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A REVIEW STUDY OF HYPERTHYROIDISM AND MEDOAGNI VRIDDHI SPECIAL REFERENCE OF HYPER-SECRETION OF THYROXINE

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ABSTRACT

According to Ayurveda hyperthyroidism can be linked to *Medoagni Vriddhi*, which is an increase in the metabolic fire's activity that transforms *Meda Dhatu*. Over stimulating *Medoagni* causes fat deposits to be broken down and used up quickly, which is similar to the catabolic state that occurs in hyperthyroidism. This explains the condition's common symptoms of emaciation, restlessness and profuse perspiration. Thus, the rapid metabolic state that characterizes hyperthyroidism is reflected by both thyroxine hyper secretion and *Medoagni Vriddhi*. Ayurveda compares the symptoms and indicators of thyroid disorders to those of many other illnesses, including *Bhasmaka*, *Galganda* and *Ati Karshya*, etc. T4 travels throughout the body in the bloodstream and regulates vital bodily functions. An excessively high metabolic rate can result from hyperthyroidism, or an overactive thyroid that produces more thyroid hormones than the body needs. This article reviewed hyperthyroidism and *Medoagni Vriddhi* with special reference to hyper secretion of thyroxine.

KEYWORDS: Ayurveda, Hyperthyroidism, *Medoagni Vriddhi*, Thyroxine, *Bhasmaka*.

INTRODUCTION

Hyperthyroidism is defined by the overproduction or even by normally elevated secretion of thyroid hormones, which is usually associated with elevated serum levels of iodine or increased uptake of iodine. This condition characteristically demonstrates hyper secretion of serum T3 and T4 with inhibited TSH levels. The majority of the clinical signs are produced by an elevated rate of metabolism, which is mainly caused by the effects of thyroid hormones, particularly of T3. [1-4]

From the Ayurvedic perspective, this condition is characterized by *Dosha-vyadhi lakshana*, but rather than *Srotorodha* or *Ama*-characteristic signs observed in hypothyroidism, it exhibits *Dhatukshaya lakshana*. The major *Doshas* implicated are *Vata* and *Pitta*. Symptoms like *Karsya*, *Karsnya*, *Gatrakampa*, *Spurana* and *Pralapa* indicate aggravation of *Vata Dosha*. In contrast symptoms such as *Glani*, *Indriyadaurbalya*, *Daha* and *Pitavak* manifest as aggravation of *Pitta dosha*. Both *Vata* and *Pitta* are thus strongly vitiated in hyperthyroidism. As the thyroid gland is described as a *Medo Dhatu* dominant organ in Ayurveda, *Dusya* in hyperthyroidism is also *Medo Dhatu*. [3-5]

Samprapti

Vitiated *Vata* and *Pitta doshas* agitate *Medo Dhatu*, hyperactivity of *Medo Dhatvagni* results in *Kshaya* of *Medas*. Because *Vata* and *Pitta* are dominant in hyperthyroidism, the *Jatharagni* is heightened. *Agni's* activity is greatly increased when it is aggravated by both *Pitta* and *Vata* since it is naturally comparable to *Pitta*. *Atyagni* is the name given to this condition of hyperactive metabolism, in which the *Agni* starts consuming the *Dhatus* and *Ojas* in addition to digesting food. *Trt, Kasa, Daha* and *Murccha* are some of the main signs of *Atyagni*. The catabolic character of this metabolic imbalance is demonstrated by the patient's frequent malaise and lethargy, etc. [5-7]

Medoagni Vriddhi & Hyperthyroidism

Dhatwagnis which are considered parts of Kayagni in Ayurveda, have a vital function in tissue metabolism. An increase in Dhatwagni leads to Dhatu Kshaya, whereas a decrease causes Dhatu Vriddhi. In hyperthyroidism, patients mainly lose weight because of the increased action of Dhatwagni, which raises catabolic action and tissue loss. On the other hand, in hypothyroidism, weight gain results due to reduced Dhatwagni, which retards catabolism and encourages tissue deposition. During hyperactivity of Dhatwagni, the body exhibits

heightened metabolic function; resulting in higher tissue breakdown. When *Dhatwagni* is inactive, it facilitates only anabolic functions such as tissue formation, resulting in *Dhatu Vriddhi*. *Dhatwagni* functions with two different types of functions: anabolic and catabolic. *Medoagni Vriddhi* in Ayurveda can be correlated with hyperthyroidism when considering the metabolic aspects. **Figure 1** depicted role of *Medoagni Vriddhi* in hyperthyroidism. [6-8]

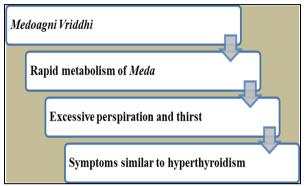


Figure 1: Association of *Medoagni Vriddhi &* hyperthyroidism.

The vitiation of Medovaha Srotas due to physical inactivity, Divaswapna and Medura Ahara Atibhakshana can be considered responsible factor hyperthyroidism, which is characterized by increased metabolic rate and expenditure of energy, corresponds to Ayurvedic terms like Atyagni or Bhasmaka Roga. Under this condition, because of reduced Kapha and increased Pitta and Vata, the Agni becomes Tikshna, particularly in the absence of food in the Amashaya. This makes the body start the catabolism of tissues; symptoms of this conditions Nidranasha. Hridaya are Stambha. *Vishambha* and *Balahani*. These symptoms are very similar to those of hyperthyroidism. [7-9]

Role of Thyroxine

Thyroid gland overproduction of thyroid hormone is known as hyper-secretion of thyroxine (T4) in hyperthyroidism. A faster metabolism results from this, which can cause symptoms including anxiety, heat intolerance, weight loss, elevated heart rate, and excessive perspiration. Graves' disease, thyroid adenomas, and toxic multinodular goiter are common causes.

Thyroxine, an iodine-bound hormone secreted by the thyroid gland, is instrumental in governing the metabolic processes of the body. Iodine a primary element in thyroxine can be linked to *Tejomahabhuta*, which is the foundation of *Agni*, the constitutional principle that oversees transformation and metabolism in the body. Thyroxine controls virtually all metabolic processes, such as energy expenditure, protein synthesis, lipid metabolism, and heat production. These effects reflect the role of digestion and transformation of *Agni* at both the gastrointestinal and tissue level. In addition, the main

form of *Agni* in Ayurveda, *Kayagni*, is in charge of preserving the body's overall metabolic balance. Since thyroxine controls cellular metabolism and all cells have receptors for thyroid hormones, it can be compared to *Kayagni Amsha*, the vital metabolic fire found in all tissues and cells. [1, 8-10]

Treatment

- ✓ The management of hyperthyroidism involves calming the exacerbated *Vata* and *Pitta doshas* and decreasing the augmented *Jatharagni* and *Dhatvagni* to alleviate symptomatology due to *Medo-Mamsa kshaya*.
- ✓ Dietary change in hyperthyroidism is keeping to a *Pittavatahara* diet, with protein foods, milk products, and cabbage and broccoli type vegetables, and the exclusion of iodine-rich foods and caffeine.
- ✓ Enough sleep is essential, and practices like *Ratrijagarana* should be avoided.
- ✓ *Yoga* is an auxiliary measure, the most beneficial *Asana* being *Sarvangasana* for thyroid conditions, in addition to *Matsyasana*, *Halasana*, *Suptavajrasana* and *Suryanamaskara*, etc.
- ✓ Pranayama methods Anuloma-Viloma and Kapalbhati are useful since they normalize the metabolic rate and have a relaxing but stimulating effect on the throat, which maintains overall thyroid function and symptom control.

CONCLUSION

The Ayurvedic ideas of Agni Vaishamyata can be used to understand thyroid diseases. Various causes are identified in classical writings, including Vishamasana, Mithyahara Vihar and Ati Sevana of Madhura Rasa. Due to the aggravation of Kaphaja and Vata doshas, Medo Dhatu accumulates in the neck area, which leads to Galaganda. Ayurvedic classical texts do not classically describe hyperthyroidism, but they do discuss allied metabolic diseases like Atyagni, Tikshnagni and Bhasmaka Roga, which have common characteristics with hyperthyroidism. Symptoms of Bhasmaka Roga are quite similar to those of hyperthyroidism. Metabolic acceleration observed in hyperthyroidism, excessive tissue and fat breakdown results from elevated metabolic activity, this condition can be correlated with Ayurvedic concept of Medoagni Vriddhi. The treatment options in Ayurveda include individualized diets, uses of medicinal plants, detoxification treatments Virechana karma and daily routines such as Yoga and Pranayama. Following these criteria can be a crucial factor in managing hyperthyroidism.

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