ABSTRACT:

The endocrine system maintains homeostasis by controlling hormones. The endocrine system produces hormones from glands and homeostasis is the maintenance of the internal environment by keeping your hormones constant.

In some Indian religions, a chakra (Sanskrit cakra, "wheel") is thought to be an energy point or node in the subtle body. Chakras are believed to be part of the subtle body, not the physical body. More importance is given to Shatchakra in Yoga vigyan for stability. According to Ayurved, Vata dosha has prime control over all functions of the body. Nowadays, there is a need to establish the relation between modern science, Yoga, and Ayurved for maintaining good health of an individual. Ayurved and Yoga are interdependent science which are already being used in day today practice. It is true need to interpret both sciences with modern science which will really show magical results. Endocrine disorder is commonly seen in the present era. So, to improve the function of endocrine glands, we may follow the knowledge Shatchakra and Vata dosha described in Ayurved samhitas which actually works together as a system to balance physical and mental health of an individual. The effort is made to establish interrelationship of endocrine glands with Shatchakra and Vata dosha in Ayurved.

Key words: Endocrine glands, Shatchakra, Vata dosha

INTRODUCTION: Nowadays, there is a need to establish the relation between endocrine glands, Yoga, and Ayurved for maintaining good health of an individual. Ayurved and Yoga are interdependent science which are already being used in day today practice. It is true need to interpret both sciences with modern science which will really show magical results. Endocrine glands release hormones into circulating blood that influence the function of cells at another location in the body. Multiple hormone system of the body play a key role in regulating almost all functions including metabolism, reproduction, development, water and electrolyte balance and behavior. Endocrine disorder is commonly seen in the present era. An estimated 108 million people in India suffer from endocrine and metabolic disorders. So, to improve the function of endocrine glands, we may follow the knowledge Shatchakra and Vata dosha described in Ayurved samhitas which actually works together as a system to balance physical and mental health of an individual. The effort is made to establish interrelationship of endocrine glands with Shatchakra and Vata dosha in Ayurved.

AIM AND OBJECTIVES:

1) To establish relationship between endocrine glands, Shatchakra and Vata dosha.
2) To highlight importance of Shatchakra in prevention of endocrine disorders.
3) To describe vital function of Vata dosha in balancing the functions of endocrine glands.

**MATERIAL:**
1) Literature regarding endocrine glands.
2) References about Shatchakras in Yoga and Ayurved.
3) Descriptions of Vata dosha from Ayurved samhitas and texts.
4) Research articles related to Shatchakra, endocrine glands and Vata dosha.

**METHODS:**

a) Endocrine glands: Endocrine glands are glands of the endocrine system that secrete their products, hormones, directly into the blood rather than through a duct. The major glands of the endocrine system include the pineal gland, pituitary gland, pancreas, ovaries, testes, and thyroid gland, parathyroid gland, hypothalamus and adrenal glands. The hypothalamus and pituitary gland are neuroendocrine organs.

b) Shatchakra: The chakras are thought to vitalize the physical body and to be associated with interactions of physical, emotional and mental nature. There are six Chakras: Muladhara is in the anus. Svadhishtana is near the genital organ. Manipura is in the navel. Anahata is in the heart. The Vishuddhi Chakra is in the front of the neck. The sixth Chakra, the Ajna is in the head (between the two eyebrows).
c) Vata dosha: Vata is of five divisions. Firstly, Pranavata located in head and moves in the chest, throat supports mind, heart, sense organs and intelligence attends to expectoration, sneezing, belching, inspiration and swallowing. Udana Vata is situated in chest it moves in the nose, umbilicus, throat helps in initiation of speech, effort, enthusiasm, strength, colour, memory. Vyana Vata located in heart moves all over body and is responsible for all types of activities. Samana Vata located near digestive fire moves in Kosha withholds, digests absorbs and eliminates the food. Apana Vata located near large intestine moves in the waist, bladder, genitals and is responsible for elimination of semen, menstrual fluid, faeces, urine, fetus.  

DISCUSSION:  
1. Relation between Endocrine glands and Shatchakra: The hormonal glands are also considered to be associated with the latent centers (chakras) of supernormal energy. Their stimulation is associated not only with the activities at the physical level in the body but also at the mental and emotional levels. The Sadhanas of Kundalini Jagrana involves penetration and stimulation of the Shat chakras at an orderly pace. The effects of associated processing within the body may be understood in gross scientific terminology if we consider the eternal connection of the Shat chakras with the endocrine glands. This approach would explain how the spiritual sadhanas are useful in regulating all aspects of personality development and opening the paths of all round progress and elevation in a natural way. If we consider the site of endocrine glands and Shatchakra in the body, individual chakra might be controlling Endocrine glands present in same area through Vata dosha.
<table>
<thead>
<tr>
<th>Chakra</th>
<th>Site in the body</th>
<th>Endocrine gland</th>
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<tbody>
<tr>
<td>Ajnya</td>
<td>Head</td>
<td>Pituitary and pineal</td>
</tr>
<tr>
<td>Vishuddha</td>
<td>Neck</td>
<td>Thyroid and parathyroid</td>
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<tr>
<td>Anahat</td>
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<td>Manipur</td>
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<td>Swadhisthan</td>
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<tr>
<td>Muladhar</td>
<td>Pelvis</td>
<td>Gonads</td>
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2. Relation between Shatchakra and Vata dosha: Individual Vata is said to be related with Chakra. By considering the Sthana or important Karma of that particular Vata as told in Samhitas and relating it to the Sthana of Chakra and hence making a full circle of interrelationship resulting in establishing the possible relation between the Chakra and Vata. Prana vata is said to be related to Ajnya Chakra and Anahata Chakra. The most important function of Prana vata is supporting mind, heart, sense organs and intelligence. If we consider the Sthana of Mind, then it is Hridaya and the Sthana of Anahata Chakra is also Hridaya. Likewise if we consider the Sthana of sense organs, intelligence, then it is related to Head, and Sthana of Ajnya Chakra is also Head. Hence making a full circle of interrelationship and resulting in establishment of possible relation between the Anahata Chakra, Ajnya Chakra and Prana Vata. Udana Vata is said to be related to Visudha Chakra and the most important function of Udana Vata is Vak Pravrutti and for the Vak Pravrutti important Anga required in the body is Kantha Pradesha and this is said to be the Sthana of Visudha Chakra. Hence making a full circle of interrelationship and resulting in establishment of possible relation between the Visudha Chakra and Udana Vata. Samana Vata is said to be related with Manipura Chakra and the Sthana of Samana Vata is Agni Samipa and the Sthana of Agni is said to be Grahan which comes at the level of Nabhi, which is also the Sthana of Manipura Chakra. Hence making a full circle interrelationship and resulting in establishment of possible relation between the Manipura Chakra and Samana Vata. Apana Vata is said to be related with Muladhara and Swadisthana Chakra, the important function of Apana Vata is Niskramana of Mutra, Shukra in males through the Linga Marga, Raja Srava, Garbha in females through Yoni Marga and Niskramana Karma of Purisha through the Guda Marga hence highlighting the functional relationship between the Apana Vata and Linga, Guda which are also the Sthana of Swadisthana and Muladhara Chakra hence making a full circle of interrelationship and resulting in establishment of possible relation between the Swadisthana, Muladhara Chakra and Apana Vata. Vyana Vata is said to be not related with any of the Chakras since it is present throughout the body and is responsible for all the activities of the body. By this, we can say
that all this Chakras will govern and control the function of Vata dosha and since it is Atyanta Sukshma Rupa and hence supporting the statement that the knowledge gained by our sense organs is much less, knowledge beyond the perception of sense organs in much more.  

CONCLUSION:

By considering the above discussion, we may conclude:

1) Ajnya Chakra may be control the function of Pituitary and Pineal glands through Pranavata.

2) Vishuddha Chakra may be control the function of Thyroid and parathyroid glands though Udana vata.

3) Anahat Chakra may be control the function of Thymus gland through Udanavata.

4) Manipur Chakra may be control the function of Pancreas and adrenal gland through Samanavata.

5) Swadishana and Muladhar Chakra may be control the function of Gonads through Apana vata.

REFERENCES:

2. www.iisc.ernet.in/currsci/oct 252000 on 2 Sept.2015
4. www.ayurvedatreatments.co.in on 3 Sept 2015
6. www.speakingtree.in on 3 Sept 2015
8. Charaka Samhita with Hindi commentary by Dr.Brahmananda Tripathi, Chaukambha Surbhararati Prakashan, Varanasi, vol II,28/9,p.935

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