

Hridaya Marma: A Review of its Structural and Functional Significance

Vd. Dnyanda Bhujbal¹, Vd. Arun Bhujbal², Vd. Vishal Madhukar Khandre³

¹Assistant Professor, Sanskrit Samhita Dept. Shree Saptashruni Ayurved Mahavidyalaya, Nashik, Maharashtra.

²Professor, Rachna Sharir Dept., Anjaneya Ayurved Mahavidyalay, Nashik, Maharashtra.

³PhD Scholar, Associate Professor - Kriya Sharir Dept., Shree Saptashruni Ayurved Mahavidyalaya, Nashik, Maharashtra.

Abstract—Hridaya Marma, a vital point in Ayurvedic medicine, is located in the thoracic region and is associated with the heart and cardiovascular system. This review aims to provide a comprehensive overview of Hridaya Marma's structural and functional significance, exploring its anatomical correlations, physiological implications, and clinical relevance. A thorough analysis of classical Ayurvedic texts, modern medical literature, and research studies reveals the importance of Hridaya Marma in maintaining cardiovascular health, regulating emotions, and influencing overall well-being. This review highlights the potential of Hridaya Marma as a diagnostic and therapeutic target in integrative medicine, emphasizing its significance in promoting health and preventing disease.

Index Terms—Hridaya Marma, Ayurveda, cardiovascular health, integrative medicine, vital points, Marma, Hriday; Koshtang, Heart, Trigunas.

I. INTRODUCTION

Ayurveda described various holistic approaches for maintaining wellbeing of mind, body and spirit, etc. This ancient wisdom is eloquently reflected in the distinct concept and arrangement of Marma which are anatomical markers where the Tridosha manifesting as Prana, Ojasa and Tejas. These points are also characterized by the presence of the soul or life force (Bhutatma). Sushruta Samhita and Siddha described concept of Marma Chikitsa considering these points as vital sources of energy.

Hridaya Marma, a vital point in Ayurvedic medicine, has been a subject of interest for centuries due to its unique location and significance in maintaining overall health and well-being. Located in the thoracic

region, Hridaya Marma is closely associated with the heart and cardiovascular system, and is considered a critical point in the management of various cardiac and emotional disorders. The concept of Marma, or vital points, is an integral part of Ayurvedic philosophy, and Hridaya Marma is one of the 107 Marma points described in the classical Ayurvedic texts.

Despite its importance, Hridaya Marma remains a poorly understood concept in modern medicine, and its structural and functional significance has not been fully explored. Recent studies have highlighted the potential of Marma points, including Hridaya Marma, as diagnostic and therapeutic targets in integrative medicine. This review aims to provide a comprehensive overview of Hridaya Marma's structural and functional significance, exploring its anatomical correlations, physiological implications, and clinical relevance.

Etymology¹²

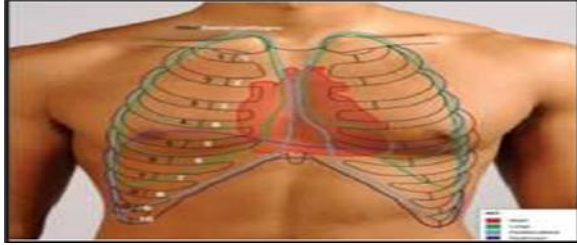
According to Shatpath Brahman and Brihat Aranyak, the word — Hridaya is made up of three Dhatu (verbs) — Hru stands for Harati (beneficiary), — Da for Dadati (to give or contribute) & Ya” stands for Yagati, which means — to control, or — in Gatou, which refers to the rhythmic movement for collecting and diffusing of Prana. Hri the suction exertion of Hridaya (i.e., venous return), Da- the pumping action of Hridaya (i.e., to propel of oxygenated blood), and Ya the operation of these above two conditioning, therefore, express the function of the organ.

Definition¹¹

Marmais defined as an anatomical site where five structures i.e. Mamsa (Muscles), Sira (conducting system), Snayu (ligaments and supporting structures),

Asthi (bones) and *Sandhi* (joints) meet together in which particularly *Prana* (life) stays by nature. [1,2]

Location⁹



Hridaya is a Madhya Shareeragata Marma. Acharya Sushruta quotes that a Hridaya Marma is situated between two breasts and is at the Amashaya Dwara, which is seat of Satwa, Raja and Tama. [3]

Hridaya is located in between the Stanas (breasts) in the chest cavity. It is located above the Amashaya Dwara (Cardiac orifice).

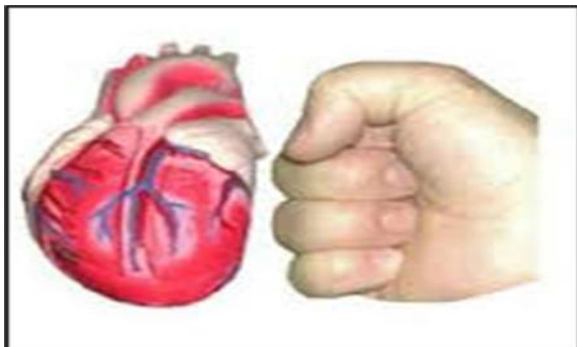
Shape⁹



According to Acharya Susruta, Hridaya is in the shape of inverted lotus. [4]

According to Acharya Bhela, Hridaya is like Kumbhika Phala. It's looking like inverted lotus its means apex of the heart is tip of the lotus; myocardium is body of lotus and aorta is petiole of lotus.

Size⁹



Acharya Charaka explains the size of Hridaya as 4 Angula. [5]

Vagbhata also opines the same in Ashtanga Samgraha. Hridaya Marma occupies a space of 4 Angula dimension (approximately equal to the horizontal dimension or breadth of middle segment of one's own middle finger)

Classification¹⁰

1. Dimention- 4 Angul
2. Effect- Sadhya Pranahar Marma
3. Shadanganusar- Uro sthita Marma
4. Structural basis- Sira Marma
5. Number- 1

Regional anatomy of Hridaya Marma¹⁰

1. Mamsa- Cardiac muscles
2. Sira- Coronary vessels, Arch of aorta & its branches
3. Snayu- S.A. node, A.V. node, Purkinjii fibers, bundles of His, Vagus nerve, Cardiac plexus.
4. Asthi – Tendinous Fibrous skeleton, Sternum, 2nd,3rd,4th ribs
5. Sandhi- Posterior aspect of sterno-costal joint

Features of Hridaya

According to Acharya Arunadatta, *Hridaya* is made up of *Mamsapeshi (Hritapeshi)* and looking like *Adhomukha Kamala*. According to Acharya Bhavaprakash, *Hridaya* is also known as *Jivashaya*. It means, it is seat of life. *Ashaya* means *Avastana Pradesh*; it means *Hridaya* having cavities in it known as atrium and ventricles. According to Acharya Vagbhata, *Hridaya* having *Samruta Asamruta Dwaram* it means valves of the heart. According to Acharya Charaka, it has ten *Moola Siras*. [13]

Functional anatomy of Hridaya

1. It is the seat of Chetana; hence it maintains life process (conscious level). [6]
2. It ejects and receives Rasarakta Dhatu by the help of Vyanavayu (circulation). [7]
3. It controls intellectual power and mental activities of human being by Manas and Sadhakapitta (Little brain in heart). [8]

II. HRIDAYA MARMA & ANAHAT CHAKRA RELATION

अनाहत चक्र¹⁰

Location- Hridaya

Following body parts included under Anahata Chakra-Heart, upper back including the thorax, the lower area of lungs, the blood and the blood circulation and the skin.

Anatomical Correlations

Hridaya Marma is located at the level of the fourth intercostal space, near the sternum. Anatomically, this region corresponds to the heart and the coronary arteries. The Marma point is also closely associated with the phrenic nerve, which innervates the diaphragm and plays a crucial role in regulating breathing.

Physiological Implications

The physiological implications of Hridaya Marma are far-reaching, with potential effects on the autonomic nervous system, stress response, and emotional regulation. Stimulation of Hridaya Marma has been shown to influence heart rate variability, blood pressure, and respiratory rate. Additionally, Hridaya Marma is believed to play a role in regulating the body's stress response, with potential implications for anxiety and depression.

Clinical Relevance

The clinical relevance of Hridaya Marma is evident in its potential applications in integrative medicine. As a diagnostic target, Hridaya Marma may offer insights into cardiovascular disease risk and emotional disorders. As a therapeutic target, Hridaya Marma may be manipulated through various techniques, including marma therapy, acupuncture, and yoga, to promote cardiovascular health and emotional well-being.

III. DISCUSSION

The review of Hridaya Marma's structural and functional significance highlights its importance as a vital point in Ayurvedic medicine. The anatomical correlation of Hridaya Marma with the heart and cardiovascular system suggests its potential role in regulating cardiac function and maintaining cardiovascular health.

The physiological implications of Hridaya Marma are far-reaching, with potential effects on the autonomic nervous system, stress response, and emotional regulation. The concept of Hridaya Marma as a "heart-

brain" axis, connecting the cardiac and cerebral systems, warrants further exploration.

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IV. CONCLUSION

In conclusion, the review of Hridaya Marma's structural and functional significance highlights its importance as a vital point in Ayurvedic medicine, with far-reaching implications for our understanding of cardiovascular health, emotional regulation, and overall well-being. Further research is needed to fully explore the potential of Hridaya Marma as a diagnostic and therapeutic target in integrative medicine.

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