INTERNATIONAL AYURVEDIC MEDICAL JOURNAL



Case Report ISSN: 2320 5091 Impact Factor: 5.344

MANAGEMENT OF PRIMARY HYPOTHYROIDISM ON AYURVEDA PRINCIPLES - A CASE STUDY

Pooja Abhani¹, Mandip Goyal²

¹M.D. Scholar, Department of Kayachikitsa, ²Associate Professor, Department of Kayachikitsa, Gujarat Ayurved University, Jamnagar, Gujarat, India

Email: poojabarot20894@gmail.com

ABSTRACT

Hypothyroidism is a clinical syndrome resulting from deficiency of thyroid hormones due to its insufficient synthesis which in turn results in a generalized slowing down of metabolic processes. It affects the metabolism of the body even at cellular level and thus can affect any organ virtually. Hypothyroidism has been found to be a common form of thyroid dysfunction affecting 10.9% of the population. The prevalence of undetected hypothyroidism is about 3.47% in India and is 2nd most common endocrine disorder reported all over the world in present time. Hypothyroidism is a common problem in India, where 1 in every 10 men & women suffer from hypothyroidism. The management of primary hypothyroidism with levothyroxine (L-T4) is simple, effective and safe, and most patients report improved well-being on initiation of treatment, but patient become drug dependent and has to take this hormone replacement throughout the life. Moreover, a proportion of individuals continue to suffer with symptoms of the disease despite achieving adequate biochemical correction. Though there is no direct reference of hypothyroidism in Avurvedic classics but as per its presentation, this condition can be correlated with the hypo function of *Dhatvaagni*. As per the principle of Ayurveda, for the disorders which are *Yapya* and are deep rooted in body, Rasayana prescribed after proper Shodhana is preferred. In present case study, newly detected case of primary hypothyroidism was successfully treated with Ayurvedic line of treatment which includes Virechana with Haritakyadi Yoga followed by Dhatri Bhallataka Vati for 2 months. The patient was followed up to 10 months and there was no recurrence of the symptom with normal value of serum TSH.

Keywords: Ayurvedic management, Dhatri Bhallataka Vati, Primary Hypothyroidism

INTRODUCTION

Hypothyroidism is one of the common functional disorders of thyroid gland and is a frequently encountered problem in clinical practice. Hypothyroidism is posing a major health challenge in both developing as well as developed world. 1 in 10 Indian adults carry the risk of Hypothyroidism. Adults in age group of 35+ are at higher risk. The chances of women getting

affected by Hypothyroidism are three times more as compared to men. Over 8% of Indian population is at a higher future risk of getting affected, and 1/3rd of the hypothyroid patients are unaware of the condition (1) In spite of many advances, the modern management of Hypothyroidism still remains unsatisfactory. It is a major risk factor for many serious illness and hypo-

thyroidism itself can result in threatening condition, thus it leads to affected person to remain dependent on hormonal replacement throughout his life. Excessive thyroid hormone replacement carries the potential for serious long term metabolic complications (e.g., accelerated osteoporosis, drug intolerance, hypersensitivity, heart attack, heart failure, palpitation, irregular heart rhythm and short term complication like increased appetite, headache, hyperactivity, nervousness, anxiety, mood swings, trouble sleeping, tiredness, changes in menstrual periods, hair loss (usually temporary), stomach cramp, can be take place(2). The more important is to search out safe, effective and cheaper remedies.

Looking into the pathogenesis and complications of hypothyroidism, it requires a systemic and radical therapy for which *Ayurveda* may provide a ray of hope through *Shodhana Chikitsa* or *Rasayana*. Though terms like *Galganda* and *Gandamala* have been cited in the texts like *Charaka*, *Shushruta* and *Astanghrudaya* but no direct reference of hypothyroidism is available.

The symptoms of newly diagnosed case of Hypothyroidism, resemble with Aamlakshana which is produced by Agnimandhya and result in Strotorodha by Vata and Kapha Dosha. Keeping this Samprapti in mind the treatment was planned. According to Aacharya Charaka, Bhallataka is one of the best Rasayana for countering the disorder of Kapha and Agni (3). While other ingredients of Dhatri Bhallataka Vati like Triphala, Trikatu, Guda and Tila possess Agnideepan, Amapachaka, Kapha - Medahara properties, it also reported to have anti-inflammatory, antioxidant and immune-modulatory effects. Kanchnara is considered as a drug of choice for Granthi Vikara and Galganda, so here in this case Kanchnara Guggalu with Punarnavashtaka Kashaya was administered in follow up period along with *Pathya-Apathya*.

Considering this, a treatment protocol was planned as per Ayurveda principles in which in the initial phase *Deepana Paachana* was done with *Trikatu Churna* for 3 days followed by *Snehpana* according to patient's *Koshtha* and *Agni, followed* by *Virechana with Haritakyadi Yoga* (4) to remove *Srotorodha. Haritakyadi*

Yoga is mentioned by Acharya Charaka in Rasayana Adhyaya for Koshtha Shuddhi before use of Rasayana Aushadhi which contain Saindhava, Aamalaki, Guda, Vacha, vidanga, Rajani, Pippali and Shunthi in equal proportion. There after Dhatri Bhallataka Vati (5) was given for 2 month with water after meals. Patient was followed up for next 10 month with supportive medicine Kanchnara Guggulu and Punarnavashtaka Kashaya.

Case Report

A 27 years old female patient reported to Kayachikitsa department of I.P.G.T & R.A Hospital, Jamnagar with complaints of swelling of body, puffiness of face, hoarseness of voice, recurrence of cold and cough, fatigue, lethargy, constant weight gain scanty and irregular menses since four month patient. For this, she was multivitamins on her, but had no relief, so she reported to the Ayurveda hospital. After taking proper history patient was subjected to investigations, like Hb gm%, Complete Blood Count, routine -physical, chemical and microscopic examination of urine and thyroid profile which included S.TSH & Free T4.The reports indicated that she was suffering from primary hypothyroidism since her total TSH was 8.2µIU/ML & Free T4 0.9 ng/dl whereas other reports like RBS (96 mg/dl), Hb (11.9 gm%), ESR (20 mm/hr), S. Cholesterol (156 mg/dl), S. Triglyceride (54 mg/d) were within normal range. The weight of patient was recorded which was 80 kg, with BMI 34.6. Taking her past history, we came to know that problem started with swelling on eyelids in morning occasionally from last 8 month and then after daily she had continuous swelling on eyelid from last 4 month. She also complaining of fatigue when she was doing routine household work and had increased her weight although she was not taking much food since last 4 month and complaining of dry skin after taking bath.

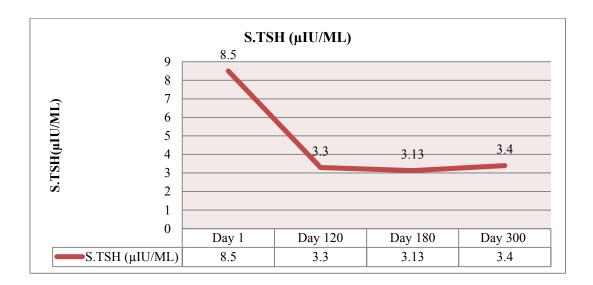
Treatment Plan

In the beginning, treatment was planned with *Virechana*. For this purpose, *Deepana- Pachana* was done with *Trikatu Churna* 3gm with lukewarm water after meals for three days. During these days, patient was asked only to take *Moonga Dala Yusha* in both

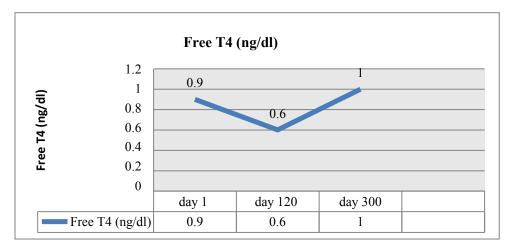
meals and to drink warm water whenever thirsty and no other food articles was allowed. This was followed by Snehpana done which was done with cow's Ghee internally in increasing dose till Samyaka Snehana symptoms were achieved. Patient was given Goghrita for Snehapana starting from 40 ml on 1st day, 70 ml on 2nd day, 110 ml on 3rd day, 160 ml on 4th day, 210 ml on 5th day and 250 ml on 6th day. On the next day after completion of Snehapana, Abhayang with Bala Taila and Bashpa Swedana for 3 days was done .On the 4th day of this procedure, after performing of Abhyanga and Svedana Haritakyadi Yoga 30 gm was administered for the purpose of Virechana with luke warm water on empty stomach and patient was not allowed to take anything orally except warm water till the completion of Virechana procedure. During this procedure continuous monitoring of the patient was done and vitals were recorded which remained within normal range. Patient achieved Madhyama Shuddhi with 10 Virechana Vega and 4 Vamana Vega. In last VirechanaVega patient observed sticky transparent coughing like Vega which indicates Kaphanta Shuddhi. patient get Samayaka Virikta Lakshana which Vit-Pitt- Vata Kramasaha Nissarana, includes Vatanulomana, Laghuta and Agni Vridhi. Thereafter patient was advised to follow Samsarjana Krama for next 5 days. In Samsarjana Karma on first day when patient get Virechana at that evening patient had given Peya. on 2nd day morning patient had given Peya and at evening Vilepee. On 3rd day at morning Vilepee and at evening Akrutvusha. On 4th day at morning Akrutyusha and at evening Yusha. On 5th day at morning Yusha and at evening light meal. During this period patient strictly advised to drink only lukewarm water. After that Dhatri Bhallataka Vati 2 Vati 250 mg each thrice a day was given with water after meal for 60 days and patient was observed for next 1 month. After 3 months, patient started with the feeling of wellbeing and the intensity of symptoms reduced along with her weight (BMI=32). Her report of serum TSH was done on 08/02/19 which was 8.5 µIu/ml and free T4 0.9 ng/dl came lower on 06/06/19 to 3.3 μIu/ml and Free T4 0.6 ng/dl. Then after 2 months interval her thyroid profile was checked on 08/08/19 and it was found that S.TSH was 3.31µIu/ml and Free T4 0.8 ng/dl. She was further observed for the period of 4 months, and her report on 07/12/19 of S.TSH was 3.401µIu/ml and Free T4 was 1.0 ng/dl. During this period patient was given *Kanchanara Guggulu 2 Vati* (500mg each) after meal with lukewarm water and *Punarnavastak Kashaya* 40 ml, empty stomach 2 time/day. *Patient was advised to continue* light diet, which included seasoned rice, barley, *Moong Dala*, fresh vegetables and to perform sufficient. physical activities and practice *Yoga* postures like *Sarvangasana*, *Matsayasana*, *Halasana* and also *Suryanamaskara* patient was also advised to discontinue use of cabbage, cauliflower, soya beans, heavy fried and fast food, oversleep, sedentary lifestyle.

Throughout this period, patient was not taking any modern medicine or hormonal therapy.

Effect of therapy on S.TSH



Effect of therapy on Free T4



DISCUSSION

Hypothyroidism is a clinical condition in which thyroid hormone does not produce enough thyroid hormone as per requirement. A patient may land up to the complication like myxedema coma, which is very rare, but patient has to live on hormonal therapy throughout his life. Hypothyroidism can be correlated with *Dhatvagnimandhya* and disorder produced due to *Kapha* and *Vata Prakopa*. Hence the drug that act on *Vata* and *Kapha* and *Agnideepana* can be advised. Mode of action of *Virechana*, in *Virechana* used *Go-Ghrit* which contain vita A & vita E that are antioxidant and helpful in preventive oxidative injury to the

body and also has *Rasayana*, *Yogavahi*, *Ojo vardhaka* and *Agnideepaka* properties. In this way *Virechana* make desirable functioning of *Dhatvagni*. *Virechana* opens channel, improve the nutritional assimilation and also increase bioavailability of drugs. By this way *Virechana* improve thyroid function and regulates S.TSH.

In this study *Dhatri Bhallataka Vati* contains *Laghu*, *Tikashana Guna* which helps into clear channels, remove *Strotorodha* and *Ama*. In this way reduce puffiness and edema. Its *Medohara* effect helps in reducing *Ama* and weight which is increased in hypothyrodisim. Its *Katu*, *Tikata* and *Kashaya Rasa* combined

with *Deepana* and *Pachana* properties causes relief in the symptoms of *Shothahara*, regulates the menstruation irregularity due to *Vata* and *Kapha* by this way corrects *Agni*. Its *Rasayana* effect due to antioxidant properties helps in relief in fatigue, muscle ache, weakness and hair loss. By this way *Dhatri Bhalla*-

taka Vati helps in breaking the Samprapti of Hypothyroidism. After that patient advice to take Kanchnara Gugglu which is best drug for Granthi and Galganda and Punarnavastak Kashaya (6) which help in reduce Shoth and muscle ache in follow up period.

Mode of Action Symptoms Treatment Virechana remove Strotorodha and increase the Agni At the initial phase (08/02/19) Plan For Virechana Increase bioavailability of drugs 1) Deepana Pachana with Trikatu to the body Swelling of body ++ Churna 3 gm after meal for 3 days 2) Snehapana with Goghrita for 6 days Puffiness of face +++ (According to Koshtha and Agni) 3) Abhyanga with Bala Taila Hoarseness of voice + Recurrence of cold and Cough ++ Sarvanga Vashpa Swedana for 3 After Completion of Samsarjana Fatigue and Lethargy ++ 4) On 4th Day Virechana performed Krama (After 15 Days) with Haritakyadi Yoga, 30 gm with Constant weight gain (BMI=34.6) Swelling of body + luke warm water 5) Patient achieved Madhyam Koshtha Scanty and irregular Menses ++ Puffiness of face ++ Shuddhi with 10 Virechana Vega Lab Investigation= and 4 Vamana Vega Hoarseness of voice + 6) Patient adviced to follow Samsarjan S.TSH= $8.5 \mu IU/Ml$ & Free T4 Krama for next 5 days Recurrence of cold and Cough + =0.9ng/dl Fatigue, Lethargy + Constant weight gain (BMI=33.8) After 4 Month (06/06/19) Scanty and Irregular Menses ++ Swelling of body↓ Puffiness of face + Bhallataka is best for Mandagni and Dhatri Bhallataka Vati 2 Vati Hoarseness of voice 0 Kaphaja Vikara (Bhallataka, Triphala, Recurrence of cold and cough + Fa-Triphala stimulate digestion and Trikatu, Guda, Tila) has Rasavana effect and decreases tigue, Lethargy + body weight 250 mg each thrice daily after meal with water Constant weight gain (BMI=32) Trikatu Agnideepaka, Amapac haka and Kaphamedahara For 60 days Scanty and Irregular Menses + Tila is Ve-Deepana, Lab Investigation= and Radanasthapana S.TSH= 3.3µIU/ML & Free T4 sayana

=0.6ng/dl

Follow Up Period

After 2 Month (08/08/19)

Swelling of body 0

Puffiness of Face +

Horseness of voice 0

Recurrence of cold and cough +

No Fatigue, Lethargy 0

Reduce Weight Gain (BMI=32)

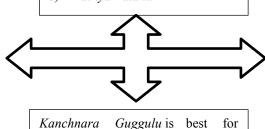
Lab Investigation=

S.TSH= $3.31\mu IU/ML$ & Free T4 =0.8ng/dl

- 1) Kanchanara Guggulu 2 Vati thrice daily after meal
- 2) Punarnavashtaka Kashaya40ml twice daily empty stomach
- 3) Pathya Palana

Granthi Vikara Punarnavashtaka

Shotha and weight



Kashaya reduce

AFTER 4 MONTHS (07/12/19)

No Swelling of body

No Puffiness of face

Relief in Hoarseness of voice

Relief in Recurrence of cold and cough



No fatigue, lethargy

Reduction in weight (BMI=32)

Lab Investigation=

 $S.TSH = 3.401 \mu IU/Ml \& Free T4 = 1.0 ng/dl$

CONCLUSION

It can be concluded form the present case report that by adopting Ayurvedic treatment principles, especially in newly detected mild and uncomplicated cases of hypothyroidism where patient is yet to start any hormone replacement treatment, not only decrease in the level of serum TSH can be achieved, but also improvement in overall quality of life can be attained. Further an attempt for early diagnosis of hypothyroidism shall also be done by screening the patient in suspected cases especially female presenting with symptoms of Ama, Meda and Kapha Dushti with progressive weight gain.

REFERENCES

- 1. www.thyroidindia.com/thyroid-disorder-generalpopulation-thyroid disorder in general population on 4 April 2018
- 2. https://www.healthline.com/health/levothyroxine-oraltablet#interactions
- 3. Charak Samhita, part -2 ChikitsaSthana, Rasayana Adhyaya-1-2/19, With Shree Charakrchandrika (commentary)by brahmanand tripathi. Chaukhambha syrbharti prakashan, Varanasi Ed: 2015.page no-41

- 4. Charak Samhita, part -2 ChikitsaSthana, Rasayana With Shree Charakrchandrika Adhyaya-1-1/25, (commentary)by brahmanand tripathi. Chaukhambha Syrbharti Prakashan, Varanasi Ed: 2015.page no-13
- 5. Ayurveda Nibhanda Mala part-2 Author -Shah Tilak Chand Tara Chand, AjirnaAdhayaya- 6 Vaidya- Surat Publication- SastuSahitya, Akandkhandit 4th Edition-1997, Pg.677
- 6. Bhaishajya Ratnavali authour kaviraj govindadas sen, udararogaadhikara- 40, Chaukhambha syrbharti prakashan, Varanasi Ed: 2017.page no-732.

Source of Support: Nil **Conflict of Interest: None Declared**

How to cite this URL: Pooja Abhani & Mandip Goyal: Management Of Primary Hypothyroidism On Ayurveda Principles - A Case Study. International Ayurvedic Medical Journal {online} 2020 {cited May, 2020} Available from: http://www.iamj.in/posts/images/upload/3613 3619.pdf