hypolipidemic) medication.[16] Overall, *Kanchnaar guggulu* alleviates the *Kapha* and *Medodushti*, unclogs the *Srotorodha* (channel obstruction) and boosting the *Jatharagni*.[17] Thyrogrit which has *Dhanyak, Kanchnaar twak, Singhada, Baheda, Punarnava, Trikatu, Shuddh guggul* as ingredients. This formulation provides optimal *jatharagni* regulation therefore regulating the metabolism and contributing to overall energy levels and thyroid wellness. *Ekangveer ras* and *Swarnamakshika bhasma* boosts immune system and alleviates symptoms like weakness, debility. *Praval pishti* along with *Godanti Bhasma* helps in pacifying the *jatharagni. Dashmoola kwath* has anti-inflammatory and *Tridosha shaman* property.

With certain *Asanas* and *Pranayams*, *Yoga* can also aid in the management of hypothyroidism. *Asanas* like *Suryanamskar, Naukasana, Bhujanasan, Matsyasana, Halasana*, *Sarvangasana* and *Pranayams* such as *Anulom vilom*, *Bhastrika, Ujjayi* play beneficiary role in eliminating thyrotoxins from body, maintaining proper blood circulation.[18]

CONCLUSION

Hypothyroidism is fast emerging lifestyle disorder which leads to metabolic disturbances in the body. Ayurvedic intervention offers a holistic approach to managing health conditions, including hypothyroidism without apparent evidence of any adverse effect. With the right use of Ayurvedic drugs and lifestyle changes, one can not only reduce TSH levels in hypothyroidism but also boost the thyroid glands natural activity.

Essentially, hypothyroidism is a *Vata kapha samsarga* condition and occurs due to involvement of *Dosha, Dhatu, Agni*. During hypothyroidism treatment, all pathogentic elements must be addressed, with a focus on body, mind, and *Dosha* strength. Hence, adopting a strict lifestyle and a healthy diet regimen

may act as an adjuvant in reducing the harmful effects and working synergistically with medications in curing the disease.

REFERENCES

1. Longo, D., Fauci, A., Kasper, D., Hauser, S., Jameson, J., & Loscalzo, J. (2011)
   Harrison's Principles of Internal Medicine 18th Edition Vol II, The McGraw Hill companies, Inc., 2012 Page 2911.
2. Longo, D., Fauci, A., Kasper, D., Hauser, S., Jameson, J., & Loscalzo, J. (2011)
   Harrison's Principles of Internal Medicine 18th Edition Vol II, The McGraw Hill companies, Inc., 2012 Page 2913.
3. Alam Khan, M. Muzaffar Ali Khan and Shamim Akhtar, 2002. Thyroid Disorders, Etiology and Prevalence. Journal of Medical Sciences, 2: 89-94.
4. Anthony S. Fauci, Dan L.Longo, Dennis L. Kasper, Stephen L. Hauser,J. Larry Jameson, Joseph Loscalzo, et al., Disorders of the Thyroid Gland, Chapter 341, in Harrison's Principles Of Internal Medicine 18th edition. The McGraw Hill companies, Inc., 2012 Page 2911
5. Unnikrishnan AG, Kalra S, Sahay RK, Bantwal G, John M, Tewari N, Prevalence of hypothyroidism in adults: An epidemiological study in eight cities of India. Indian J Endocrinal Metab. 2013; 17 (4): 647-52.
6. Smith JW, Evans AT, Costall B, Smythe JW. Thyroid hormones, brain function and cognition: a brief review. Neuroscience & Biobehavioral Reviews. 2002 Jan 1; 26(1): 45-60.
7. Tortora GJ, Derrickson BH. Principles of anatomy and physiology. John Wiley & Sons; 2018 May 15.
8. Hypothyroidism (underactive thyroid). Mayoclinic. org. 3 Nov. 2018. https://www.mayoclinic.org/diseases-conditions/hypothyroidism/diagnosis-treatment/drc-20350289 (16 Jan. 2019)
9. Hypothyroidism (Underactive). Thyroid.org. https:// www.thyroid.org/hypthyroidism (16 Jan 2019)
10. Complementary and Alternative Medicine in Thyroid Disease (CAM). Thyroid.org. https://www.thyroid.org/thyroid-disease-cam (16 Jan 209)
11. Pt Sastri Kashinatha & Chaturvedi Gorakhanath, Charak Samhita with elaborated Vidyotni Hindi Commentary Part I, Reprint Edition 2016, Varanasi, Chaukambha Bharati Academy, Sutrasthan 20/17, Page no 405.
12. Shastri Ambikadutta, Sushruta Samhita with Ayurveda Tattva Sandipika Part I, Reprint Edition 2018, Varanasi, Chaukambha Sanskrit Sansthan, Nidan Sthana Chapter 11/23, Page no 355.
13. Gupta Atrideva, Ashtanghridyam of Vagbhata with Vidyotini Hindi Commentary, Reprint Edition 2019, Varanasi, Chaukhambha Prakashan, Uttarsthan 21/53 Page no
14. Sharma Priya Vritt, Dravya Guna Vigyana, Part 2, Chaukhambha Bharti Academy, Reprint 2006, Page 236.
15. Shastri Laxmipati, Yog-Ratnakar with Vidyotini Hindi Commentary, Reprint 2015, Varanasi, Chaukambha Prakashan, Page no 150.
16. Amit et al. World Journal of Pharmaceutical Research, Vol 4, Issue 06, 2015 Page 670.
17. Sastry J.L.N. Illustrated Dravyaguna Vijyana, Vol II. Second edition. Varanasi, Chaukambha Sanskrit series, 2005; 115: 118-119.
18. Swami R. Yoga, Its Philosophy and Practice. Divya Prakashan Haridwar India, 2007.

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