

ROLE OF SARVANGASANA IN HYPOTHYROIDISM: A REVIEW

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ABSTRACT

Hypothyroidism is a condition characterized by abnormally low thyroid hormone production. These disorders may directly or indirectly involve the thyroid hormone which affects growth, development and many cellular processes. Since Hypothyroidism develops from a shortage of thyroid hormone and the most effective treatment is generally thyroid hormone supplementation. Hypothyroidism often continues throughout life and the patient may require lifelong follow-up and medication to control the condition. Yoga is one of the few natural remedies that can be used as prevention and treatment for hypothyroidism by stimulating thyroid gland. *Sarvangasana* which shows tremendous effect on thyroid gland will be discussed in paper.

KEYWORDS: Hypothyroidism, *Sarvangasana*.

INTRODUCTION

Thyroid diseases are common worldwide. In India too, there is significant burden of thyroid diseases. Accordingly to a projection of various studies on thyroid disease, it has been estimated that about 42 millions people in India suffer from thyroid disease. Thyroid disorders are the most common among all the endocrine diseases in India. Imbalance in production of thyroid hormone arises from dysfunction of the thyroid gland itself, pituitary gland. The most common thyroid problems involve abnormal production of thyroid hormones. Insufficient hormones production leads to hypothyroidism. In modern medicine, it is treated by thyroid hormone supplementation in which patient requires lifelong follow-up and medication. To

overcome this yoga asana can help it by improving function of thyroid gland and further damage of thyroid gland.

Yoga is one of the ancient techniques for dealing with thyroid problems. Yoga is much more than exercise. It helps to bring mind, body and spirit into perfect balance. It is an excellent alternative for treating people suffering from hypothyroidism. Sarvangasana help to massage the thyroid gland and hence helps in curing the problem. It helps to stimulate thyroid glands and thus improve their overall function by helping them work at their optimal level, so it is a modest attempt to make people aware of how *sarvangasana* can help in hypothyroidism.

MATERIALS AND METHODS

All the available authentic books in the yogic literature have been referred for the specific materials. Related modern books, internet websites, magazines articles etc. have been used as literary materials.

Anatomy of Thyroid^[1]

The thyroid gland is a butterfly shaped, pinkish colored gland situated in the neck in front of trachea. Thyroid is a great center of energy source. The prime function of the thyroid gland is to control metabolism. As the bellows of a black smith pushes the air to maintains appetite(jatharagni). The energy production from the food occurs by the action of thyroid hormones. If there is little dysfunction of thyroid gland or little imbalance in thyroid hormones our condition deteriorates.

Hypothalamus is an important organ related to thyroid function and is situated in the brain. It activates pituitary gland. Then pituitary gland releases thyroid stimulating hormone thyrotropin and sends it to thyroid gland and thyroid releases its hormone which is used as energy needed for our daily routine activities.

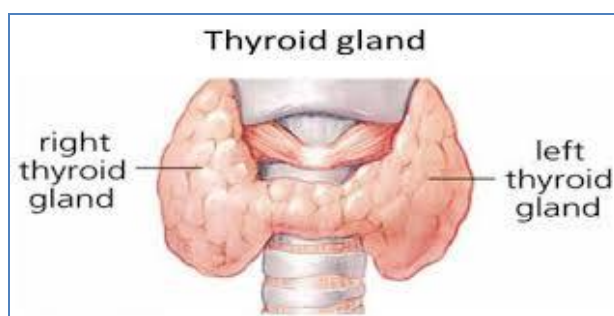


Fig. 1: Thyroid gland.

Hypothyroidism, also called underactive thyroid disease, is a common disorder. With hypothyroidism, your thyroid gland does not make enough thyroid hormone.

Cause

- Autoimmune : Hashimoto's thyroiditis Grave's disease
- Iodine deficiency
- Iatrogenic : Thyroidectomy Drug induced
- Congenital Symptoms:
 - fatigue
 - weight gain
 - a puffy face
 - trouble tolerating cold
 - joint and muscle pain
 - constipation
 - dry skin
 - dry, thinning hair
 - decreased sweating
 - heavy or irregular menstrual periods
 - fertility problems
 - depression
 - slowed heart rate
 - goiter

Importance of Yoga in Hypothyroidism^[2,3,4]

- Yoga for hypothyroidism is considered to be effective as it has a positive effect on the organs of endocrine system, especially by stimulating the thyroid gland.
- It act directly on the chakras and energy system of the body, resetting the endocrine chakra of system so that the energy potential of the body is boosted. Also it treats the root cause of hypothyroidism(mind).

Sarvangasana^[5]

It is the main asana which is to be done in hypothyroidism.

Procedure

1. Inhale, raise the legs together slowly and gracefully (without bending the knees) till it forms about 45deg. to the ground.
2. Continue to inhale and raise the legs further to 90° position. Bring the arms down and place them next to the buttocks.
3. Exhale; raise the buttocks and the trunk, taking support of the arms and elbows, without lifting the head. Rest the elbows on the ground firmly and support the back with both palms.
4. While retaining the legs parallel to the ground, straighten the trunk by pushing it with the hands until the chin is well set in the suprasternal hollow.
5. Inhale and raise the legs vertically keeping the body erect and come to the final shoulder stand position.
6. Maintain effortlessly with normal breathing for about 2-3 minutes. Carefully avoid all jerks.
7. Slowly come back to sthiti and relax in savasana.

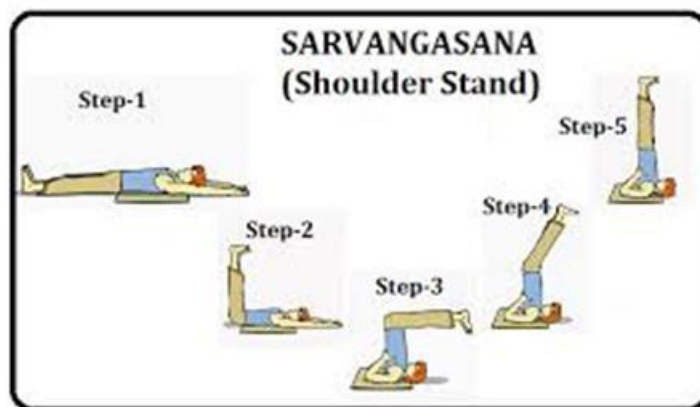


Fig. 2: Sarvangasana.

Role of sarvangasana in hypothyroidism^[2,3,4]

Due to this posture, there is no difficulty for the heart to pump the blood towards the brain, since it's automatically. Hypothalamus which is situated in brain is stimulated which plays important role to release thyroid hormone therefore **HPT axis** is also stimulated.

Inversion actually stress the whole body placing a demand on the brain and forcing it to work. Thus the glandular and nervous structures are toned up.

Jalndhara bandha^[6] While doing this asana Jalandhara bandha is formed, which improves the function of the thyroid, parathyroid and pituitary glands due to increase oxygen and blood supply to it.

While doing this asana the blood stores in the neck. Blood is forcibly flow to the thyroid gland and that part will get strengthen because of that.

Cervical nerve plexus

Thyroid plexus: This thyroid branch provides nerve supply and the functions of the most important endocrine gland called thyroid gland.

This thyroid plexus and the thyroid gland are stimulated by the pressure exerted by the chin lock position (jalndhara bandha) and the metabolism function of thyroid gland are definitely improves.

When the pressure is exerted on the thyroid gland. Physiologically there is series of activities which occur to release the thyroid hormones into blood.^[7]

- The plasma membrane of follicular cells sends foot like extensions called pseudopods, which close around the thyroglobulin-hormone complex. A receptor like substance called megalin which is present in the membrane of follicular cells mediates the process.



- The pseudopods convert thyroglobulin- hormone complex into small pinocytic vesicles.



- Then, the lysosomes of the cell fuse with vesicles.



- The lysosomes contain some digestive enzymes like proteinases which digest (proteolysis) the thyroglobulin and release the hormone.



- Now, the hormone diffuse through the base of the follicular cells and enter the capillaries. Only T3 and T4 releases into the blood.

Caution

The following persons should not try to perform sarvangasana.

Children less than 12yrs of age, persons having uncontrolled blood pressure, even with medicines, those having cervical spondylosis, pregnant ladies, persons with problems of myocardial infarction, mental instability, person having ear discharge or perforated ear drum.

CONCLUSION

Health is the god's gift to each and everyone. Using intellect we have to maintain it properly till the end of our life. The thyroid produces hormones that affect our body's metabolism and energy level. Thyroid problems are among the most common medical conditions. Asana practice and pranayama play an important role to control and prevent thyroid disorders.

One should understand the basic mechanism of body and mind in order to keep it effectively and peacefully. Also understanding the connection between body and mind, role of prana, interconnection of chakra and endocrine system helps to lead a successful happy life.

“Health is wealth. Peace of mind is happiness. Yoga shows the way.

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REFERENCES

1. B.D.Chaurasia's. Human anatomy, Regional and applied, Dissection and clinical, volume 3 Head, Neck and Brain, 4th edition, CBS publishers and distributors.
2. www.gyanunlimited.com/health/saarvangasana
3. www.yogapoint.com/asana/sarvangasana.html.
4. www.yogicwayoflife.com/jalandhara.bandha.thechin-lock/
5. The classic guide to yoga by The world's foremost authority:Light on yoga, BKS Iyenger forword by yehude Menuhin, harpercollins publishers, India, 2006, page no.212,213,214,215

6. Hathayoga pradeepika, Swatmaram yogindravirchita, Kshemraj shri Krushnadas shresthina, Mumbai, shri vekanteshwar publishers, page no.124.
7. Essentials of medical physiology, K.Sembulingam & Prema Sembulingam, 5th edition, Jaypee Brothers Medical publishers(P) LTD, Page no.375.