

Structural Anomalies in the Body Arising from Thyroid Gland Dysfunction: An Ayurvedic Prospect

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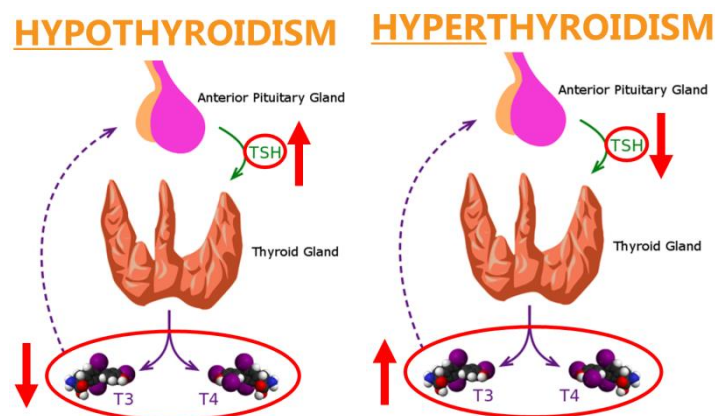
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Abstract

The thyroid gland, regarded as a small butterfly-shaped organ at the base of the neck, controls the metabolic activities of the organism. It is centrally involved in the secretion of the thyroid hormones thyroxine (T4) and triiodothyronine (T3). The dysfunction can be attributed to structural and functional variations. These two are commonly termed hypothyroidism and hyperthyroidism. The following discussion deals with these changes, as well as with the Ayurvedic approach to managing thyroid dysfunction.

Keywords: Thyroid, Hyperthyroidism, Hypothyroidism



Anatomical Changes Through Hypothyroidism

Weight Gain and Obesity: Perhaps the most common effects that veterinarians note in hypothyroidism are weight gains. Without enough thyroid hormone circulating around the metabolism, the entire body goes down and there is fat storages that begin to collect. Often noticed with edema around the face and

extremities, which is a great fat indicator.

Cardiovascular System: Hypothyroidism results in bradycardia and an increase in cholesterol which precipitates atherosclerosis. Overtime, the so-produced extra work thickens the heart walls thereby enlarging it – cardiomegaly.

Musculoskeletal Changes: Muscular weakness, stiffness of joints and swelling (myxedema) in hands and feet are usually the musculoskeletal presentation. If severe enough, it causes carpal tunnel syndrome secondary to swelling of structures.

Gastrointestinal System: Underactivity of the thyroid glands slows down the entire digestive system, leading to the problems of constipation and other complications of the gastrointestinal tract. The liver may enlarge with increased fat deposition and decrease in the flow of the bile (hepatomegaly).

Reproductive System: In females, hypothyroidism causes irregular periods, heavy menstruation (menorrhagia), and problems in conception. In males, it may cause a decreased libido and erectile dysfunction.

Nervous System: Cognitive functions can be impaired, manifesting in memory problems, depression, and general mental sluggishness. Peripheral neuropathy, such as numbing or tingling in the extremities, can also become another symptom.

Anatomical Changes Because of Hyperthyroidism

Weight Loss: Hyperthyroidism accelerates the metabolic processes of the body. Thus, even when a patient with this disease eats more food than usual, he continues to lose weight.

Cardiovascular System: Tachycardia, palpitations, and an increased atrial fibrillation risk are linked with hyperthyroidism. Consequently, it could make the heart work overtime, thus possibly resulting in high blood pressure and sometimes even heart failure.

Musculoskeletal System: Atrophy of muscles and presentation of weakness is widespread. The bones turn brittle very fast due to the fast loss of calcium exposing one to fractures.

Gastrointestinal System: An overactive thyroid causes an accelerated digestion system in the body, which necessitates frequent evacuation of bowels or, sometimes, diarrhea. This, therefore, could result in malabsorption, thus a lack of most nutrients.

Reproductive System: In females, hyperthyroidism can intensify an irregular menstrual cycle or amenorrhea, which may result in a complete omission in menstrual periods. In both organisms, hormone imbalances may affect the fertility.

Nervous System: There might be a presence of anxiety, irritability, and tremors in patients. It is also very common to see people facing insomnia and hyperactivity due to overstimulation of the nervous system.

Ayurvedic Perspective on Thyroid Dysfunction

Ayurveda, which is the traditional Indian medical science, speaks about managing the human body in a holistic way so that it brings about a balance of the doshas Vata, Pitta, and Kapha of the body. Ayurveda opines that primarily, the problem of the thyroid gland is associated with an imbalance of the doshas Kapha and Pitta in the body.

Kapha Imbalance (Hypothyroidism)

Diet: Foods warm and stimulating, like ginger, black pepper, and cinnamon, are advisable to keep Kapha

in balance. Foods that aggravate Kapha, such as milk, cold, and heavy foods, should be advised against. Herbs: Popularly, Ashwagandha (*Withania somnifera*), Guggulu (*Commiphora mukul*), and Kanchar (Bauhinia variegata) are used herbs in most of the Ayurvedic formulations for.

Lifestyle: Regulated exercise including yoga and pranayama helps stimulate metabolism; also helps in reducing the accumulation of Kapha.

Hyperthyroidism (Pitta Imbalance): Diet: Cool and calming, foods like coconut water, cucumber, and leafy greens are beneficial. Avoid spicy, oily, and acidic foods that increase Pitta.

Herbs- Herbs such as Shatavari (*Asparagus racemosus*), Brahmi (*Bacopa monnieri*), and Amalaki (*Emblca officinalis*) are administered to bring back balance and offset the aggravated Pitta dosha.

Lifestyle

The lifestyle should have activities such as meditation, gentle yoga, and adequate rest to treat hyperthyroidism.

The process of thyroid involvement in the system signifies a major anatomical and physiological change, which can produce a cascade of change in other systems in the body. With treatment in conventional medicine available through hormone replacement and the use of antithyroid medications, treatment complementing ayurveda through dietary modifications, herbal remedies, and changes in lifestyles leads to reattainment of balance and better well-being.

Conclusion

Ayurveda also regards thyroid sickness and the elements that come out from it in terms of the dosha, that is, Kapha, Pitta, and Vata imbalances. It solves the metabolic and structural disorders caused by thyroid dysfunction by correcting the doshic level with individual treatments, herbal formulations, and diet changes. Modern medicine treats most cases of thyroid disorder with interventions aimed at the specific causes of the disorders, for instance, umbrellas or hormone replacement therapy. In opposition, ayurveda does not only prescribe treatments for the imbalances but seeks to heal all of oneself including the way the person looks and feels.

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