Analysis of hypothyroidism in Ayurvedic view

Patil Prajakta¹, Wagh Suryakiran²

¹P. G. Scholar
²HOD and Professor -9822846910 suryakiran_wagh@gmail.com

Keyachiktsa Department, Yashwant Ayurved Mahavidyalaya, PG and RTC, Kodoli, Kolhapur, Maharashtra.

*Corresponding author: prajupatil2892@gmail.com

ABSTRACT – Thyroid gland disorders are growing worldwide health issue. Global incidence of hypothyroidism is increasing as thyroid gland easily responsible to stimuli like stress and anxiety¹. According to WHO 2 billion people are iodine deficient worldwide². Relative iodine deficiency causes goiter and severe deficiency causes hypothyroidism. Women are 2-10 times more likely to develop these conditions. There is exact no correlation of thyroid gland in Ayurveda. But the Ayurvedic system of medicine is very futuristic and it doesn't emphasize on naming the disease. It rather insist on understanding the constitutional status of a disease and adopting an appropriate treatment. The main action of thyroid hormone is to act as a spark to start up body metabolism at cellular level. In Ayurveda it can be correlated with the actions of Agni. The Jatharagni responsible for digestion and absorption of food with assistance of saman vayu³. Bhutagni responsible for transformation of heterogeneous substance to homogenous substance. Dhatwagni responsible for metabolism and convert aahar-ras into sar and kitta⁴ These vitiated agni causes vitiation in doshas which leads to various diseases like hypo and hyperthyroidism. Also the symptoms of hypothyroidism can be co-related with imbalanced Dosha Dushya. Nidan sevan and ama further aggravates the symptoms of hypothyroidism. So the present article aims to study hypothyroidism from ayurvedic point of view – thyroid hormone its physiology, vitiation of dosha dushya ama agnimandya in hypothyroidism and brief management of it.

Keywords: hypothyroidism HPT AXIS, Kapha vata dosha vrudhi pitta kshay, Agnimandya, Ama

INTRODUCTION:

The thyroid gland is an important endocrine gland located in the neck and is the site for the production of thyroid hormones. The thyroid gland produces two related hormones –T4 Thyroxine and T3- Triiodothyronine. These hormones play an important role in cell differentiation during development and helps to maintain thermogenic and metabolic homeostasis in adult⁶.
Regulation of thyroid axis is classic example of endocrine feedback loop. Hypothyroidism refers to any state that results in deficiency of thyroid hormone including hypothalamic or pituitary disease and generalized tissue resistance to thyroid hormone. Ayurveda has endowed the function of thermogenesis and metabolism in the body to Agni. The normal and abnormal functions of thyroid gland and agni are similar. also symptoms of hypothyroidism is similar like Ama. Vitiation of dosha dhatu responsible for production of symptoms. Management of hypothyroidism with synthetic hormone derivatives may bring the value of T3 T4 TSH to normal range but the increase dosage and and continuous medications are cost expensive and makes the patient drug dependent till the end of mortal life. so better safer and long lasting therapy needed for present society. The symptoms of hypothyroidism are similar like vata kapha vridhi and pitta kshya, ama, agnimandya. So the present article aims to co-relate hypothyroidism and agnidushti, ama, doshadushti, dhatudushti and to ascertain treatment of hypothyroidism in Ayurveda.

**MATERIALS AND METHODS –**
The study is carried out by literature search and critical review of the obtained facts. The study of various Ayurvedic texts were made critically and effort made to understand pathogenesis of hypothyroidism.

**PHYSIOLOGICAL ACTION OF THYROID HORMONE –**

- **Protein metabolism-** increases synthesis of proteins in cells.
- **Carbohydrate metabolism-** stimulates glucose uptake, glucogenolysis and gluconeogenesis to generate free glucose which provide energy to body.
- **Lipid metabolism-** help in fat metabolism by mobilizing lipids from adipose stores and accelerates oxidation of lipids to produce energy. Thyroxine decreases fat storage by mobilizing it from adipose tissue and fat depots. the mobilized fat is converted into free fatty acid and transport by blood; Thus thyroxine increases free fatty acid in blood.
- **Action on body temperature** – increases heat production in body by accelerating various cellular metabolism processes and increases BMR.
- **Action on growth** –accelerating especially in children.
- **Action on CVS** –increasing heart rate by increasing force of contraction of heart.

**Hypothyroidism -**
Hypothyroidism is abnormally low activity of thyroid gland – resulting in retardation of growth and mental development in children and adults.

**CAUSES-**
1. Iodine deficiency remain a common cause of hypothyroidism worldwide.  
2. Autoimmune disease – Hashimotos thyroiditis and iatrogenic causes (treatment of hyperthyroidism) are most common.
3. Other causes – Drugs – iodine excess – including iodine containing contrast media and amiodarone. Lithium . antithyroid drugs. ,congenital hypothyroidism, thyroditis.


Analysis of hypothyroidism in Ayurvedic view:
Avatu means thyroid gland in Sanskrit8. ojas is our innate vitality and immunity. A prolonged vata pitta imbalance depletes ojas and causes vata to put kapha out of balance. In hypothyroidism – etiological factors mainly vitiate tridosha –kapha predominance associate with vata vruddhi and pitta kshaya leading to provoking vata. This tridosha vitiation invites derangement of jatharagni – ultimately leading to derangement of dhatwagni and subsequently appearance of ama. This ama blocks the channels of body (srotorodha) thereby affecting contents of channels causing vitiation of strotasa and dhatu and forming the symptoms which is similar like hypothyroidism.

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Dosha involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight gain</td>
<td>Kapha vruddhi</td>
</tr>
<tr>
<td>Puffiness of body</td>
<td>Kapha vruddhi</td>
</tr>
<tr>
<td>Loss of appetite</td>
<td>Kapha vruddhi Pitta kshay</td>
</tr>
<tr>
<td>Dry and coarse skin</td>
<td>Vata vruddhi Pitta kshaya</td>
</tr>
<tr>
<td>Minimal or absent sweating</td>
<td>Pitta kshaya</td>
</tr>
<tr>
<td>Constipation</td>
<td>Vata vruddh</td>
</tr>
<tr>
<td>Horseness of voice</td>
<td>Kapha Vata vruddhi</td>
</tr>
</tbody>
</table>

INVolvement of dhatu

<table>
<thead>
<tr>
<th>Dosha</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rasa</td>
<td>Weight gain, loss of appetite, heaviness of body, lethargy, premature aging symptoms – menstrual disorders infertility</td>
</tr>
<tr>
<td>Rakta</td>
<td>Dry skin, slow pulse rate, lethargy</td>
</tr>
<tr>
<td>Mamsa</td>
<td>Heaviness in body, muscle ache, granthi, galganda</td>
</tr>
<tr>
<td>Meda</td>
<td>Tiredness, sleepiness, sluggishness</td>
</tr>
<tr>
<td>Asthi</td>
<td>Osteoporosis OA</td>
</tr>
<tr>
<td>Majja</td>
<td>Osteoporosis</td>
</tr>
<tr>
<td>Shukra</td>
<td>Loss of libido, infertility.</td>
</tr>
</tbody>
</table>

INVolvement of Ama

<table>
<thead>
<tr>
<th>Ama lakshan</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strotorodha</td>
<td>Stunned growth</td>
</tr>
<tr>
<td>Bal bhrinsha</td>
<td>Delayed development milestones, cold intolerance, mental impairment</td>
</tr>
<tr>
<td>Gaurava</td>
<td>Swollen puffy oedematous face, weight gain</td>
</tr>
<tr>
<td>Anil mudhata</td>
<td>Slow HR, joint paint, inability to concentrate</td>
</tr>
<tr>
<td>Aalasya</td>
<td>Lethargy sleepiness</td>
</tr>
<tr>
<td>Aruchi Apakti</td>
<td>Decrease appetite and BMR</td>
</tr>
<tr>
<td>Malasanga</td>
<td>Constipation</td>
</tr>
</tbody>
</table>
loss of energy, apathy, fatigue

IN Volvement of Agni
Metabolic effect of thyroid hormone can be seen on almost all cells of body. The effect of agni is also on each and every cell of the body. Just as thyroid hormones helps in carbohydrate, fat and protein metabolism – jatharagni digest these substances into GUT with assistance of saman vayu. Bhutagni converts these heterogenous substances into homogenous substances at cellular level. Vitiated agni is said to be root cause of all diseases in the body. Agnimandya is the vitiated state where Agni is unable to digest even the meagre quantity of ingested food. Due to improper digestion, Agnimandya results in formation of abnormal ras dhatu (apachit rasdhatu) i.e. Ama. This ama produces the symptoms similar like hypothyroidism or hyperthyroidism.

CHIKITSA
SHAMAN CHIKITSA
1) DEEPAN PACHAN – regulating agni with dipanas (digestive herbs) to increase metabolism is essential followed with clearing ama with herbs known as pachnas. The deepan pachan therapy in ama dosha strengthens Jatharagni and in turn regularizes Bhootagni and Dhatwagni. Thus the Ayurveda therapy not only gives symptomatic relief but also metabolism at the cellular level is kept into check.
2) LEKHANIYA DRAVYA – helpful to reduce excess weight – like chitrak and guggulu.
3) RASAYAN – all of above drugs helpful but as they have heating property and thus may aggrivate pitta and deplate ojas – adjusting dosage of these herbs according to food intake prevent loss of energy. lower dosage or Rasayanas is used if pitta is vitiated.
4) SECONDARY SYMPTOMS – laxatives can be used for constipation.

SHODHAN CHIKITSA.

- Chardi virechanam Nasyam Swedo Dhooma Siravyadha Agnikarma Ksharyoga Pralepo Langhanani cha. - bhaishajya ratnavali Galganda chikitsa 82
- The therapies like vaman virechan Nasya Swedan Dhoopmaan Siravyadha Agni karma Kshar yog Pralepa Langhana mentioned in Bhaishjhya ratnavli.
- Snehapana – amrutadya tail, tumbi tail, goghrita
- Vaman – with madanphala pippali
- Mrudu virechan – gandharv hasyadi tail / trivrutt

YOG AND KASHAY KALPANA
- Kashay – varun mula kwath
- Guggulu – vyoshadi guggulu Knchnar guggulu Triphla guggulu
- Ghrit – vachyadya ghrit
- Tail – manjishtradya tail, mahaajmodadya tail, magdhadaya tail vachadi tail
- Aasav aarishta – vidangasav

PATHYA PATHYA
PATHYA-
- Aahar – kaphahara aahar like yava (barley) bajara (millet) jowar, Ragi vegetables like radish sarshap gandeera and spices like shunthi jeerak trikatu ushna jala (luke warm water)
• Vihar – regular exercise like yogasana pranayam like – surya bhedan kapalbhati

APATHYA –

Heavy food and refined food. Fried preparations. refined food like – white floor black gram, peas, potatoes. curd, milk, fermented and bakery products.

DISCUSSION –

Hypothyroidism is a burning issue and present treatment is not helping much in resolving underlying pathology. The conceptual pathology helps us to identify it is Kapha pradhan tridosha vyadhi with ras medo dushti pre dominantly. The nidan parivarjan and deepan pachan chikitsa helps to reduce agnimandya and ama ultimately reduced symptoms of hypothyroidism and give relief. The yogas like Varunadi kashay, Kanchnar guggulu helps in removing strotolepa and resolving agnimandya Management of hypothyroidism with synthetic hormone derivatives may bring the value of T3 T4 TSH to normal range but the increase dosage and continuous medications are cost expensive and makes the patient drug dependent till the end of mortal life. so better safer and long lasting therapy can be achieved by Ayurveda.

CONCLUSION –

Hypothyroidism can be considered as a condition which results into Dosha dushti. -Kapha vata dosha vrudhi and pitta kshya results in agnimandya. dhatwagni mandya. this vitiation of Agni results in formation of ama nirmiti.

Dosha pratyaniyk chikitsa will help to manage this condition better. Rasayan will help to managing condition as it helps in stromomkh vishodhan. Thus with Ayurveda we heal the root imbalance of hypothyroidism rather then treat symptoms for the remainder of patients life.

ACKNOWLEDGMENT

Dr. S. P. Wagh M. D Kayachikitsa and Dr. Divya Kasbe PG scholar, Kayachikitsa department Yashwant Ayurved Mahavidyalaya PG and RTC Kodoli Kolhapur.

REFERENCES:

1. Ganpati Mudur ‘Endocrine disorders remain undetected and untreated in India’ BMJ 1999Jan 23;318(7178);216 new delhi
4. Prof. Vd. Y. G. Joshi Charak samhita shri Chakrapani virachit Aurved dipika vyakhya Yashwant tika Uttrardh. vaidyamitra prakashan dwituya avruttchi kitsasthan adhya 15/14 page no. 343
5. Prof. Vd. Y. G. Joshi Charak samhita shri Chakrapani virachit Aurved dipika vyakhya Yashwant tika Uttrardh. vaidyamitra prakashan dwituya avruttchi kitsasthan adhya 15/15 page no. 343
Conflict of Interest: Non

Source of funding: Nil

Cite this article:

Analysis of hypothyroidism in Ayurvedic view.
Patil Prajakta, Wagh Suryakiran