

EFFECT OF KRODHA (ANGER) ON CARDIOVASCULAR SYSTEM**Dr. Shruti R. Bhatulkar^{1*} and Dr. Shweta More²**¹Pg Kriya Sharir Deptt. (Student) CARC, Nigdi.²Assistant Professor, Guide, Kriya Sharir Deptt) CARC, Nigdi.Article Received on
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***Corresponding Author****Dr. Shruti R. Bhatulkar**Pg Kriya Sharir Deptt.
(Student) CARC, Nigdi.**ABSTRACT**

In present fast paced life Krodha (Anger) is increasingly becoming a contributory factor for ill health. Ayurveda as well as Indian philosophy has explained Krodha as a Dharneeya vega and its importance. In Ayurveda manovaha strotas deals with mind and psychology. Component of manovaha strotas includes Pran Vayu, Udan Vayu, Vyaan Vayu, Sadhak pitta and Tarpak kaph. Abnormality in any of these components disturbs mind and causes various psychological disorders. Emotions like courage, fear, anger, happiness comes under the influence of Sadhak pitta. In this article we will study the effect of Krodha on Cardiovascular system. The Psychological disturbances like anger and rage can affect heart rate, and pulse rate. State of fear can lead to vasodilation and sweating. These examples

show interconnection between body and mind. To control anger is very essential to prevent the Cardiovascular disorders.

KEYWORDS: Emotions like courage, fear, anger, happiness comes under the influence of Sadhak pitta.

INTRODUCTION

Health is defined as state of physical, mental and social wellbeing in which disease and infirmity are absent. Nowadays the human beings are suffering from mental illness due to changing in lifestyle and increasing level of stress. Manasbhav like anger, lust, greeding, etc. affects the physiological of our body.

Ayurveda explained Dharniya vega which are sum of psychological urges which should be controlled as a lobha (gridiness), Shoka (sorrow), bhaya (fear), Krodha (anger), irshya

(jealousy), nairalgya (excessive boldness), Atiraga (attached towards specific thing) the vega which have to suppress to avoid the disease.

Dharniya Vega are to be controlled for healthy body and mind. Dharniya Vega is emotions which can be seen on human body positively or negatively.

Krodha is the Hetu for vitiation of Sharirikdoshas, and is a cause for diseases like Jvara (fever), Atisasara (diarrhea), Shosha (emaciation), Meha (diabetes) Paitika gulma, Arocaka, Rajaykshma, Unmada, Apasmara, Pratisyaya, Trishna, and Vatarakta, etc.

Vata, pitta, kapha occupy whole body, mind also occupies entire body, hence entire body can be called as Manovaha strotas.

Body - Mind Relationship

Positive feelings are called as Sukha as well as happy state of mind. Negative feelings or Unhappy state of mind is called as Duhkha. Actually, sukha (happiness) and dukkha (unhappiness) are qualities (guna) of Atma and Mind is always conjugated with soul. Mind is the mediator of soul and sense organs of human being.

According to Sushruta, excessive Rajas guna of mind give rise to Krodha. If person repeatedly gets angry due to Rajas guna, it reflects on Heart rate and Blood pressure. So Anger can be the pre disposing etiological factor for Hypertension. Krodha leads to derangement of Satva leading to Pitta and Vata prakopa, which ultimately affects the gati of Vyan vayu. This increases the blood pressure. Imbalanced state of mind mainly affects Cardiovascular system, because (Heart) it is the main location Mana (Mind).

Anger is an undesirable state of affairs in that anger and behaviors associated with it constitutes a problem for individuals and society as a whole. Anger is an "emotional state that varies in intensity from mild irritation to intense fury and rage" It is often consider as a common experience in everyday life.

Everybody get angry at any point of his or her life. Often it gives favourable result in fulfilling the demand of the individual. However, anger itself is not desirable and good for both physical and emotional health.

Anger is closely linked with cardiovascular system, nervous system, digestive system and as well as psychological disorders and related behaviors, such as depression and suicide. Now we will discuss effect of anger on cardiovascular diseases.

Causes of Anger

- Fatigue
- Hunger
- Pain
- Recovery from illness
- Puberty
- Hormonal changes associated with menopausal

SYMPTOMS

- Heightened blood pressure. [May cause red face].
- Shortness of breath
- Heart palpitation
- Dilated pupils
- Sleeplessness
- Increased Swearing
- Irritation
- Tense Muscles
- Anxiety
- Blood sugar level increases to provide more ener

Anger

Hypothalamus

Pitutary Gland

Adrenal Gland

Adrenal Secration

Heart Rate & BP Increases

AIM

To study the effect of Krodha (Anger) on Cardiovascular system.

OBJECTIVE

To study Anger emotion and physiology of Cardiovascular system.

To study Anger in ayurvedic and modern view and its effect on body.

MATERIALS

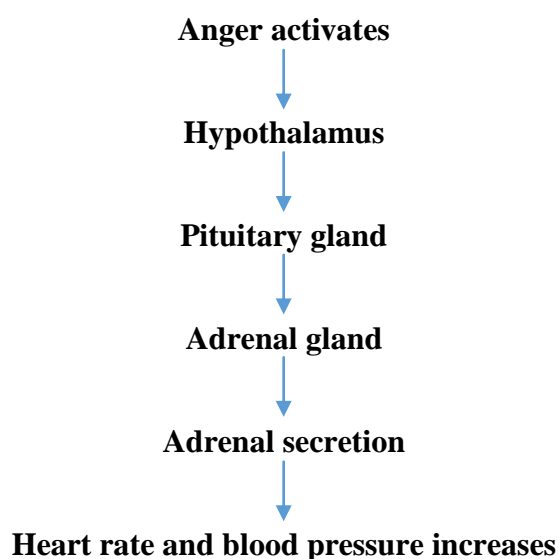
Literary study has been conducted through various ancient text like Charak samhita, Sushruta samhita, Ashtang Hridayam and other Ayurveda texts. various research publications, concerned modern texts.

Effect of Anger on Cardiovascular System

1) Cardiovascular System

Cardiovascular system comprises heart and blood vessels. It has important function to supply oxygen, nutrients and other essential substances to the tissues of the body and to remove carbon dioxide and other metabolic end product from the tissues. Negative emotions like anger, anxiety and sadness affect the heart and its functions.

a) Anger activates the hypothalamic –pituitary-adrenal axis. The catecholamine activation norepinephrine and epinephrine. The blood vessels that direct blood to the large muscles and the heart dilate, thereby increasing the amount of blood pumped to these parts of the body and elevating blood pressure. It is fight or flight response.



Stress hormone causes blood vessels to constrict and divert more oxygen to muscle for more strength to take action. But it also raises blood pressure and risks for having a stroke or heart attack.

Symptoms of anger on cardiovascular system

- 1) Heart rate increase
- 2) Blood pressure increase
- 3) Arterial tension increase
- 4) Blood glucose level increase
- 5) Blood fatty acid level increase
- 6) Blood vessels clogged and damaged .this can leads to hypertension, stroke and heart attack.

a) Effect of Anger on the heart from Ayurveda perspective

Acharya Sushruta describes that the heart having two mamsa peshi. Ten great vessels arise from the heart which supplies Rasa-Rakta and Ojas to the whole body. Avalambaka Kapha – type of kapha dosha located in the chest region.

With consideration of Anger it affects

- 1. Impact on Vital Substances:** Anger vitiates Rasa, Rakta, and Ojas, compromising their quality and leading to disturbances in the ten major vessels that supply the body, ultimately affecting overall vitality and health.
- 2. Flaccidity of Heart Muscle:** Emotional disturbances like anger can lead to a weakened heart muscle, impacting its strength and functionality.
- 3. Avalambaka Kapha:** The viability of Avalambaka Kapha diminishes under the influence of anger, which is crucial for the protection and nourishment of the heart.
- 4. Mental Influences:** The excessive Rajasa guna from the mind contributes to krodha (anger), which reflects on heart rate and blood pressure, showcasing the interplay between emotional states and cardiovascular health.
- 5. Vayu Dynamics:** The heart's pumping action is regulated by Prana and Vyana Vayu. Disruption in their coordination can impair heart function, particularly through the effects of Udana Vayu, which governs emotional expression and waste expulsion.
- 6. Sadhaka Pitta:** Located in the heart, Sadhaka Pitta influences both emotional stability and cognitive functions, linking mental stress directly to cardiac health.
- 7. Interconnection of Heart and Mind:** The dual meaning of "Hridaya" highlights the deep connection between the heart and brain, indicating that emotional health is essential for maintaining cardiac function.

8. Role of Ojas: Ojas, considered the essence of vitality, resides in the heart and is critical for sustaining health. Emotional disturbances can deplete this vital substance, further compromising heart health.

MANAGEMENT

The goal of anger management is to reduce both emotional feeling and the physiological arousal that anger causes. Anger is neither good nor bad, whether you use it constructively or for destruction is all in your hand. Krodha is included under mithyaayoga of mind as per charak samhita. Hence it is important to maintain the balance in them. Meditation, Omkara jaap, Pranayam and yoga exercise should be done regularly. Panchkarma like shirodhara, nasya, will do for relieving stress.

DISCUSSION

Dharniya Vega are to be controlled for healthy body and mind. Dharniya Vegas are emotions which can be seen on human body positively or negatively. According to Sushruta, excessive Rajas guna of mind give rise to Krodha. As rajas guna is mutually related to Vata Dosha, excess Rajas guna aggravates Vata Dosha also. So if person repeatedly gets angry due to Rajas guna, it might be reflecting on Heart rate and Blood pressure in the form of Tachycardia and Hypertension due to imbalance of Vata Dosha. Person who gets angry then Anger or Krodha leads to derangement of Satva leading to Pitta and Vata prakopa, which ultimately affects the gati of Vyan vayu. This increases the blood pressure. Imbalanced state of mind mainly affects Cardiovascular system because (Heart) it is the main location Mana (Mind).

Anger activates the hypothalamic–pituitary–adrenal axis. The catecholamine activation is more strongly norepinephrine than epinephrine. Heart rate and blood pressure increase. Blood flows to the hands. Perspiration increases. According To Ayurveda, Satva, Raja and Tama are Mahagunas. Raja and Tama are Dosha of Mana while it mention with Satva, they are collectively called as ‘Triguna’. Raja and Tamo guna are Manas dosha hence intensified Raja and Tamo guna triggers Kama, Krodha, Lobha, Moha, Irshya, Maan, Mada, Shoka, Bhaya, Harsha etc. Due to intensification of Raja and Tama guna person may exhibit emotion like Anger, fear etc.

So krodha(anger) should be controlled and manage.

CONCLUSION

According to Ayurveda Krodha (anger) is one of the Dharaneeya vega, so this article explained effect of Krodha on physiology of cardiovascular system like heart functioning and blood pressure. anger can be predisposing factor etiological factor for hypertension, stroke and heart attack. Krodha is considered a mental dosha that aggravates the Pitta dosha, leading to cardiovascular imbalances. So it should be controlled by every human being. Managing krodha through lifestyle modification and stress management technique is crucial to maintaining cardiovascular health.

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