Hypothyroidism - A Case Report

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ABSTRACT

Endocrine mainly concern with synthesis, secretion and action of hormones through metabolic signals which contribute peripheral metabolism of activation of different cells. Hypothyroidism is the most common endocrine disorder observed of the 5% population, mainly females in present time, at the same time treatment available in synthetic thyroxin tablets which patient has to take life long. On other side, it reflects many side effects. So it is proper time to treat the disease with classical drugs, so here in this paper a case report treated by using Kanchanara Guggulu, Kankayanagutika (Gulma) and Phala Kalyangrita, which is the prime focus of this paper.

Key words: Hypothyroidism, Kanchanara Guggulu, Kankayanagutika, Phala Kalyangrita.

INTRODUCTION

The thyroid is a small, butterfly-shaped gland located just below the Adam's apple. This gland plays a very important role in controlling your body’s metabolism, that is, the rate at which your body uses energy. It does this by producing thyroid hormones (primarily thyroxine, or T4, and triiodothyronine, or T3), chemicals that travel through your blood to every part of your body. These thyroid hormones tell the cells in your body how fast to use energy and create proteins. The thyroid gland also makes calcitonin, a hormone that helps to regulate calcium levels in the blood by inhibiting the breakdown (reabsorption) of bone and increasing calcium excretion from the kidneys. There are two types of thyroid patients hypothyroid and hyperthyroid.1

Anatomy

The thyroid gland is among the most significant organs of the endocrine system and has a weight of 15 - 20g. It is soft and its colour is red. This organ is located between the C5 - T1 vertebra, in front of the trachea and below the larynx. It is comprised of two lobes and the isthmus that binds them together. Capsule glandular which is internal and external folium of thyroid gland is wrapped up by a fibrosis capsule named thyroid. The thyroid is supplied with arterial blood from the superior thyroid artery, a branch of the external carotid artery and the inferior thyroid artery, a branch of the thyrocervical trunk. The venous blood is drained via superior and middle thyroid veins, which drain to the internal jugular vein, and via the inferior thyroid veins. The inferior thyroid veins originate in a network of veins and drain into the left and right brachiocephalic veins. Both arteries and veins form a plexus between the two layers of the capsule of the thyroid gland.2

Ayurveda and Thyroid Gland

There is no direct mention of the thyroid gland in Ayurveda, but a disease by the name Galaganda, characterized by neck swelling, is well known. The first description of neck swelling was mentioned in Atharva Veda by the name Apachi. Charaka mentioned the disease under 20 Sleshma Vikaras.3 Sushruta in Sareera Sthana has mentioned that of the
seven layers of the skin, the sixth layer Rohini is the seat of Galaganda. In Nidana Sthana he described Galaganda as two encapsulated small or big swellings in the anterior angle of the neck, which hang like scrotum, whereas Charaka mentioned Galaganda as a solitary swelling.

Susratha stated that rivers flowing towards east might give rise to the occurrence of Galaganda. Bhela described that Sleepda and Galaganda are more common in Prachyadesa (eastern part) of the country and that persons consuming predominantly fish are liable to develop Galaganda.

Harita Samhita described the role of Dustambu (contaminated water) and Krimidosha (infection) in the precipitation of Galaganda. Kashyapa Samhita added that any part of the country that is cold, damp, with densely grown long trees, water stagnation and heavy rains may be prone for the development of Galaganda.

Thyroid Hormone

There are two biologically active thyroid hormones, 

- Tetraiodothyronine (T4; usually called thyroxine)
- Triiodothyronine (T3)

Derived from modification of tyrosine.

Main causes of Hypothyroidism

The main causes of hypothyroidism can be classified into;

Primary (thyroid failure): Hypothyroidism, caused by the inability of the thyroid gland to make T3 and T4, is called primary hypothyroidism; Primary hypothyroidism is a condition of decreased hormone production by the thyroid gland. It accounts for 95% of hypothyroidism cases; only 5% or less are supratheroid in origin. The most common cause of primary hypothyroidism is;

1. Iodine deficiency in diet; AITDs (Autoimmune thyroid diseases); Drugs; iatrogenic; Congenital.
2. Secondary (due to pituitary TSH deficit).
3. Tertiary (due to hypothalamic deficiency of TRH).
4. Radiation therapy to the neck area.
5. Radioactive iodine treatment
6. Thyroid surgery

Hypothyroidism is one of the most undiagnosed and misdiagnosed diseases, as its clinical features are notorious. Hypothyroidism doesn’t have any characteristic symptoms, and many symptoms of this condition can occur in people with other diseases.

Case Study

A case of a 25 years young female patient working in MNC visited to OPD of Panchakarma Department, N.K. Jabshetty Ayurvedic Medical College And P G Centre (Karnataka) on 10/11/15 with complaints of Severe fatigue, loss of energy, weight gain, difficult y losing weight, depression and depressed mood, joint and muscle pain, headaches, dry skin, brittle nails, brittle hair, itchy scalp, hair loss, irregular periods etc.

The patient had taken treatment from private medicine doctor before 2 to 3 years. The history also suggested that the patient had received thyroid replacement therapy. But there was no satisfactory relief through the drugs. Routine blood investigation
including thyroid profile was done, where hypothyroidism was found i.e. her T4 and TSH report at first is 9.04mg/dl and 6.04mg/dl respectively. Patient herself was willing for Ayurvedic therapy. Thereafter, medicine was given for 4 months. After completion of 2nd month patient got complete relief from irregular menstruation and also joint and muscle problem, and T4 and TSH report reduced up to 6.74mg/dl and 7.03mg/dl respectively. No adverse effects were being observed throughout the entire sitting. Then after 1 month T4 and TSH report reduced up to 6.20mg/dl and 3.21mg/dl respectively. To observe any recurrence of symptoms patient was followed up to 6 months but recurrence of symptoms were not observed. Finally T4 and TSH report remarkably reduced up to 5.50mg/dl and 3.37mg/dl respectively. Patient was fully satisfied with medicinal therapy as compared to previous treatments done with modern modalities.

Selection of drugs

1. **Kanchanara Guggulu**[^12]

   **Ingredients:** Kanchanara Twak, Triphala, Twak, Sunthi, Pippali, Ela, Twak, Patra, Guggulu.

   **Indications:** Gulma, Gandamala, Apachi, Arbuda, Granthi, Vrana, Bhagandara, Sleepada, Kustha.

   **Dose:** 2 pill tds.

   **Anupana:** with water.

2. **Kankayana Gutika (Gulma)**[^13]

   **Ingredients:** Sathi, Puskaramoola, Danti, Chitraka, Adraka, Sringabera, Vacha, Trivruta, Hingu, Yavakshara, Yamani, Ajaji, Ajamoda, Dhayanak, Mustulunga Rasa.

   **Indications:** Gulma, Krimi, Arsha, Raktapitta.

   **Dose:** 2 pill tds.

   **Anupana:** with ghee, milk water, Madhya.

3. **Phala Ghrita**[^14]

   **Ingredients:** Triphala, Mangistha, Kustha, Tagara, Satavari, Grita, Kheera, Hingu, Kakuli, Haridra, Daruharidra.

   **Indications:** Bala Graha, Vandhatwa, Yoni Vikara, Sukra Vikara, Garbhnī Roga.

   **Dose:** 2 tsf bd

   **Anupana:** with luke warm water.

**Discussion**

Ayurveda has not mentioned endocrine disorders, instead for treatment of unspecified Syndromes. The Symptoms of hypothyroidism are studied in term of imbalance of Dosha, Agni, Srotas etc and an effort is made to obtain the proper Samprapti of hypothyroidism in classical way.

When we compared all these symptoms that directly shows there is involvement of Srotas along with different Doshas and Agni abnormality. Like in cases of over hypothyroidism the serum triglyceride remains high density, lipoprotein level remain low which will support the abnormality of Medovaha Srotas in pathogenesis of hypothyroidism.

Elderly patient with hypothyroidism have low mental state forgetfulness, emotional liability etc. symptoms which supports Manovaha Srotas abnormality in this disorder.

Above all the main involvement of Agni is there by producing Ama due to Agnimandya and here we should not forget the Doshas which are the root cause for Agnimandya are Kapha Vata which causes the improper functioning of Jatharagni and Dhatwagni.

So, in the line of treatment main target is to treat these Doshas, remove the Sroto Avarodha particularly in Rasavaha, Mamsavaha, Medovaha, Manovaha Srotas.

**Conclusion**

Hypothyroidism is not described in Ayurvedic classics. But based on clinical presentations the involved factors in the hypothyroidism Doshas are Kapha Vata. Case has been treated with above mentioned medicine which has given the satisfactory result.
REFERENCES


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