WORLD JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.wjpmr.com

<u>Case Report</u> ISSN 2455-3301 WJPMR

AYURVEDIC MANAGEMENT OF HYPOTHYROIDISM: A CASE REPORT

Dr. Ankush Patle^{1*}, Dr. Rupali Khobragade², Dr. Medha Joshi³ and Dr. Vrinda Kurande⁴

¹PG Scholar, in Dept. of Kayachikitsa. ²HOD & Professor, in Dept. of Kayachikitsa.

³Guide & Professor, in Dept. of Kayachikitsa.

⁴Associate Professor, in Dept. of Kayachikitsa PDEA'S College of Ayurved & Research Centre, Nigdi, Pune.



*Corresponding Author: Dr. Ankush Patle PG Scholar, in Dept. of Kayachikitsa.

Article Received on 08/08/2024

Article Revised on 28/08/2024

Article Accepted on 18/09/2024

ABSTRACT

Thyroid disorders are becoming challenging problems to the medical profession throughout the world. The hypometabolic problems are due to low digestive fire (mandagni) or underactive thyroid gland. Patients of Hypothyroidism are seen worldwide. Hormone replacement therapy has become very popular and undoubtedly effective. But it has been observed some of patients even after administrating thyroxine in appropriate dosage are not symptom free though their TSH levels has been brought to normal. Such patients has to seek some alternative therapies for other symptomatic relief like Agnimandya and this patients choose Ayurvedic treatment.^[1] A 47 years old female patient presented with symptoms of hypothyroidism at PDEA's Ayurved Rugnalaya. Ayurvedic Shaman Chikitsa was given which showed significant results and patient got symptomatic relief along with normal lab (TSH) Values.

KEYWORDS: Thyroid Disorders, Hypothyroidism, Mandagni, Aama (Āma denotes the abnormal or impaired process of digestion and metabolism that leads to build up of toxic by-products), Thyroxine, Shaman Chikitsa.

INTRODUCTION

In patient suffering from Hypothyroidism (suffering from mandagni) BMR is low or it can be explained that anabolism is more than catabolism. There is weight gain, Constipation, cold intolerance etc and decreased Heart rate(Bradycardia) among the sufferers. These patients can be treated either by advising improving their lifestyle, by administrating such drugs which can increase the digestive fire and Dhatwagni. Such preparations/medications are abundantly found in ayurvedic literature.^[2] This is a case of 47 years old female patient who visited at PDEA's Ayurved Rugnalaya with symptoms of Hypothyroidism. This patient was on Tab Thyroxine 50 mcg since 5 years, but did not got relief for the same. So patient took ayurvedic shaman chikitsa and got relief in the symptoms along with the significant decline in higher values of TSH levels.

Patient details

A 47 years old female patient came to OPD No 117, PDEA's Ayurved Rugnalaya on 17/01/2023 with Following Complaints.

| S- NO | Complainta | Gradation | | | | Duration | |
|-------|--------------------|-----------|---|---|---|--------------------------------|--|
| Sr NO | Complaints | 0 | 1 | 2 | 3 | Duration | |
| 1 | Puffiness | | | | | On and off since 2 to 3 months | |
| 2 | Oedema | | | | | intermittent | |
| 3 | Dry and Coarse kin | | | | | On and off since 2 to 3 months | |
| 4 | Breathlessness | | | | | On and off since 2 to 3 months | |
| 5 | Constipation | | | | | Intermittent | |
| 6 | Fatigue | | | | | Since 2 months | |
| 7 | Hairfall | | | | | On and off since 2 to 3 months | |

www.wjpmr.com

| Symptoms | | Score | |
|--|------------------------|--------------------------|--|
| a. Puffiness | | | |
| Absent | | 0 | |
| Occasional | 1 | | |
| Daily periorbital edema/puffin | 2 | | |
| relieved in later part of day | | | |
| Persistent | 3 | | |
| b. Edema | | | |
| Absent | | 0 | |
| Edema over lower/upper extrem | mities | 1 | |
| Edema over both extremities | | 2 | |
| Edema all over the body | | 3 | |
| c. Dry and coarse skin | | | |
| No dryness | | 0 | |
| Dryness after bath only | 1 | | |
| Dryness all over body but relie | ved by oil application | 2 | |
| Dryness not even relieved by o | oil application | 3 | |
| d. Breathlessness | | | |
| Absent | | 0 | |
| Occasionally, only after strenu | ous workout | 1 | |
| Even on climbing upstairs, but | relieved by rest | 2 | |
| Felt in routine work - bathing, | changing clothes | 3 | |
| e. Constipation | | | |
| Frequency | Consistency | Straining | |
| Once a day-0 | Shithila-0 | No-0 | |
| Once in two days-1 | Madhyama-1 | Occasional bearable-1 | |
| Once in three days-2 | Kathina-2 | Frequently, | |
| Once in more than three days-3 | Granthil-3 | severe-2 | |
| f. Weakness | | | |
| Able to exercise without difficu | ulty | 0 | |
| Able to do mild exercise | 1 | | |
| Able to do only mild work | 2 | | |
| Able to do mild work with diff | 3 | | |
| Not able to do even mild work | 4 | | |
| Unable to do even day-to-day i | 5 | | |
| g. Lethargy | | | |
| Doing work satisfactorily with | proper vigor in time | 0 | |
| Doing work without desire, un | 1 | | |
| time | | | |
| Doing work without desire, un of mental pressure and not in t | 2 | | |
| Not starting any work in his/he doing little work very slow | 3 | | |
| Does not have any initiation ar | nd not want to work | 4 | |
| even after pressure | | | |
| h. Fatigue | | | |
| Normal | | 0 | |
| Patient likes to stand in compa | 1 | | |
| Patient likes sit in comparison | | 2 | |
| Patient likes to lie down in con | 3 | | |
| Patient likes to sleep in compa | 4 | | |
| i. Muscle ache | ison with lying down | 50. T | |
| No | | 0 | |
| | | 1 | |
| Relieved by rest Muscle ache | | 1 | |
| Not relieved by rest but relieve | d by Ext application | 2 | |
| Requires external application a | 3 | | |
| Present consistently | 4 | | |
| Duration of menstrual blood | | -+ | |
| | 0 | | |
| 4-7 days | 0 | | |
| 3 days | | 1 | |
| 2 days | | 2 | |
| 1 day | | 3 | |
| k. Interval between two cycles | | | |
| 25-29 days | | 0 | |
| 35-39 days | 1 | | |
| 40-45 days | 2 | | |
| | | 3 | |
| >45 days | | | |
| l. Hair fall | | | |
| >45 days 1. Hair fall Absent | | 0 | |
| l. Hair fall Absent Hair fall on washing | | 1 | |
| l. Hair fall Absent | | | |

Gradation Of Symptoms^[3] History of illness

Patient was known case of hypothyroidism since last 5yrs on regular tab thyroxine 50mcg with intermittent complaints of puffiness over face, Oedema, dry and coarse skin, constipation, fatigue, hairfall. Despite of taking regular tab thyroxine patient is having above complaints along with raised tsh levels so she approached our opd for further ayurvedic management.

L

General History

No history of any previous serious disease or Hospitalization.

No history of Hypertension, Diabetes mellitus

No history of COVID-19, Vaccinated 2 doses for COVID-19

I

L

General Examination Ashtavidha Pariksha

Naadi- vata-kaphajagati with pulse rate of 84/min Mootra-4-5 times a day in frequency Mala-Difficulty in defecation with hard stool in consistency Jivha- Sama (coated and moist) Shabda- Spastha Sparsha-Ruksha twacha (dry skin) Druk- Spastha Akruti- Madhyam

Udar parikshana- alpa udaraadhman Ura parikshana- Avishesh P-84/min BP-134/84mmhg Weight-59 kgs Height-157 cm BMI-24.1 Satva-Madhyam Prakruti- Kapha Pradhan Vataj

Investigations

Sr TSH was done before and after treatment Sr TSH On (11/01/2023) - 15.35 mIU/L (Before Treatment)

Samprapti^[4] / Pathogenesis

Dosha – Kapha, Vata Dushya- Rasa & Meda Agni- Jatharagni, Dhatvagni, Medaagni Ama- Jatharagnimandyajanit, Dhatvagnimandhyajanit Srotas- Rasavahasrotas and Medovahasrotas Srotodushtiprakara – Sanga Udbhavstana- Amasaya Rogamarga- Bahya

vitiated Vata and Kapha dosha results Aam dosha causing Agnimandya (hypodigestive power) and constipation. Dosha prakopak Hetu initially converts Aaharrasa (digestive juice) into Aam, resulting in Vikrut rasa dhatu. All of this adds to the Vikrutdhatu Utpatti effect.

Chikitsa

After an initial assessment of the patient Varunmoola Kwath Ghana Vati were given

Dose - Tab Varunmoola Kwath GhanaVati 500 mg Vyanodane (After food) for 2 months

Probable mode of action of Drug

वरुण

वरुणादिः कफं मेदो मन्दाग्नित्वं नियच्छति (अ० ह०, सूत्र 15 / 21).^[5]

वरुणः पित्तलो भेदी श्लेष्मकृच्छ्राश्ममारुतान् ।

निहन्तिगुल्मवातास्त्रकृमींश्चोष्णोऽग्निदीपनः ॥

कषायो मधुरस्तिक्तः कटुको रुक्षको लघु । (भा॰ प्र॰ वटादि वर्ग; 65-66).^[6]

वरुणमूलक्वाथ

माक्षिकाढ्य सकृत्पीतः क्वाथोवरूणमूलजः।

गण्डमालांहरत्याशुचिरकालानुबन्धिनीम्।। (वंगसेन/गंडमाला अधिकार 15/18).^[7]

Varuna (Crataeva nurvula) is having Tikta, Kashay, Madhur rasa, Katu Vipaka, Ushna Veerya in properties. Weakness is caused by Rasa Dhatu kshaya due to Kapha Dosha Vriddhi and margavarodh by Aama Rasa. Tiredness and dyspnea both are Rasapradoshaja and Medopradoshaja Vikara. Mandagni causes vitiation of Rasa Dhatu which leads to a lack of Prinana (nutrition) of the Deha resulting in decreased Dehabala and causes symptoms such as weakness and tiredness. Varuna Kwatha Ghanavati have Kaphavatashamaka property and by its Kashaya Rasa absorbs Meda, Kleda, and Kapha Dosha.^[8]

Adhyasana and hypofunctioning of Agni are the cause of Purishavaha Srotodushti.^[9] Constipation (Vibandha) occurs due to vitiation of Vata Dosha, especially Apana Vata.^[10] Ama in the Koshtha obstructs the free movement of Samana Vayu and Apana Vayu. Ama itself when mixes with Purisha makes it abnormal and sticky, which causes the elimination process difficult. Constipation can impair hormone clearance and cause an elevation in estrogen, which, in turn, raises thyroid-binding globulin levels and decreases the amount of thyroid hormones available to the body.^[11]

Kashaya Rasa eliminates the blockage and cleans Srotas through the Shodhana property.^[12] Tikta Rasa has Deepaniya, Pachaniya, and also Lekhana, Shodhana property. The Srotas are scraped by the Lekhana Guna, which eliminates extra Kapha and Meda.^[13] Deepana-Pachana- property of the drug does Ama Pachana and Agnideepana. Agnideepana leads to the proper formation of Rasa Dhatu and relieves symptoms of weakness and tiredness and also relives constipation.

Varuna possess Kapha-Vatashamaka property. It has potent antioxidant property, radical-scavenging ability, delaying cellular senescence, building structural proteins such as collagen and elastin, and restoring skin barrier function along providing hydration to the skin.^[14]

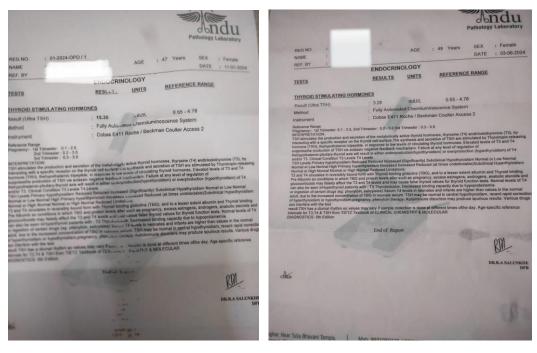
CONCLUSION

Though there is no direct description of hypothyroidism in Ayurveda, it is found that there is strong correlation with Agnimandya and Ama, Tridosha involevement. The Drug Varun Moola Kwath Ghanavati Showed significant improvement in symptoms like puffiness, oedema, Dry and Coarse skin, Breathlessness, Constipation, Fatigue, Hairfall. Along with that significant improvement in Sr TSH value after 2 months of treatment.

RESULT Subjective Parameters Gradation

Gradation of symptoms according to follow ups.

| imptoins decording to follow ups. | | | | | | | |
|-----------------------------------|---------------------|------------------------------------|--------|--------|--------|--------|--|
| Sr. No | Symptoms | Day 0 (Gradation Of symptom) | Day 15 | Day 30 | Day 45 | Day 60 | |
| 1 | Puffiness | 1 | 1 | 1 | 0 | 0 | |
| 2 | Oedema | 2 | 2 | 1 | 1 | 0 | |
| 3 | Dry and Coarse Skin | 2 | 2 | 2 | 1 | 1 | |
| 4 | Breathlessness | 1 | 1 | 0 | 0 | 0 | |
| 5 | Constipation | 2 | 2 | 1 | 1 | 0 | |
| 6 | Fatigue | 2 | 2 | 1 | 1 | 0 | |
| 7 | Hairfall | 2 | 2 | 2 | 1 | 1 | |



| Lab investigation | Sr TSH |
|----------------------------------|-------------|
| Before Treatment On (11/01/2024) | 15.35 mIU/L |
| After Treatment On (3/06/2024) | 3.28 mIU/L |

DISCUSSION

Patient is known case of Hypothyroidism along with classical symptoms of hypothyroidism. Patient was on Tab Thyroxine 50 mcg daily since 3 years Despite there is no symptomatic relief to the patient According to Ayurveda, the present complaint Agnimandya is due to Aaama utpatti and Sroto dusthti. Shaman Chikitsa Tab Varun Moola Kwath Ghanavati 500 mg twice a day was prescribed to the patient for duration of 2 months The chikitsa showed significant improvement in reverting lakshanas of hypothyroidism along with decreased value of Sr TSH level After Treatment. No Side effects were observed during and after treatment.

CONCLUSION

Ayurvedic Shaman Chikitsa reduced Symptoms of Hypothyroidism along with decreased level of Sr TSH levels without any adverse effects.

REFERENCES

- Gupta D, Scientifically Inventive View On Thyroid Disorders. Principles And Practice Of Thyroid Disorders In Ayurveda. 205-206. 1st ed. Chaukhamba Publishers, 2017.
- 2. Gupta D, Scientifically Inventive View On Thyroid Disorders. Principles And Practice Of Thyroid Disorders In Ayurveda. 5-6. 1st ed. Chaukhamba Publishers, 2017.
- 3. A clinical study to evaluate the role of Triphaladya Guggulu along with Punarnavadi Kashaya in the management of hypothyroidism - Scientific Figure on ResearchGate. Available from, 2024. [accessed 21 Aug]
- Charak, Charak Samhita, Sharma & Dash. Vol.-III, Chikitsa sthan Grahanichikitsa adhyaya. Adhyaya 15. Edition, 2005. Varanasi, Choukhamba Orientalia. Verse no. 5. P. 1863.

- 5. Vagbhata, Ashtangahridaya with commentaries-Sarvangasundara of Arunadatta and Ayurvedarasayana of Hemadri; Annotated by: Dr.AnnaMoreshwarKunte Krishna and Ramachandra Shastri Navre; Edited by: Pt.Hari Sadasiva Sastri Paradakara Bhishagacharya; Chaukamba Subharati Prakashan, Varanasi; Edition: Reprint, Year, 2010.
- Haritakyadi Nighantu of Bhava Misra, Commented by Vaidyaratna Shiv Sharm vaidya shastri, Khemraja Shrikrishnadas, Mumbai, Edition, 2000, Vatadi Varga, 6/62, pg-207.
- 7. Pandit Hariprasad Tripathi, Vangasen Samhita, Hari Hindi Vyakhya, Chaukhamba krushnadas Acadamy, Varanasi; Edition: Reprint Year, 2016
- Gupta KAUpadhyaya Vaidya Yadunandana, Astangahrdayam 'Vidyotini' Hindi Commentary. Reprinted Edition. Ch. 10, Ver. 15, 16, 2018; Varanasi Chaukhambha Prakashana Publications:110
- 9. Samhita Charak Vimanasthana, Srotasvimaniyaadhyaya, 5/21. Available from:
- Gupta KAUpadhyaya Vaidya Yadunandana, Astangahrdayam 'Vidyotini' Hindi Commentary. Reprinted Edition. Ch. 12, Ver. 9. 2018; Varanasi Chaukhambha Prakashana Publications:167.
- 11. https://chriskresser.com/the-thyroid-gut-connection
- 12. Samhita Susruta Sutrasthana, Rasavisheshavigyaniyaadhyaya, 42/17. Available from:
- Gupta KAUpadhyaya Vaidya Yadunandana, Astangahrdayam 'Vidyotini' Hindi Commentary. Reprinted Edition. Ch. 10, Ver. 15, 16. 2018; Varanasi Chaukhambha Prakashana Publications:110
- 14. Varma SR, Sivaprakasam TO, Mishra A, Kumar LM, Prakash NS, Prabhu S, et al Protective effects of Triphala on dermal fibroblasts and human keratinocytes PLoS One, 2016; 11: e0145921.