

## TRIPLE DRUG REGIMEN IN THE MANAGEMENT OF HYPOTHYROIDISM A CASE STUDY

Raghavendra N. Pandilwar<sup>1</sup>, Aparna N. Sathe<sup>2</sup>

<sup>1</sup>Final Year (MD), <sup>2</sup>Professor,

Kayachikitsa Department, Y M T Ayurvedic Medical College, Kharghar, Navi Mumbai, Maharashtra, India.

### INTRODUCTION

Hypothyroidism is one of the most common among all the disorders of the thyroid gland. Thyroid gland is very sensitive endocrine gland as it responds to stress easily. This may be the reason for increasing the incidence and prevalence of this disease globally. Hypothyroidism occurs in both males and females but in females the ratio is higher. The female to male ratio is approximately 5:1.

Thyroid gland secreted two hormones thyroxine (T4) or tetraiodothyronine and triiodothyronine (T3). Hypothyroidism is a condition where there is a hypo functioning of the thyroid gland. Due to hypo functioning of the thyroid gland there is a less secretion of thyroid hormones in the body. Thyroid hormones are required in the body for stimulation of metabolic activity in most of the tissues also thyroid hormones are essential part of lipid, carbohydrate, fat metabolism. Hence if there is less production of thyroid hormones in the body, body metabolism slower down resulting in reduced B.M.R

Hypothyroidism can be classified in to 3 types.

1) Primary hypothyroidism - it is due to the less production of thyroid hormones by the thyroid gland. iodine deficiency re-

mains the most common cause of primary hypothyroidism

- 2) Secondary hypothyroidism – it is due to the defect in pituitary tsh synthesis.
- 3) Tertiary hypothyroidism- defect in the hypothalamic TRH

The symptoms of hypothyroidism are very infrequent. Most of the time patient is presenting with weight gain as a only symptom. The patient suffering from hypothyroidism has following symptoms. Weight gain, cold intolerance, hoarseness of voice, lethargy, excess sleep, constipation, weakness, peri-orbital puffiness, hair loss and in females symptoms like irregular cycle is present.

*Kanchanara guggul* is one of the most commonly used drug in the management of thyroid disorders since ages. Also the leaves of *kanchanara* looks like the thyroid gland. One of the principles of *ayurveda* states *SAMANYAM VRIDHIKARANAM*. This promotes use of this drug in management of Hypothyroidism.

*Nighantu Ratnakar* states *gorakhmundi* as *apachighna* and *gandhar*.

*Punarnava mandur* is used extensively to treat peripheral oedema. It has *gomutra* which has *lekhan* property. Thereby it cleanses *strotorodh* and promotes circulation.

Keeping all these in mind triple drug combination was considered to treat hypothyroidism.

**AIMS AND OBJECTIVES:**

- 1) To evaluate the efficacy of triple drug regimen in the management of hypothyroidism.
- 2) To assess effect on bio-chemical parameters specifically changes in the ultrasensitive TSH.

**REVIEW OF LITERATURE:** The relevant literature in Ayurvedic and modern texts along with relevant research papers and its practical application is undertaken.

**MATERIAL AND METHODS:**

- 1) Source of the data: study is carried out in "Dept of *kayachikitsa* , Y.M.T. Ayurvedic medical college and hospital , kharghar , navi Mumbai.
- 2) Type of study: open single study.
- 3) Medium : English

**CRITERIA FOR PATIENT SELECTION:**

**DIAGNOSTIC CRITERIA:**

- 1) Serum ultrasensitive TSH > 4.5.IU/ML
- 2) Individuals presenting with sign and symptom of hypothyroid.

**INCLUSION CRITERIA:**

- 1) Age 18 yrs to 60 yrs
- 2) Patient of either gender
- 3) Newly diagnosed patient of hypothyroidism.

**EXCLUSION CRITERIA:**

- 1) Patient suffering from life threatening condition.
- 2) Congenital hypothyroidism.
- 3) Rapid progressive case of myxoedema.
- 4) Patient suffering from immunocompromised disease.
- 5) Pregnancy and lactation.

**CASE HISTORY -**

A female patient of age 32 yrs working as a sales executive in a reputed company was complaining of weight gain since 2 to 3 months, lethargy hair loss.

No h/o – DM/ HTN/ Koch's / bronchial asthma

No h/o – any drug allergy.

P/m/h – nil

P/s/h- L.S.C.S. 3 yrs back

O/e – g.c. good

T- Afebrile

Wt - 76 kg

P- 60/ min

B.P. - 130/ 80 mmHg.

S/e- RS-AEBE clear

CVS- s1, s2 normal

CNS- conscious, oriented properly.

P/a- soft, non-tender.

P/h- Bowel - constipation

Bladder- normal

Sleep – excess

Appetite- normal.

**HABITS:** spicy food and fermented food in the diet regularly.

**INVESTIGATIONS -**

FREET3, FREE T4, ULTRASENSITIVE TSH.

CBC,

LIPID PROFILE,

BLOOD SUGAR – Fasting and Post prandial

**PLAN OF TREATMENT –**

1. TAB. *KANCHANARA GUGGUL* 250 mg 2 TAB BID.

2. TAB. *GORAKHMUNDI* 250 mg 2 TAB BID

3. TAB. *PUNARNAVA MANDUR* 250 mg 2 TAB BID.

4. *ANUPAN* – Luke warm water.

5. *AUSHADH SEVAN KAL* - *Vyana* and *Nisha kal*.

The above treatment was given for the 15 days and advised for a follow-up. After 15 days the symptoms were reduced. The blood test was done after 1 and ½ months as it takes approximately 6 to 8 weeks to recover the pituitary thyroid axis .<sup>(1)</sup>

Report after 1 and ½ month her TSH dropped down to 10 IU/ml, and also the all the symptoms of the patients are decreased considerably.

Again the same treatment was continued and reports were done after 1 and ½ month where TSH was found to be 3 IU/ml that means she reverted in euthyroidism

state. Patient was asked to continue the medicine for 2 month and thyroid profile test was done. Her reports came to normal range. Stopped the medication and observe the patient for 6 month. After 6 month repeated the test and she remains in the euthyroid state.

**PATHYAPATHYA:** patient is encouraged to have drumstick and *kanchanar* in the diet in form of vegetable. Use of cauliflower, cabbage, fermented food, spicy food was prohibited.

**OBSERVATION:** patient relieved symptomatically and TSH comes to normal range.

BEFORE TREATMENT	AFTER TREATMENT
1) TSH – 32 IU/ML	1) TSH – 3 IU/ML
2) Weight – 76 kg	2) weight – 68 kg
3) excess sleep	3) sleep normal
4) Lethargicity present	4) no Lethargicity
5) Significant hair loss	5) hair loss reduces considerably

## DISCUSSION

Hypothyroidism is a condition which is due to the hypo functioning of the thyroid gland. As in allopathic science patient have to take thyroxin for life long. As stated earlier there is no direct mention of the thyroid gland in *ayurveda*, some clinicians correlates it with *galaganda*.

*Kanchanar guggul* is selected in this patient because *kanchanar guggul* is used since ages in the management of thyroid disorders. Research<sup>(2)</sup> says that *kanchanar* is the drug which directly stimulates the thyroid gland to increase its hormones also promotes peripheral conversion of T4 to T3 is also increases with the use of *kanchanar*. Also *guggul*<sup>(3)</sup> have the same action as that of *kanchanar* and also *guggul* is having the property of lipolysis. Hence a drug which

contains both *kanchanar* and *guggul* is selected that is *kanchanar guggul*.

Patient came with the symptoms like lethargy, hair loss, weight gain. For these symptoms *punarnava mandur* is selected. *Mandur* used in *punarnava mandur* is *gomutra bhavit* which can be beneficial to reduce the symptoms like lethargy due to excess *kapha dosha*. Also there is a role of *gomutra* in reducing the weight of the patient. *Gorakmundi* is a drug which comes under *rasayan gana* according to *charak*<sup>(4)</sup>. According to *nighantu*<sup>(5)</sup>, *gorakmundi* is a drug having property of *gandnashan* and *apachighnya*. .

## CONCLUSION

Patients suffering from hypothyroidism are increasing day by day. As the treatment in allopathic science in the management of hypothyroidism is a hormone

replacement therapy, patients have to take the drug for life long. Ayurvedic treatment stimulates the thyroid gland for production of thyroid hormones. Hence in management of hypothyroidism *ayurveda* plays a vital role. The ayurvedic drug should be selected depending upon the symptoms and the cause of the disease. The huge benefit of ayurvedic treatment is patient do not have to take the medicine for life long. Also ayurvedic treatment do not have side effects. Hence hypothyroidism can be treated with the help of *ayurveda*.

---

#### REFERENCES:

1. Harrison's principle of internal medicine. 17 th edition volume II by, fauci, kasper, jameson, loscalzo
2. J Ethnopharmacol. 1999 Nov 1; 67(2):233-9. With ania somnifera and Bauhinia purpurea in the regulation of circulating thyroid hormone concentrations in female mice. Panda<sup>1</sup>, Kar A.
3. *Guggulu* (Commiphora mukul) potentially ameliorates hypothyroidism in female mice. Author - Panda<sup>1</sup>, Kar A
4. charak samhita ,with charaka chandrika hindi commentary , by Dr. Brahmanand Tripathi and dr. ganga sahay pandey, sutrasthana , chaukhamba surbharti prakashan, 2007
5. Nighantu Ratnakar, part 1, pg 158, Chaukhamba pratishthan, Krishnshastri Navare.

---

#### CORRESPONDING AUTHOR

**Dr. Raghavendra N. Pandilwar**

MD, Final Year, Kayachikitsa Dept.

Y.M.T. Ayurvedic Medical College

Kharghar, Navi Mumbai, Maharashtra, India

**Email:** raghavendra.pandilwar@gmail.com

---

*Source of support: Nil*

*Conflict of interest: None Declared*