

Role of Vishuddha Chakra on Thyroid Disorders

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Abstract: *This paper will highlight role of Vishuddha Chakra on the management of thyroid disorders. The asanas, mudras and pranayama for activation of vishuddha chakra have significant value in management of thyroid disorder like hyperthyroid (thyrotoxicosis) and hypothyroidism. The vishuddha chakra or throat chakra is located in the throat region. While doing yoga study I realize that long before medical science knew the existence of thyroid gland our great yogis came up with practice which not only keeps gland and body healthy but also helps to understand higher awareness. The asanas, pranayama and mudra for activation of chakras can help in various disease management. The sole aim of this research is how vishuddha chakra thyroid gland are connected, could activation of vishuddha can help in management of thyroid disorders and role of vishuddha chakra in management of thyroid disorders like hyperthyroidism and hypothyroidism.*

Keywords: Vishuddha Chakra, Thyroid, Thyroid Disorders, Yoga, Metabolism

I. INTRODUCTION

Chakras are spinning vortex or whirlpool of energy which cannot be seen but they can be felt. There are seven main chakras located in the human body according to hath granths. All chakras are located near the site of endocrine gland. Dr Hiroshi Motoyama, a Japanese scientist did his scientific research on chakras. He invented a device 'the chakra machine' which records the impulse which comes from the psychic centres in the spinal cord (chakra). The machine was designed in the way to measure minute energy changes. Yoga asanas can influence our nervous system and mind to bring balance of hormones, body, mind. Before the discovery of endocrine system the yogis developed the kundalini yoga system which is used to awaken all chakras at the site of endocrine gland.

Vishuddha chakra in traditional scripture is defined as purple lotus of 16 petals, which is located in the throat region and it is known as 'purification centre' and in the psychological way it is concerned with communication and self expression.

¹Motoyama, H., 'Psychophysiological study of yoga', *Instit. For Religious Psychology.*, Tokyo, 1976, 6.

²Motoyama, H., *Theories of the Chakras: Bridge to Higher Consciousness*, Quest, Illinois, 1981, pp.271-279



Image reference of vishuddha chakra from wikipedia.

We all know people who eat and eat but never gain weight and those people also who easily gain weight without eating much food also. Some people are energetic through the whole day and some feel very dull through the whole day. This happens because of the energy system of the body which is also known as metabolism.

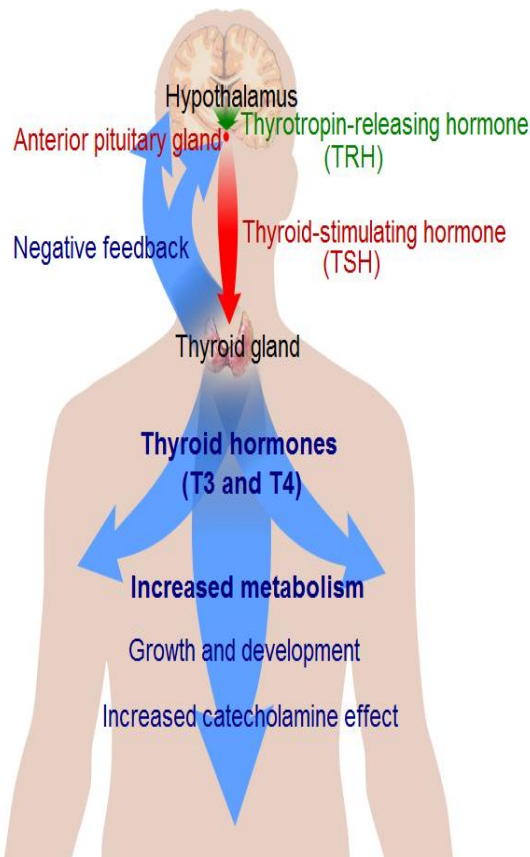
Metabolism is a sum of expenditure and conservation of energy. The conversion of the energy in food to energy available to run cellular processes; the conversion of food to building blocks for proteins, lipids, nucleic acids and some carbohydrates; and the elimination of metabolic wastes. Metabolism is divided into two types :

1. Anabolism : The build up and replacement of tissues and storage of energy ; for example glucose is taken from the digestive track and stored in liver as glycogen.
2. Catabolism : The breakdown of tissues and use of energy.

The thyroid gland is an endocrine gland which is located at the neck and consists of two connected lobes. The thyroid secretes three hormones which are- triiodothyronine (T₃), thyroxine (T₄) and peptide hormone calcitonin. These thyroid hormones play an important role in controlling metabolic rate, protein synthesis, growth and development.

The secretion of the thyroid gland is controlled by thyroid stimulating hormone (TSH), which is secreted from the anterior pituitary gland. The secretion of TSH is regulated by the hypothalamus. The production of thyroid hormone depends upon presence of iodine, which can be found in sea, sea weeds, fresh vegetables and milk. The absence of iodine from diet can cause thyroid gland to enlarge and this condition is known as goitre.

Thyroid system



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The thyroid hormones work on every cell of the body and act to improve basal metabolic rate and also affect protein, fat, and carbohydrate synthesis of the body. According to Dr. Stefano Guandalini, MD, Professor Emeritus at University of Chicago Medicine, stress increases production of the hormone cortisol, which is produced by adrenal glands and cortisol can inhibit secretion of TSH (thyroid stimulating hormone) from the pituitary gland, leading to partial suppression of thyroxine, the main hormone secreted by the thyroid gland. Thyroxine is essential in maintaining the normal activities of the central nervous system, body growth and movement, thought process, speech, emotional and behavioural stability.

According to statistics, thyroid disorders are on the rise in India. Approximately 1 in 10 Indian adults suffer from hypothyroidism, a condition in which the thyroid gland does not produce enough thyroid hormones to meet the needs of the body. This condition is twice as prevalent in women as in men and is common among women of child-bearing age. A 2016 study conducted in nine Indian states, assessing prevalence of hypothyroidism in pregnancy with TSH, found 13.13 per cent of pregnant women to be hypothyroid. Following trimester-specific Thyroid Stimulating Hormone (TSH) cutoffs of 2.5 mIU/L for the first trimester and 3.0 mIU/L for the second and third trimester, as recommended by the FOGSI, ITS & NRHM guidelines, prevalence of hypothyroidism was found to be 44.3 per cent, 32.0 per cent, and 34 per cent in the first, second, and third trimester respectively. There is significant regional variation in prevalence. In

Maharashtra, the study showed 17.85 per cent prevalence in Pune and 14 per cent in Nasik. "Thyroid prevalence is on the rise as we have seen a surge in cases," says Shashank Joshi, Secretary, Indian Thyroid Society (ITS). He says the two main reasons that contribute to the rise in the cases thyroid disorders are rising awareness of the disease, which means more patients with this condition are being diagnosed, and autoimmunity, which is the most common cause of thyroid and is often triggered by stress. A case study is presented as a way of introducing yogic practices to be explored to treat thyroid dysfunction. DM is a 65 year old newly diagnosed with hyperthyroid disorder who desires to use complementary medical approaches to treat her condition. An investigative literature search for articles studying yogic practices in the treatment of thyroid disorders was conducted. Yogic practices that make positive changes in the secretion of bodily hormones affecting the thyroid gland was not consistently supported in the literature, but unrefuted in the literature are studies (Singh et al., 2011; Tripathi et al., 2018; Gupta et al., 2006; Pascoe & Bauer, 2015; Mody, 2016) that support the practice of yoga to manage the side effects of thyroid disorders such as stress, anxiety, sleep disturbances, irritability negative emotions and clouded mental capacity (Mondal, Kuhu & Saha, 2015). These symptoms declined over time with regular yoga practice while positive emotions increased and emotional balance was restored. It remains vital that practitioners work in close collaboration with patients with thyroid dysfunction desiring to use complementary approaches to disease management, to sift through conflicting reports to discern a best approach plan for optimal health outcomes.

According to researchers, yoga therapy has proven successful to make changes in the secretions of bodily hormones. Chatterjee and Mondal (2017) studied the effects of daily yoga on subjects' hormone levels. They followed 45 subjects split into two groups, one control group who carried out their daily routines without change compared to a group who practiced daily yoga for 30 to 60 minutes, at least six days per week for twelve weeks. This team of researchers (2017) discovered a progressive decrease in serum THS, but they saw no change in triiodothyronine (T3) or thyroxin (T4) levels. Other researchers finding yoga as beneficial for hyperthyroid disorders were Maske and Barnwal (2016). This team enrolled subjects into two groups, a control group and a group who practiced yoga for 90 days for 30 minutes daily. Maske and Barnwal (2016) saw a significant decrease in the level of T4 in the group who practiced yoga. In direct contrast to this study, however, and even cited in this study mentioned above, Singh & Barnwal (2014) observed a significant increase in the level of T3 in hypothyroid patients with a daily practice of yoga for the exact same timeframe. These studies seem contradictory in nature in terms of the efficacy of yoga on endocrine activity, wherein one study finds yoga lowers T4 and one raises T3, both of which are elevated in hyperthyroidism and the goal of treatment is to lower both levels.

Why do I choose this topic ?

1. Hatha yoga tradition great emphasis is laid on chakras or the spinning energy vortex. Major chakras are located near our endocrine glands, the In goal of the study is establish a connection between thyroid (endocrine gland) and the vishuddha chakra.
2. How vissudha chakra opening or activating practices can help in thyroid disorders like hypothyroidism and hyperthyroidism.
3. We all know in today's era most of the diseases are lifestyle induced and factors like stress, diet and daily physical activities as most of us are having sedentary lifestyle, so the research will help in management of hypothyroidism and hyperthyroidism.

II. RESEARCH METHODS AND METHODOLOGY

All the information given in this theoretical research is collected from some yoga books by Bihar School of Yoga, reseach papers, google and on the logical exploration of a system of beliefs and assumptions.

2.1 Findings

Here are few recommendation of asana, pranayama and mudra for the activation of vissuddha chakra and in management of thyroid disorders.

Many of yogasna are named by movement of animals, through observation our rishis understood how animals live in harmony with their bodies and respective environments. For example they by copying the rabbit in shashankasana they

could influence the flow adrenaline. through imitating animal posture, the rishis found they could maintain health and these asana can influence flow of neuro secretion and hormones too.

1. Neck and Shoulder Yogic Exercises

Neck and shoulder yogic exercises such as Greeva Sanchalana (neck movement) and Skandachakra (shoulder rotation), Uccharana-sthala tatha Visuddha -cakra- suddhi, helps to relieve tension, heaviness and stiffness from the shoulders, neck and head region. All the nerves connecting the different organs and limbs of the body pass through the neck. It also helps to strengthen neck and shoulder muscles. It increases flexibility of cervical vertebrae which improves circulation to head region.

2. Vipreetkarni Mudra

Vipreetkarni mudra is inverted posture which is similar to shoulder stand and helps to balance thyroid. This vipreetkarni mudra is similar to shoulder stand, sarvangasana but vipreetkarni exert less pressure on the neck then sarvangasana. In this posture circulation to brain is increased especially to cerebral cortex pituitary and pineal gland. By inverting the body in this posture all the fluid flow back towards the head which creates a pressure in the throat which stimulates the thyroid and awakens the vishuddha chakra. This mudra can even increase metabolic rate and can help in management of hyperthyroidism too. This practice should be done daily, preferably in the morning time. In this mudra whole neck is compressed, circulation to the brain is enhanced. After doing this asana, one should practice matsyasana (fish pose) as a counter pose. It also tranquillizes the mind, relieve mental and emotional stress. It influence on the parathyroid glands. This mudra is helpful for both hypo and hyper states of thyroid.

3. Simhagarjana and Simhagarjanasana

This asana helps to relieve all emotional and mental stress and can be used to strengthen thyroid gland. As secretion of stress hormone from adrenal gland can alter the secretion of TSH which can create imbalance of thyroid gland. It plays a role in emotional relaxation also. If the person is not emotionally relaxed it creates stress in the body and mind. tension is removed from the chest.

4. Matsyasana (Fish Pose)

This asana can be done as a counterpose of vipreetkarni asana and opposite of vipreetkarni mudra and savangasana. It stretches the throat and encourages deep respiration. It helps in regulating function of thyroid and thymus.

5. Bhujangasana (Cobra Pose)

Practice of bhujangasana keep spine healthy. The asana tones and massages all abdominal organs and adrenal gland situated above kidneys which helps to regulate cortisol (stress hormone) and thyroid is regulated.

6. Kechari mudra (tongue lock)

In this mudra tongue is rolled up and should touch on the upper palate. It stimulates pressure point located in the back of the mouth. These points stimulates a number of pressure point located in the back of the mouth and nasal cavity. This is achieved by regulating the production of powerful secretion of brain, hormones itself which are produced in tiny amounts to control the pituitary gland and thereby the whole orchestra of glands associated with the centres below ajana. These dependent glands are thyroid gland, mammary gland, thymus and adrenal gland. The practice of kechari mudra also influence the centres in the hypothalamus and brain stem which control autonomic breathing, heart rate etc.

7. Ujjayi Pranayama (Psychic Breath)

This is a tranquillizing pranayama. This pranayama soothes the nervous system and calms the mind. It slows down the heart beat also hence it is good for high blood pressure too. This practice also gives us direct access into the pranic and psychic networks, the substructure of metabolic activity. Ujjayi is the basis of vishuddhi shuddhi and ajapa japa, which are very powerful yogic procedures and should be taught after the patient has acquired the initial skills thoroughly.

8. Jalandhar Bandha

The meaning of bandha is lock, Jalandhar bandha is a throat lock. According to yoga philosophy body has 16 *adhra*s, base or receptacles like toes, ankle, thighs, knees, perineum, genitals, navel region, heart, base of the neck, throat, root of the tongue, *nasikagra* (nose tip), *bruhmadhya* (eyebrow centre), brahmarandra (top of the head) and crown. Jalandhar bandha is used in kriya yoga too for activation of visuddha chakra for higher purpose of awakening kundalini. This practice should be done after asanas and pranayamas. This bandha closes the windpipe and compresses various organs in the throat including thyroid and parathyroid gland. It stimulates the thyroid gland and balances the metabolism of the body. The Jalandhar bandha massages and tones the thyroid gland enhancing its efficacy.

9. Nadi Shodhan

Nadi shodhan is a balancing pranayama because where imbalance lies physical or mental body it can restore equilibrium. It can be really helpful for hyperthyroidism.

10. Sarvangasana

Sarvangasana (shoulder stand) is the most well recognized asana for the thyroid gland. An enormous pressure is placed on the gland by this powerful posture. As the thyroid gland has a large supply of blood than any other organ, this pressure has dramatic effects on its function, improving circulation and squeezing out stagnant secretions. Stimulation of the area draws the awareness to the area, and with attentive awareness comes prana, the vehicle of healing. This means that when we concentrate on the area, and with it are the sensory nerves stimulated, setting the brain into motion. The brain tends to readjust its regulatory centres and a corresponding readjustment of muscular states, blood flow and nervous activity in the neck area follows. Therefore, the practice of sarvangasana is useful in both hypo and hyper states as its overall effect is to rebalance.

III. CONCLUSION

Through this research study I have concluded that doing these asanas, pranayamas, and mudra can be really helpful in managing metabolic disorders like thyroid. These asanas, pranayama and mudra listed above put direct pressure on thyroid gland and other endocrine gland which regulates hormones and hormone secretions from glands. These asanas are not only beneficial to thyroid gland but can also help to keep stress hormones in control.

Hence it is concluded that visuddha chakra opening asana, pranayamas and mudra can directly influence thyroid gland and can help in management of hypothyroidism and hyperthyroidism. With visuddha chakra opening emotional relaxation is also very important. One of the most prominent precipitating factors in states of thyroid imbalance is long term suppression and blockage of emotional expression. This is closely related to another condition 'globus hystericus'. Balancing of the emotions, and giving a suitable outlet for their expression is an important part of yoga therapy for thyroid disease. Kirtan (singing of mantras collectively to the point of self forgetfulness and transcendence) is one of the most useful means. Another is ajapa japa meditation (practice of mantra awareness in the frontal psychic passage from navel to throat) in conjunction with ujjayi pranayama.

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