

An Ayurvedic Management of Depression in Hypothyroidism - A Case Report

Case Report

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Abstract

Background: Hypothyroidism is one of the most common endocrinal disorders which are mainly diagnosed basing on the laboratory investigations. In hypothyroidism, most of the patients present with non-specific symptoms. Depression is one of the common non specific symptoms of hypothyroidism. Grading and management of depression along with the management of hypothyroidism is essential to prevent the risk of harm and provide potential benefit to the patient. **Method:** A 35 year old woman presented with a depressive disorder for the past one year. On thyroid screening she was found to have subclinical hypothyroidism. Depression was graded according to Montgomery and Asberg Depression Rating Scale (MADRS). Patient was managed with Ayurvedic drugs *Kanchanara Gutika* and *Manasamitra vatakam* on OPD basis. **Result:** She had a very good clinical improvement following the therapy. Thyroid screening assured the maintenance of Thyroid hormone levels and TSH in the normal range. MADRS showed marked improvement. **Conclusion:** We conclude that it is better to have a special focus on the management of depression along with thyroid screening when patients present with non specific symptoms as depression. Ayurvedic management showed good results on MADRS as well as thyroid hormone levels.

Key Words: *Depression, Kanchanara gutika, Manasa mitra vatakam, Sub clinical hypothyroidism.*

Introduction

The incidence of hypothyroidism is at an alarming increase in the present day. The modern life style and dietary habits contribute to its increasing prevalence. Most often many hypothyroid patients complain of only depression as the presenting complaint. This may divert the attention of the treating physician towards psychological diseases. Thorough clinical and pathological investigation may reveal hypothyroidism. Hypothyroidism is an endocrinal disorder in which the blood thyroid hormone levels are altered. There is an increased TSH level and a normal or low T3 and T4 levels. Depression is one of the complaints commonly encountered in the patients of hypothyroidism. Few studies reveal that prevalence of depression is high in hypothyroid patients (1-3). Depression is seen in almost all the types of hypothyroidism namely subclinical hypothyroidism, overt hypothyroidism and central hypothyroidism. Hence depression also needs a special focus in the management of hypothyroidism in order to have a quality life.

The main aim of this case report is to highlight the importance of thyroid screening when patients

present with non specific complaints as depression. Thyroid screening may reveal hypothyroidism and the management should aim at the maintainance of normal thyroid hormones and TSH along with definite attention on the management of depression. We conclude that Ayurveda had given a promising result in a case of depression with subclinical hypothyroidism.

Case Report

A female patient aged 35 yrs presented on 29-6-2020 in Kaya Chikitsa dept OPD of S.V.Ayurvedic College, TTD, Tirupati with complaints of persistent depression and severe tiredness for the past one year. On enquiry she reported that she noticed an increase of 2Kg weight for the past 3 months. Her appetite was decreased and she had regular menstrual cycles.

H/O Present Illness

Patient was suffering with depression, sleeplessness and excess tiredness for the past one year. She consulted a psychiatrist for her complaints. She was diagnosed as a case of severe depression and was prescribed anti depressant Amitriptylline 25 mg at bed time. She used this medication for 6 months. Despite having anti-depression medication there was no change in her depression mood. Her weight increased by 2 kg for the past three months. Then she decided to take Ayurvedic medicine and visited S.V.Ayurvedic hospital for better management.

Ashtavidha Pariksha

Nadi (pulse) =78/mt. (kapha-vata)

Mutra (urine) = Normal

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Mala (stool) = Regular (*Prakruta*)
 Jihva (tounge) = Coated (*saama*)
 Shabda (speech) = Normal
 Sparsha (skin) = Dryness of skin (*Twak rukshata*)
 Druk (eyes) = Normal (*Prakruta*)
 Akruti = Moderate built (*Madhyama*)

Her physical findings are as follows:

Height: 157 cm ; Weight: 71 Kg ; Pulse rate: 78/ minute ; Respiration rate: 21/minute ; Lungs : clear; Heart : S1 S2 heard; Abdomen: Soft, Non-tender, No organomegaly; Neck: normal; Ankle Reflex : normal; Appetite : Decreased; Sleep: Disturbed.

Laboratory investigations revealed Haemoglobin:

12.2gm/dl, ESR: 8 mm; FBS: 86 mg/dl; renal function parameters and Liver function tests were within normal limits. Her T3: 85 ng/dl; T4: 5.2µg/dl; TSH: 9.8µIU/ml values revealed subclinical hypothyroidism. Her anti thyroid antibodies, anti thyroid peroxidase and anti thyroglobulin were normal.

Materials and Methods

Materials

Sl	Dravya	Dose	Anupana	Duration
1	<i>Kanchanara Gutika</i>	1gm, BID	Water	3 months
2	<i>Manasamitra Vatakam</i>	2 tablets at Bed time	Warm milk	3 months

Kanchanara Gutika

Kanchanara Gutika was specially prepared with the following ingredients: *Haritaki* – 1 part, *Vibhitaki* – 1 part, *Amalaki* – 1 part, *Pippali* – 2 parts, *Sunti* -2 parts, *Maricha* – 2 parts, *Kanchanara twak* – 12 parts, *Guggulu* – 21 parts and honey – 30 parts.

All the above drugs were purchased from local market of Tirupati and were dried in shade. Once they were completely dried, they were cleaned properly. This was done to remove any foreign material. Each of the above drugs is finely powdered. Then each of the drugs is weighed individually according to the ratio mentioned. The fine powders of *Triphala*, *Trikatu* and *Kanchanara twak* were taken in a mass mixing machine and mixed thoroughly. *Guggulu* was taken and purified with *Triphala kwath*. This purified *Guggulu* was added to the above homogenous mixture. Finally honey was added to this whole mixture. After adding honey, the whole mixture was mixed thoroughly. Making of *vati* became difficult due to excess quantity of honey and hence soft gel capsules each of 1 gm were prepared(4).

Manasa mitra vatakam: This medicine manufactured by Arya Vaidya Sala Kottakal Company was purchased.

Methods

Center of study: S.V.Ayurvedic College, Tirumala Tirupati Devasthanams, Tirupati

Type of study: Simple Random Single Case Study.

Evaluation of Depression Severity: The severity of depression was rated according to Montgomery and Asberg Depression Rating Scale (MADRS) (5).

Montgomery and Asberg Depression Rating Scale (MADRS) contain a questionnaire on the following symptoms

- Apparent sadness
- Reported sadness
- Inner tension
- Reduced sleep
- Reduced appetite
- Concentration difficulties
- Lassitude
- Inability to feel
- Pessimistic thoughts
- Suicidal thoughts

Each symptom is graded from 1 to 6 depending on its severity. The total of grades of all the symptoms gives the MADRS. The higher MADRS indicates severe depression.

At the time of first visit, the MADRS of the patient was 48 indicating severe depression.

Observations and Results

Based on diagnosis, Ayurvedic management was started. *Kanchanara gutika* (6) 1gm BID was advised along with *Manasamitra vatakam* (7) BID. The patient was instructed to come for review every month for three months. After one month the patient revealed that there was an improvement in her health condition. All her vitals were stable and MADRS score was 28. There was no weight gain. No unwanted medical effects were observed. After two months patient was feeling much better. All her vitals were stable. Her MADRS score was 18. Patient had lost weight of 2 kg. After three months of treatment patient had much clinical improvement and was relieved from depression. Her MADRS score was 4. Her Thyroid results were as follows. T3: 91 ng/dl; T4: 4.9 µg/dl; TSH: 4.3 µIU/ml. Patient had lost weight of 1 kg. There was no recurrence of symptoms or thyroid dysfunction observed during the follow-up.

Discussion

Under normal circumstances no medical treatment is needed for subclinical hypothyroidism. Yet the probability of subclinical hypothyroidism progression to overt hypothyroidism is high. Therefore any single clinical complaint cannot be neglected and thyroid screening is essential to maintain the quality of life of the patient.

In the present study, a 35 years old female, presented with depressive symptoms in spite of taking anti-depression medication. On thyroid screening her TSH was found to be elevated with normal T3 and T4 values. Her MADRS score was 48 which suggested that the patient was under severe depression. Her laboratory values and MADRS score were consistent with the diagnosis of Depression with subclinical

hypothyroidism. Patient had much clinical improvement with *Kanchanara gutika* and *Manasamitra vatakam*. Treatment was continued with repetition of thyroid screening after three months. This is to assure that the thyroid hormones and TSH are within the normal range.

The understanding of hypothyroidism on Ayurvedic lines is very important to achieve a comprehensive knowledge about the treatment. The symptoms like increased fatigue, pallor, hoarseness of voice, laziness, change of taste, cold intolerance, myxoedema are seen in hypothyroidism. When *Udanavata* is obstructed by *kapha* it leads to the symptoms like *dourbalya*, *vaivarnya*, *vakswara graham*, *aruchi*, *saitya* and *sodha*. Basing on the correlation of symptoms, hypothyroidism is understood as *kapha avruta udana vata* (8). The *doshas* involved in the manifestation of hypothyroidism are *kapha* and *vata* (*udana vata*). The *dushyas* are *rasa dhatu* and *medo dhatu*.

Kanchanara gutika is indicated in *Galaganda*. According to Ayurveda, *galaganda* is a swelling in the neck region which can be compared to the goiter of hypothyroidism. The ingredients of *Kanchanara gutika* are *Triphala*, *Trikatu*, *Kanchanara*, *Guggulu*, and Honey. Moreover the drugs of *Kanchanara gutika* can reverse the pathology of hypothyroidism. It acts effectively on the symptoms of hypothyroidism. The *Kaphahara*, *medohara*, *amahara*, *srotorodhara* and *rasayana* properties of the ingredients of *Kanchanara gutika* is the main basis for its action on hypothyroidism. By the virtue of its all *gunas*, *Kanchanara gutika* mainly relieves *srotorodha* which plays a key role in causing symptoms like cold intolerance, myxoedema and absence of perspiration. The *amahara* property corrects the vitiated *rasadhatu* and thereby the symptoms as *aruchi* is counteracted. *Medo hara* property of *Kanchanara gutika* helps to correct vitiation of *medodhatu* in the body and also relieves *galaganda*. *Kaphavatahara* properties helps to relieve body pains, muscle cramps and constipation. As *Rasayana* is the main line of treatment in *avarana* it corrects the symptoms as *vakswaragraha*, *sodha*, *saitya*, *dourbalya*.

Depression is a persistent feeling of sadness in which the patient experiences low self esteem, lack of concentration, lack of interest and pleasure in activities, feeling of guilt and the like. Certain behavioral changes as lack of appetite, disturbed sleep, restlessness are also seen. According to Ayurveda, depression can be considered as *vishada* (9), *mano avasada* (10), *adhija unmada* (11) or *kaphaja umada*(12). The symptoms of depression are predominantly of *Vata* and *Kapha doshas* vitiation. In Ayurveda, *Tamo* and *Rajo gunas* are the *manasika doshas* responsible for *mano vikaras*. There is a strong inter relation between *sareera* and *manas*. Hence when *sareeraka doshas* are vitiated it reflects on the *manasika doshas* and vice versa. When *manasika dosha* vitiation is more in intensity, people are prone to *manasika vikaras* as mentioned above.

Manasamitra vatakam is a potent Ayurvedic formulation used for anxiety, depression and stress. In

Ayurveda it is said to be *medhya* and *rasayana*. It is well indicated in *mano doshas*. It increases *pratibha*, *medha* and *pragna*. As it is indicated in *manodoshas*, it helps to relieve depression. It improves courage and tackles the feeling of low self esteem due to its property of enhancing *pragna* i.e. courage. As it is *medhya* it helps to fight lack of concentration and enhances memory. The *pratibha* property of *Manasamitra vataka* boosts up the person to be active and complete his daily activities normally. It also improves cognition, intelligence and is adoptogenic, nootropic, anxiolytic and anti-oxidant(13). It is well indicated in speech disorders, mood disorders and also promotes good sleep.

Hence, *Kanchanara gutika* along with *Manasamitra vatakam* had given a promising result in this case of subclinical hypothyroidism with depression.

Conclusion

Subclinical hypothyroidism many a times may go unnoticed except for a few non specific presentations as depression. In such patients it is very important to go for thyroid screening. Hence it is better to treat such condition to maintain the physical and psychological health of the patients. Ayurveda provides a very good treatment without any side effects in such conditions and can be a ray of hope for the people looking for alternate system of medicine.

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