



### RESEARCH ARTICLE

#### A CASE STUDY ON HYPOTHYROIDISM TREATED WITH AYURVEDIC DRUGS

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#### Abstract

Thyroid problems are among the most common endocrine disorders presently seen nowadays life. Women are 2-10 times more likely to develop this condition. In Ayurveda there is no correlation of hypothyroidism, but on basis of Ayurvedic principles, we can understand the pathology of hypothyroidism as the Agnimandya at systemic and cellular level which can be understood as decreased caloric expenditure (hypometabolism) in modern terminology. Kapha-Vatadoshavruddhi and Pitta Kshaya results due to Agnimandya.<sup>1</sup> The present study deals with a female patient of age 27 years who detected hypothyroidism in October 2022 and has complaint of Weight Gain, Constipation, Hair loss, Muscle Pain, Puffiness under eye, Cold Intolerance etc. the patient was put under Ayurvedic treatment with a drug KanchanaraTwakaKwatha with ShunthiChurna for 3 consecutive months. Thyroid profile was done after complete duration of treatment TSH level was successfully dropped from 16.21  $\mu$ IU/ml to 7.20  $\mu$ IU/ml with consecutive relieve of foresaid symptoms.

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#### Introduction:-

Hypothyroidism is a condition in which the thyroid gland does not produce enough thyroid hormone or failure of the thyroid gland to produce sufficient thyroid hormone to meet the metabolic demands of the body. It is a common disorder and prevalence of overt Hypothyroidism has been reported as 3.5% to 4.2%. According to projection from various studies on Thyroid disease in India 42 million people are suffering from Thyroid disorder, out of which subclinical Hypothyroidism is most common with prevalence of 9.4%. In women, the prevalence was higher, at 11.4% when compared with men, in whom prevalence was 6.2%. The prevalence increases with age and is higher in females than in males (6:1)<sup>2</sup>. The thyroid gland is situated in front of the neck. It has two lobes on either side connected by an isthmus, which lies at level of 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> trachea rings. The hormone secreted by the thyroid gland is thyroxine, T<sub>4</sub>, T<sub>3</sub> and Thyrocalcitonin. Thyroid hormone has a profound effect on the various aspects of intermediary metabolism like Carbohydrate, Lipid, Protein, Minerals etc. In hypothyroidism the BMR of the patient becomes low (upto 40%). Hence it has a great influence on tissue metabolism all over the body these functions have similarities with the description of agni in Ayurveda. If we try to correlate the pathogenesis of Hypothyroidism according to principles of Ayurveda we found that it is basically caused due to dysfunction of Agni. Hypofunctioning of Jatharagni which in turn affects Dhatwagni eventually brings out pathological sequence and ultimately the disease condition develops. According to A.H-

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“स्वस्थानस्य कायाग्नेः अंशः धातुषु संश्रिताः। तेषां सादातिदीप्तिभ्यां धातुवृद्धि क्षयोद्धवः”॥ (अ.ह.सू. ११)

Management of Hypothyroidism with the modern drugs may bring the value of TSH and T<sub>4</sub> to normal range but the increased dosage and continuous medication make the patient drug dependent till the end of mortal life and have many side effects. In Ayurveda role of Agni is foremost and through its management. In Hypothyroidism etiological factors mainly vitiate Tridosha (Kapha predominance associated with Pitta vitiation and Margavaranajanya leading to provoking of Vata). The line of treatment with specific target to Rasavaha, Mamsavaha, Medovaha, Manovaha, Srotasas well as Vata-Kapha Nashaka, Agnideepan, Srotoshodhana, Vatanuloman, Amapachan treatment should be administered in Hypothyroidism. Drugs mentioned above have Agnideepan, Srotosodhak, Vatanuloman, Medohara, Amapachak Properties.<sup>3</sup>

The necessary investigation has been done before treatment, during treatment, after treatment to evaluate the action of therapy follow up patient has been done through clinical examination and observation and results been stated below.

### Materials And Methods:-

**Table 1:-** material: the detail of the drug along with doses are given in the table below<sup>4</sup>

S. No	DRUGS	DOSES	ANUPANA
1.	Kanchanaratakakwatha	40 ml BD	Lukewarm water
2.	Shunthichurna	1 gm BD	Lukewarm water

### Method:-

- Centre of study:** Rishikul Campus, UAU, Haridwar
- Type of study:** Simple random single case study.
- Plan of treatment:** the treatment was done on an OPD basis, the drug mentioned in table no 1 was prescribed along with the guidance of Pathya and Apathyato the patient. The patient was observed after every 1 and ½ month for 3 months, the changes in symptoms are noted along with report of TSH was done in each visit.
- Case reports:** a 27 year old female patient visited our OPD with complaints of Weight gain, Muscle pain, Puffiness under eye, Cold intolerance, Hair loss, Constipation, Lethargy, Menstrual abnormality (Oligomenorrhea).

### History of present illness:-

The patient was suffering from the symptoms since 4 month back and undergoes thyroid profile after recommendation. She decided to go for Ayurvedic treatment from our hospital.

### Clinical examination

At the first visit to the OPD following examination done-

Nadi- 68 bpm,  
Mala- Vibandh(constipated)  
Mutra- normal  
Jihva- normal  
Sparsha- ruksha  
Twaka- dry skin  
Drika- upanetra  
Akriti- Madhyama(moderate)

### General examination-

Weight - 64kg  
Height- 5.3 feet  
Thyroid gland- not enlarged  
BP- 120/80 mmHg  
Respiration – 18/min  
Sleep- disturbed  
Oedema – puffiness under eye

**Blood examination**TSH- 16.21 $\mu$ IU/ml**Observation And Result:-**

The patient was observed for 3 consecutive months and on each 30 days subjective symptoms were Assess (**table no 2**) and after 45 days of treatment thyroid profile was repeated (**table no 3**).

**Table 02<sup>5</sup>:-**

Symptoms	1 <sup>st</sup> month	2 <sup>nd</sup> month	3 <sup>rd</sup> month
Weight gain	+++	++	+
Constipation	++	-	-
Cold intolerance	++	+	-
Hair fall	+++	++	+
Puffiness under eyes	++	+	-
Muscle pain	++	-	-
Oligomenorrhea	+++	++	+

**Table 03:-****1.Before treatment**

TSH	BEFORE TREATMENT	AFTER TREATMENT
	16.21 $\mu$ IU/ml	7.20 $\mu$ IU/ml

## 2. After treatment

**the Microbe**  
Laboratory

6000004084 NAME COLLECTION CENTER  
SUBASH NAGAR NEAR JHAWA PULL, JAWALPUR HARIWAR  
HARIDWAR  
UTTARANCHAL, INDIA  
Tel : 9810052330

Name : MRS. BASITA VERMA  
Reg No : 0001DC021405  
Sample Coll Dt : 14/03/2023 12:06 AM  
Sample Recv Dt : 15/03/2023 05:47 AM  
Report Status : Final

Age/Gender : 29 Y/FEMALS  
Barcode No : 51148351  
Reg Date : 15/03/2023 05:47 AM  
Reported Date : 15/03/2023 07:45 AM  
Referred By : SELF

Tests	Results	Biological Reference Range	Units
<b>IMMUNOLOGY</b>			
<b>THYROID PROFILE TOTAL SERUM</b>			
TRI-IODO THYRONINE (T3)	118.58	90.0 - 381.0	ng/dL
THYRONINE (T4)	9.48	3.26 - 12.6	ng/dL
THYROID STIMULATING HORMONE (TSH)	7.30	0.35 - 5.50	mIU/L

**Comments:**  
1. TSH levels are elevated to 7.30 mIU/L, indicating a hypothyroid state. This is a common finding in patients with thyroid dysfunction. The elevated TSH level is consistent with the low levels of T3 and T4.  
2. Elevation in concentration of Thyroid hormone binding protein can profoundly affect Total T3 and/or Total T4 levels especially in pregnancy and in patients on steroid therapy.  
3. Values <0.01 mIU/L need to be interpreted clinically, due to presence of a rare TSH variant in some individuals.  
4. TSH stimulates the production and secretion of the metabolically active hormones, thyroxine (T4) and triiodothyronine (T3). Failure at any level of regulation of the hypothalamic-pituitary-thyroid axis will result in either underproduction (hypothyroidism) or overproduction (hyperthyroidism) of T4 and/or T3.

**For pregnant females**  
(As per American Thyroid Association)

Trimester	TSH (mIU/L)
First trimester	0.1 - 2.5
Second trimester	0.2 - 3.0
Third trimester	0.3 - 3.5

**\*\*End Of Report\*\***  
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## Discussion:-

After reviewing the various Nidan, Samprapti and Rupa etc, of the disease hypothyroidism it is clear that according to Ayurveda, it is a Kapha-Vata Vikar Vyadhi with Agnimandya. Agni plays a very vital role in the normal functioning of the body as well as its vitiation is the cause of any disease. When the function of Jatharagni is hampered its effects are seen in the functioning of Dhatus. Dhatus are present in each dhatu. So we see if there is Agnimandya of that particular Dhatu then the Poshak Anshas are unable to nourish the respective Dhatu and the Uttara-Uttara Dhatu. This leads to the disease formation. As per Ayurvedic view Thyroid gland (Avatugranthi) is situated in the interior part of neck which is known as Kapha Sthanaso definitely there is Sroto Avrodha and Vata Prakop which leads to growth of Thyroid gland as the Thyroid hormone is not releasing enough hormones or enzymes so it is called as Hypothyroidism which is similar to the Ayurveda concept of Agnimandya. Agnideepana, Sroto-Shodhana, Vata Samana Chikitsa should be employed.

Kanchanaratwaka is drug of choice for Granthivikara, Galaganda. Clinical studies have shown active constituents of Kanchanarapromotes conversion of Tyrosine to Thyroxine by potentiating the enzyme Tyrosinase. It has ability to dry up vitiated Kapha and Meda due to astringent property. Deepana property of Kanchanar improves digestive fire which in turn reduces Ama.

Shunthi has Kapha-Vata Shamaka, Deepana, Lekhana, Vatanuloman properties.

So, by use of KanchanaraTwakaKwatha40ml BD after meal along with ShunthiChurna1gm BD follow up were taken on symptomatic relief every month whereas thyroid profile was repeated after completion of treatment i.e is after 3 months. As per patient there was huge relief on symptoms whereas TSH value was greatly reduced after completion of treatment.

**Conclusion:-**

After reviewing the observation and result it may be concluded that KanchanaraTwakaKwatha40 ml BD along with ShunthiChurna1gm BD for 3 months is good remedy against hypothyroidism, no such adverse effect was observed during the treatment schedule.<sup>6</sup>

**References:-**

1. Karishmasingh and anupthakar ,Dept. of Panchakarma, IPGT and RA Jamnagar; A clinical study to evaluate the role of TriphalaadyaGuggulualong withPunarnavadiKashayain the management of Hypothyroidism.[GOOGLE Scholar]
2. Debajyoti Das, DipsundarSahu, ayurvedic approach to management of Hypothyroidism- a case study ISSN: 2230-9926 <http://www.journalijdr.com> .
3. Karishmasingh and anupthakar ,Dept. of Panchakarma, IPGT and RA Jamnagar; A clinical study to evaluate the role of TriphalaadyaGuggulualong withPunarnavadiKashayain the management of Hypothyroidism.[GOOGLE Scholar]
4. SarangdharSamhitaMadhyamKhandAadhyaya 2, Shlok no. 126.
5. Ralson, Penman, Hobson. Davidson: principles and practice of medicine 23<sup>rd</sup> edition. Principles of Thyroid gland.
6. A case study on Hypothyroidism treated with Ayurvedic management by Md. Nematullah et al, IAMJ dol: 10.6607/iamj12p6032022.