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A REVIEW ON THYROID DISORDERS ACCORDING TO AYURVEDA

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ABSTRACT

Thyroid diseases are alarmingly increasing in the present era. Thyroid gland is related to many of the bodily functions and the basal metabolic rate. Generally, physicians advise to cut short salt levels in food to reduce risks of conditions like hypertension, obesity, heart diseases. On the other side, hypothyroidism and related pathologies are increasing due to low sodium diet and lack of public awareness regarding importance of Iodine and its relation with thyroid diseases. Therefore, this research article focusses on modern and Ayurvedic views of thyroid pathologies and role of Salt in preventing these pathologies.

KEYWORDS: Thyroid diseases are alarmingly increasing in the present era.

INTRODUCTION^[1]

Some facts about the Thyroid gland

- 1. The word Thyroid means ' Shield ', it is a Greek word.
- 2. It is one of the larger endocrine glands with butterfly shape and right and left lobes joined by an isthmus.
- 3. The weight of the Thyroid gland is about 10-20 g in adults.
- 4. It is located in the middle of the lower neck, below the larynx and just above the clavicles.
- 5. Hormones produced by the Thyroid gland are Thyroxin and Calcitonin.

DISCUSSION

Thyroid gland is linked with conditions like hypothyroidism, hyperthyroidism, goitre etc. mainly.

HYPOTHYROIDISM^[2]

Deficiency of the thyroid hormones causes Hypothyroidism.

This is of two types - Primary hypothyroidism due to pathology of the Thyroid gland. Secondary hypothyroidism due to pathology of the pituitary gland or the Hypothalamus.

If hypothyroidism is present since birth, the condition is termed as Cretinism, if it is developed in the adulthood, it is called as myxoedema.^[3]

Causes of Cretinism are failure of development of the Thyroid gland, failure of hormone production due to severe Iodine deficiency in the diet of both the mother during pregnancy and baby after birth. Causes of myxoedema are idiopathic causes, hereditary causes, Iodine deficiency, surgery and exposure to radiation in some cases.

Common in females, myxoedema occurs in the age group between 40_50 years.

Generally symptoms seen in Hypothyroidism are^[4]

- Hairloss especially in scalp and eyebrows.
- cold intolerance
- constipation
- weight gain
- Overall body functions and Basal metabolic rate decreases.
- In women, progesterone deficiency, irregular and excessive bleeding are seen during menstrual cycle.
- Lab tests will show TSH level increased in primary hypothyroidism. Low T4 and T3 levels are diagnostic.

HYPERTHYROIDISM^[5]

Increased levels of Thyroid hormones cause Hyperthyroidism, also known as Thyrotoxicosis.

Main causes of Hyperthyroidism are Grave's disease, Toxic multinodular goitre and also due to consumption of excess Iodine.

- Target organ of Hyperthyroidism is the Heart, therefore palpitations and dyspnoea are found as symptoms associated with
- Restlessness, tremors, insomnia, anxiety, depression, vomiting, diarrhea etc.
- Women find amenorrhoea and shorter menstrual cycles.

- Wide staring gaze and lid lag of eyes with soft, warm, heat intolerant skin is found in Hyperthyroidism.
- Lab tests show increased levels of TSH, T3 and T4.

GOITRE^[6]

Enlargement of thyroid gland is called goitre, which may be related to thyroid pathology and Iodine deficiency in some cases.

IODINE AND ITS DEFICIENCY^[7]

Iodine is an element needed for the production of thyroid hormones. T3 is the active thyroid hormone in the body which contains three Iodine molecules.When Iodine deficiency occurs, greater risks of goitre and hypothyroidism occurs. Iodine requirement per day in an adult is 150 mcg, this increases by 50% during pregnancy, its deficiency can cause impaired neurological development in the foetus. Lactating mothers also need Iodine in their diet. When the Iodine consumption per day exceeds 450 mcg, it may lead to a condition called Thyroid Iodine toxicosis. Iodized table salt is made considering the fact to include Iodine easily in daily diet. Other forms of salt are sea salt and Himalayan pink rock salt.

Iodized salt consumption in the right quantity ensures recovery from hypothyroidism, whereas in autoimmune conditions like Hashimoto's thyroiditis, symptoms may get worse if the levels are increased.

Including Iodine in dietary articles is a good option in such cases.

Shellfish, codfish, milk, egg, potato, garlic, mustard greens, sesame seeds and soyabeans contains Iodine and they can be safely incorporated in the daily diet.

Avoiding goitrogens which prevent assimilation of thyroid hormones are to be avoided in Hypothyroidism, whereas they can be consumed in Hyperthyroidism.

Cruciferous vegetables like Cabbage, Spinach, Cauliflower acting as goitrogens and beverages like coffee and alcohol are to be avoided especially in hypothyroid patients.

AYURVEDIC VIEW OF THE THYROID DISEASES

In Ayurveda,

Galaganda is a swelling in the neck situated in the sixth layer of the skin, Rohini as per Susruta samhita Sarira sthana. Acharya Susruta opines it to be two swellings in the front of the neck with a capsule like structure and he says this occurs more in places where rivers flow towards the east. He classified galaganda as Vataja, Kaphaja and Medoja.

Acharya Charaka says it to be one among the 20 kaphaja diseases.

Main causes of Galaganda are erratic changes in food, water and climate; Acharya Harita says it is primarily caused due to contaminated water consumption.

ANALYSIS OF HYPOTHYROIDISM IN AYURVEDIC VIEW

In Charaka Samhita, Ashta nindita purushas have been discussed which can be taken as functional disorders of endocrine gland.

INVOLVEMENT OF TRIDOSHA

- 1. Weight Gain -Kapha vruddhi,Pitha kshaya
- 2. Puffiness of body features- Kapha Vruddhi
- 3. Loss of appetite- Kapha Vruddhi, Pitta Kshaya
- 4. Dry & coarse skin- Vata Vruddhi, Pitta Kshaya
- 5. Minimal or absent sweating- Pitta Kshaya
- 6. Anaemia- Kapha-Vata Vruddhi, Pitta Kshaya
- 7. Constipation- Vata Vruddhi
- 8. Hoarseness of Voice- Kapha- Vata Vruddhi
- 9. Generalised Aches, Pain- Vata Vruddhi
- 10. Muscular cramps, stiffness- Vata Vruddhi
- 11. Sluggishness Kapha Vruddhi

Kapha- Utkrishta Vriddhi, Vata- Alpa/Madhyama Vriddhi, Pitha- Utkrishta Kshaya.

Involvement of Dhatu

1. Rasa- Weight gain, Loss of appetite, Heaviness of body, Lethargy, Generalised aches, Somnolence, premature aging symptoms like hairloss, Cold intolerance, Puffiness, Anaemia, Menustral disturbances, Infertility

2. Rakta- Slow pulse rate, Dry skin, Slowing of mental activity, Lethargy

3. Mamsa Heaviness in the body, Muscle ache, granthi, Galaganda

4. Meda Tiredness, Sleepiness, sluggishness, Hyperlipidemia, Dysnpnea on exertion

5. Asthi Osteoporosis, Osteoarthritis

- 6. Majja Osteoporosis
- 7. Shukra Loss of libido, infertility

Involvement of Srotas

1. Annavaha- Loss of appetite, malabsorption

2. Rasavaha- Weight gain, Loss of appetite, Heaviness of body, Lethargy, Generalised aches, Somnolence, premature aging symptoms like hair loss, Cold intolerance, Puffiness, Anaemia, Menstrual disturbances, Infertility

3. Raktavaha -Slow pulse rate, Dry skin, Slowing of mental activity, Leth- argy, Anaemia

4. Mamsavaha- Oedema, Galaganda

5. Medovaha -Tiredness, Sleepiness, Sluggishness, Hyperlipidemia, Dyspnea on ex- ertion

6. Asthivaha -Osteoporosis, Osteoarthritis, Hair loss

7. Majjavaha -Osteoporosis

8. Shukravaha- Loss of libido, Infertility

9. Purishavaha -Constipation

10. Swedavaha- Dry & coarse skin, absent/minimal sweating

11. Artavavaha Loss of libido, Infertility, Secondary amenorrhoea

INFERENCE

Ayurveda treats this condition by making suitable diet, lifestyle changes along with oral medicines and external therapies like Siro abhyanga, Nasya, Dhara etc.

Choice of herbs include Kanchanara, Guggulu, Aswagandha, Brahmi and Punarnava which are administered in suitable forms like quatha, kalka, swarasa, vati etc as per the condition of the patient.

Himalayan pink rock salt called Saindhava lavana in Ayurveda contains 86 minerals and is the purest form of natural source of Iodine, which also aids in proper functioning of the respiratory and digestive systems. So, Ayurveda advocates Saindhava lavana in many cases including galaganda.

CONCLUSION

Eliminating the root cause is the main treatment principle of Ayurveda and this helps prevent recurrence of diseases. That is the reason why Ayurveda is having wide spread acceptance even across centuries and countries.

Ayurvedic formulations like Kanchanara guggulu, Punarnava quatha are found to be effective if administered after therapies like Siro abhyanga, nasya, dhara, pichu.

In Hypothyroidism, avoiding goitrogens, peanuts, sweet potatoes and including iodine containing food articles along with iodized salt or himalyan pink salt as per the condition is the key to cure.

In Hyperthyroidism, goitrogens can be consumed in limited quantities, sea food, redmeat, alcohol, dairy products and iodized salt in excessive quantities must be avoided.

Yogasanas like sarvangasana and neck exercises also aid in treatment of thyroid diseases.

Combating mental stress by meditation also is advised for the wellbeing of mind and body of the patient.

Results of patients were promising when diet, lifestyle changes were made along with medications.

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