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HRUDAYA- MORE THAN JUST A PHYSICAL ORGAN.

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ABSTRACT:

Hridaya is normally stated as just one physical organ in the human body that has the basic function of the circulation of blood and nutrients throughout the body. This position of the heart is explained in the Sushruta sharirsthana, when we decode this shloka, this means as follows- in the chest cavity in between the two stana (breasts), the hridaya is located. The function of hridaya is to complete the circulation of the poshak tatva (nutritive factors) and oxygen (vayu) in the whole body, so this function of samvahan is completed by the hridaya only when there is a regular rhythmic motion of contraction and relaxation in the organ. Hridaya is an important organ for the proper function of the body, it is a vital part of the body, a part of tri-marma, the dasha-pranayatan, the presence of oja in it, its importance in the proper functioning of the indriya. It plays an important role in achieving the four purush-arthas of life.

KEYWORDS: Hridaya, Oja, Atma, mana, Srotas, Indriya

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INTRODUCTION:

Hridaya is normally stated as just one physical organ in the human body that has the basic function of the circulation of blood and nutrients throughout the body. It is explained just as so and no more, modern science correlates this organ to the heart of the human body that also has the function of distributing oxygenated blood throughout the body and providing nutrition through it to each part of the body, it is said to be the center of life as the important function of distribution of nutritional factors and oxygen throughout the body is fulfilled by this organ in the body. This is a very important function that is fulfilled with the help of hridaya but some other important factors are also regulated with the help of hridaya in the human body and these some additional factors are extremely complex and difficult to understand as follows-

1. The concept of Atma- The concept of atma is one of the most complicated factors that are put forward in the ancient texts of Ayurveda, the presence of a micro body that sees it all and regulates the most microscopic factors of life is said to be present inside the body and it's adhishtan i.e., the place of residence of this micro-body is said to be the hridaya. There are various controversies surrounding this concept of a microbody present inside the human body that is completely indestructible is difficult to prove and since today's research process only focuses on the gross and such features that are visible to the eyes are taken as the proof thus, the proof of the existence of such a body is questionable to many people.

2. The concept of Mana- Mana is said to be another important factor that lies rather complicated and under controversy by the other faculties of the medicine fraternity present today, mana is again not explained as anything that is physically seen or that can be touched and examined but it is again said to

be such a part of the anatomy of hridaya that is not physically seen but is present in hridaya and its effect can very clearly be seen in various actions taken by a person. Also, ayurvedic texts explain the concept of mana in rather very much detail and its effect on the body that can be observed very clearly in the same way the effects are explained in the texts thus, the presence of mana cannot be exactly denied but again due to lack of physical proof the concept cannot be exactly established.

3. Inter-relation of mana- atma- indriyas- the interrelation of mana atma and indriya leads to the proper gain of knowledge that the senses receive from their surroundings. So, this correlation is also something that needs to be properly understood. The presence of anahat chakra near the position of the heart and its effect observed in the awakening of consciousness on the higher level.

5. Oja- the concept of oja in itself is extremely important because that explains the immunity and overall body and mental strength of a person. Its Adhishtan is said to be hridaya as well and it has extreme importance in the proper functioning of the body thus it is an extremely important concept that is not understood to date. So, in this way, numerous different such concepts are present in the ayurvedic texts, that are not properly understood and therefore are not accepted properly by people but all these concepts do have a very deeply studied and researched scientific reason for the fact that is stated by acharyas in the texts. Our aim in this article is to focus on such topics and explore them further based on the facts and the knowledge present to date to properly understand the concepts behind the facts. Before that, let us understand the anatomy of the heart as explained by the acharyas.

NIRUKTI OF HRIDAYA (formation of the word): -

The term hridaya is made up of three parts, which are as follows-

Hrun +dad +in gataou; the meaning of these parts of the word is explained as follows-

1. hrun- means to abduct
2. dad- means to donate
3. in gataou- means self-formed rhythmicity for the contraction and relaxation.

The function of hridaya is to complete the circulation of the poshak tatva (nutritive factors) and oxygen (vayu) in the whole body, so this function of samvahan is completed by the hridaya only when there is a regular rhythmic motion of contraction and relaxation in the organ. So this way the function is completed also, the similarity in the function of hridaya with the heart leads to the relevance of the heart with the hridaya, but the way the heart is only said to be known for the fact that it has the relevance as the center of the circulatory motion only and that it does not have any other major function other than circulation is where the non-similarity begins as ayurvedic texts see hridaya much more than just the organ that circulates the blood throughout the body and thus, the other things that the hridaya is said to perform will be discussed later in this article.

RACHNA SHARIR OF HRIDAYA (ANATOMY): - Acharyas have explained the anatomy of the heart in detail, different acharyas have used different ways to explain the anatomy which is as follows-

Position of hridaya- “stanyoh madhyam adhishtaya urasya amashaya dwaram sat u satva raja tamasah adhishtanam hridayam | tatra api sadhya eva maranam|” (su. Sha. 6) This position of the heart is explained in the Sushruta sharirsthana, when we decode this shloka, this means as follows- in the chest cavity in between the two stana (breasts), the hridaya is located, this hridaya is located above the amashaya dwara (i.e. the opening of the stomach, the cardiac orifice). this

hridaya is also said to be the adhishtana to sattva rajas and tamas, all of which are said to be the manas guna and doshas. If we think just considering one plane of things or a single point of view, the manas represents the mastishka, which is the brain, and thus the position of these three manas gunas should be residing in the brain only, but here it is clearly stated that the hridaya is the adhishtana for the 3 manas guna. So, now, here, to understand this concept and positioning properly, we must change our point of view and see it from a different way, as from a single way of thinking, hridaya means heart i.e., the physical organ that is responsible for the circulation of blood throughout the body, but here hridaya is also said to be the organ responsible for residing the 3 manas gunas. so, in this way, this can be understood that the hridaya does not singularly represents the heart but is somewhat and somewhere related to the brain as well. Thus, if any kind of harm is done to the hridaya the person may lose his/her life, immediately.

The Shape of Hridaya- The shape of hridaya is said to be similar to that of an inverted flower of lotus that has yet to be bloomed. Acharya sharangdhar quoted this comparison to explain the shape of the hridaya and also stated that the heart blooms similar to the flower in the daytime which means basically that it is much more actively pumping and undergoing the process of rhythmic contraction and relaxation during this time, but during the night the flower again closes and this represents that the heart is less active comparatively, but hridaya is an organ which is active 24/7. This is the way the heart's relaxation and contraction are represented in Ayurveda. By pramana, acharya charak mentions that pramana of hridaya is 2 angula in the context of the width of the hridaya. The formation of hridaya is explained in texts as that it is formed by the

Prasad bhaga of rakta and Kapha, how can this be understood? To understand these clinical features are observed closely, which means that in any kind of hridaya roga, there is observed dushti of rakta and kapha doshas for sure.

Hridaya and the doshas related to it- Hridaya is said to be the adhishtana of specific types of vata, pitta, and kapha that helps in proper, non-disturbed functioning of the organ, so these doshas are as follows-

1. Vyan Vayu- Vyan vayu is the type of vayu that is explained to be residing in the whole body but especially hridaya. vyan vayu is said to have the gati guna because of which all the bhava padarthas and the aahar rasa etc are all distributed timely and at a fast pace with the help of these factors. It keeps similarity to the hydrostatic pressure that is formed on the contraction of the heart.

2. Sadhak Pitta- This type of pitta is also called “medha kara pitta” as the name suggests, this pitta resides at the hridaya and helps in the proper functioning of the mana as mentioned earlier that hridaya is the residing place mana, so, for this mana to work properly, the sadhak pitta works in heart to keep the balance of kapha and tamas guna, which should not envelop mana and induce nidra, so, sadhak pitta leads to digestion of the excess kapha and balance the doshas and facilitates the proper functioning of mana if we are to see here, the function of the sadhak pitta is said to be that it helps in achieving the wishes of the person, these are four, the dharma, artha, kama, moksha, these four are the four purush-arthas, which should be achieved to achieve moksha, so, if we observe closely, this relates to the part of hridaya that is related to the brain. Overall sadhak pitta can also be considered a psychophysiological factor.

3. Avlambak Kapha- Kapha as is normally known, is responsible for the proper nourishment of things, when we talk about

the nourishment factor, then of course avlambak kapha is responsible for the nourishment of the hridaya, which is said in texts as follows, “atmaviryena annarasahiten hridayaavalambanam” which translates to, “avalambak kapha, from its virya and with the help of anna rasa, does the function of hridaya avalamban”; this seems to be similar to the extracellular and the intracellular fluids, and the protein that is present in them that helps in the nourishment of the heart.

HRIDAYA AS STROTOMOOLA: The human body is said to be consisting of 13 major strotas that make up the whole human body and these strotas have an originating point or an important point that is vital for the proper functioning of the strotas and this vital part of strotas is said to be the strotomoola. As the name suggests, “strotomoola” is made up of two components “stroto + moola” where “stroto” refers to the strotas, and the meaning of this comes off as “of strotas” and the term “moola” means the base or the root of something. So, in this context, the “strotomoola” means, “base of the strotas” so this single term symbolizes the importance of that specific organ that is named the strotomoola as without that specific organ proper functioning of that organ is extremely difficult or near impossible. Hridaya is said to be the strotomoola of two major strotas, which are- pranvaha strotas (respiratory system) and rasavaha strotas (circulatory system), ideally, if we see the raktavaha strotas as more in line with the circulatory system, but here, the point of importance is that even though these strotas are defined individually, they are interconnected to each other, and the rasa basically can be said to be similar to the plasma and the plasma does get circulated to the whole body along with blood which is said to be similar to the rakta component, so that is why rasavaha strotas is also to be considered as the circulatory system only.

Now, to validate how hridaya act as the moola for the two strotas and what is its significance in the functioning of the two strotas then this goes as follows-

1. Strotomoola of Pranavaha Strotas-

Acharya charak and acharya Sushruta, both mention the hridaya as the strotomoola of the pranvaha strotas, where, acharya charak mentions the strotomoola to be the hridaya and the maha strotas; while Acharya Sushruta mentions the strotomoola as the hridaya and the rasavahi dhamniyan (arteries); what does mahastrotas refers to? Mahastrotas includes the phuphus (lungs), hridaya, and the alimentary canal, now, the pranvaha strotas i.e. respiratory system is said to be connected to the alimentary canal, to understand the basis why hridaya is said to be the moola of the pranvaha strotas, it is to be seen that the pranvaha strotas, provides the pranavayu to the body through its strotas and the hridaya then helps in proper circulation of the prana vayu in the whole body through its dhamniyan, being the base of rasavahi dhamniyan as the strotomoola as is mentioned by acharya Sushruta, while, for the mahastrotas of course, it is known that hridaya is the organ of the thoracic cavity which is the urahsthana, while at the same time, it is also a vital organ that lies in the koshtha as well, so it is a koshthanga as well, which explains the mahastrotas the strotomoola as some extent.

2. Strotomoola of the Rasavahi Strotas-

Rasavahi strotas, a strotas that is responsible for the distribution of the rasa dhatu throughout the body performs the function of preenan mainly, "preenan" basically means, to provide nourishment, so, as we all know the urasth (residing in the thoracic cavity) hridaya functions as the one that helps in the nourishment of whole body through proper circulation of the components in the body, so, being that the hridaya works as the strotomoola of rasavahi strotas. and along

with that as the rasavahi dhamniyan also plays an important role in the circulation of rasa throughout the body, this also explains why the acharyas have mentioned it as the strotomoola.

HRIDAYA AS A PART OF TRI MARMA AND

DASHA-PRANAYATAN: Marma is said to be those specific points in our body that are vital for the survival of the body, these points are the points where if the person is injured either life of that person is in danger or the person is severely disabled in some way for life. While dasha-pranyatan are such 10 specific points in the body where the prana of a person resides and if any kind of injury happens to such places in the body then the person is said to be dead immediately. Let us understand how, hridaya is an important part of the tri marma and dasha pranayatan.

1. Hridaya as Trimarma- In Charak Samhita, Chikitsasthana, acharya charak mentions the trimarma as the body has 107 marmas in it but out of all the three marmas that holds the most importance is hridaya, basti, and shira, where, hridaya is representing the urasth hridaya i.e., the heart, the basti is the bladder, and the shira is the head or one can say the brain which is the center of all the controlling factors on the body. If any of these organs are injured then the person is immediately dead, thus they are the most important organs that need protection, these three are also called "tri-danda" which means "tripod of life". if we are to understand why the heart is included in the trimarma, it is extremely simple, as the heart is the organ that is the center of the circulatory system of the body, and all the major arteries and veins are connected to the heart only from which the oxygenated blood is circulated in the body while the non-oxygenated blood is oxygenated so it is one of the most important organs without which the body will receive the nutrition it needs for survival.

2. Hridaya as Dasha-Pranayatan- The Dasha pranayatan are, according to acharya charaka- 2 shankhpradesh, 3 marmas (hridaya, basti, and shira), kantha, rakta, oja, shukra, guda; in ashtanga sangraha acharya vagbhata mentions – jivha bandhan as an important pranayatan as well. –these 10 parts of the body are the adhishtana for the prana and an injury result in immediate death as for hridaya, the reason for its presence in the dashpranayatan is the same as that for the trimarma.

Hridaya and its Vastness: Hridaya is not just an organ but is more than that, it is an organ that helps in the circulation of rasa and rakta throughout the body but similarly, it is adhishtana to so many more things and its manifestation can be seen in a much broader form than just a physical organ responsible for a single function. According to acharya Kashyap, the hridaya is not just the heart, but acharya kashyap very clearly mentions that the hridaya is of two types, which are as follows-

1. Urastha Hridaya- ura means the chest cavity, the urastha hridaya is the organ of circulation known by all known as the heart, present in the chest cavity between the two lungs, which is responsible for the distribution of oxygenated blood throughout the body.

2. Mastishka-Gata Hridaya- which means the heart that is present in the brain, now which part of the brain does is exactly explain we cannot say for certain as the hridaya is the one that is responsible for emotions, it is the one residing mana and atma also responsible for the proper functioning of the senses a.k.a. indriyas, so it is not very clearly known which part of the brain is exactly representing the mastishka gata hridaya and the same goes for the manovaha strotas as again it is somewhat related to the hridaya which resides mana.

The functions hridaya is responsible for are as follows-

- Circulation of rasam rakta, aahar-rasa ad all the other nutritive factors to all the parts of the body
- Adhishtana of atma
- Adhishtana of mana
- Helps in indriya and indriyaartha sannikarsha
- Adhishtana for sattva, rajas, tamas guna
- Adhishtana of oja

Many factors that reside in hridaya are not exactly physically seen or observed, but their functions and effects are observed in action, now, we will make an effort to understand the different functions of hridaya and the different factors residing in hridaya and how it functions and through this, we will understand the vastness of hridaya.

1. Circulation of rasa, rakta, aahar rasa, and other nutritive factors throughout the body- Regarding this point, the process and functions have already been explained above.

2. Adhishtana of Atma- Atma is one of the three aadharstambha of life, it comes under tridanda, if we see its definition, then atma is explained as that factor of the body that is responsible for watching and observing all the actions done by humans and therefore it is given the name of “drishta”. The one that doesn’t end, so this atma is a kind of energy, this is one of those factors of the heart, that is not visible to the naked eye but its existence cannot be denied because its function can be observed clearly. So, for this observing body that keeps an eye on all the factors of the body and all the functions performed by the human body, now, this atma is said to be residing in the hridaya, but in hridaya also as mentioned above, it includes two types of hridaya, one that resided in urahsthana while the other one that resides in mastishka and is a part of the brain, as to say, so, in which part of the hridaya does the atma resides? This has not yet been decided clearly.

3. Adhishtana of Mana- Mana is that part of the body that motivates or initiates the indriya to get acquainted with its indriya-

artha, so when these indriya gets the knowledge then the knowledge received is properly assimilated and delivered to the brain. For this part, how does hridaya plays a part in it and how does this process works is as follows- it is well known that the knowledge is properly received by the indriyas only when there is a proper co-relation between all the factors that are atma, mana, indriya, and indriyarthā if we see then for the proper gain of knowledge only the two factors must be sufficient, that are the indriya and the indriyarthā, but that does not happen and it actually requires the help from the two others, and as we have seen that the atma is residing in hridaya and since all these parts are to work together and the sannikarsha of the atma and mana are important so these two have to reside close to each other for which reason mana also resides in the hridaya itself. Now, the mana present in the hridaya works in a complex manner, it does not interact with all the indriya at once but it works with such efficiency and so fast that this connection of mana and indriya cannot be properly precepted and this makes it look like the mana is interacting with all the senses at the same time while it is not so, the mana is responsible for motivating the indriya to acquaint with the indriyarthā, after this acquaintance the Pran Vayu takes this knowledge received (indriya vishaya) to the minute centers of the indriya in the brain, from there with the help of indriya buddhi this knowledge is perceived and after this information received is properly perceived by the indriya buddhi and the grahya knowledge is differentiated then the final knowledge is taken to the atma through the mana. So, mana is an important part of the perception of knowledge throughout the process and is also the connecting point for it.

4. Adhishthana of Sattva, Rajas, And Tamas Guna- Mana is a part of the body that along with the buddhi is dependent on the three

manas gunas, the sattva, rajas, and tamas, so hridaya also is an adhishthana for the three manas gunas and helps in the proper working of the mana and atma.

5. Adhishthana of oja- Hridaya is clearly mentioned as the adhishthana for the oja, which is the sara of all the dhatus and this oja is extremely helpful in maintaining the immunity of the body also, with this oja only the life of a person is possible if the oja is lost out of the body of the person then the person's life is in danger. So, in this way, the hridaya which is the adhishthana for oja is extremely important for the survival of the person.

DISCUSSION:

Our main purpose of this article is to understand that the hridaya is not just the heart but is more than that and we have seen how one single organ explained as the hridaya is responsible for so many things like the proper gain of knowledge by the indriyas, also this is responsible for the fact that the immunity of the body is properly maintained with the help of the proper maintenance of the oja, we also saw that how the mana and atma are present in the hridaya and how vastly do they function all over the body. We saw the anatomy of the hridaya as explained by the acharyas. So, it can easily be understood now that just heart cannot be connected with the hridaya but hridaya also includes so many other factors, definitely the two are connected in one way or the other but not exactly, we saw the co-relation of the doshas with the different functions we see in heart and one more to be added in it can be that the SA node and AV node the way they create the pressure throughout the heart for the contraction of the chambers can be related to the vyan vayu along with the flow of blood throughout the body which is again regulated by this vayu and the opening and closing of the valves in this way so many

factors can be understood by the presence of vyan vayu in the urasth hridaya as for if we talk about the mastishka gata hridaya the proper relation is not known till now, but this is clearly understood that heart is not the sole relation we find in the hridaya but also the way the mention of hridaya, mana and atma, buddhi etc. are found In so many manas disorders, it is bound to come to notice that the mastishka gata hridaya is definitely involved in all of these disorders.

CONCLUSION:

Hridaya is an important organ for the proper function of the body, it is a vital part of the body, a part of tri-marma, the dasha-pranayatan, the presence of oja in it, its importance in the proper functioning of the indriya, etc completely explains that this organ is extremely important for the survival for the person, along with that we have pointed out several points that describes that hridaya is much more than just a physical organ. It works in the physical domain and at the very same time this very organ works in the mental, and psychological domain as well and even beyond that. It plays an important role in achieving the four purush-arthas of life.

REFERENCES:

1. Charaka Samhita, Agnivesha, Acharya Priyavrat Sharma, Acharya Vidyadhar Sukhla and professor Ravidatta Tripathy, part-2, Chukhamba Sanskrit pratisthan, Delhi, Sharir stan sthana, P-234.
2. Vd Ambikadutta Shastri, Sushrut samhita part 1, Sharir sthan, Chukhamba sanskrut sansthan Varanashi, edition 12, yr 2001, Pg 28-29
3. Montagna, William. The structure and function of Heart. Elsevier, 2012.
4. Agnivesha. Charaka, Dridhabala, CharakaSamhita Part II, ChikitsaSthana, Kushtha Reprint. Varanasi: Chaukhambha Bharati Academy; 2006. Hindi commentary by Kashiram Shastri and Gorakhnath Chaturvedi.p. 253.
5. Agnivesha, Charaka Samhita, Vidyotini Hindi commentary by Kashiram Shastri and Gorakhnath Chaturvedi Part II, reprint. 30. Vol. 7. Varanasi: Chaukhambha Bharati Academy; 2006; p. 253.
6. Susruta Samhita, English Translation of Dalhana's Commentry along with critical notes, VOL.2, Edited by Priyavrat sharma, Chukhamba, Viswavharathi, Varanasi, 1st Edition 2000, p.241
7. Achary YT, editor. Nibandhasangraha commentary. 1st ed. Varanasi, Uttar Pradesh, India: Chaukhambha Surabharati Publication; 1994. Sushruta, SushrutaSamhita, with Dalhan; p. 4
8. Achary YT, editor. Nibandhasangraha commentary. 1st ed. Varanasi, Uttar Pradesh, India: ChaukhambhaSurabharati Publication; 1994. Sushruta, SushrutaSamhita, with Dalhan; p. 288
9. Susruta Samhita, English Translation of Dalhana's Commentry along with critical notes, VOL.2, Edited by Priyavrat sharma, Chukhamba, Viswavharathi, Varanasi, 1st Edition 2000, p.243
10. Tripathi B, editor, (1st ed.). Ashtangahridaya of Vagbhata, Varanasi: Chowkhambha Sanskrit Series, 2009; 344.
11. Haritha Samhita, 'Hari' Hindi Vyakhya Sahitya, Pandit Hariprasad Tripathy, Chaukhamba. Krishna Das Academy, Varanasi Edsition 2009, Truthiya Stanam, chapter 39, Kustha Chikitsa, Shloka 11 and 12, Page-416.
12. Bhela Samhita, Dr. K.H Krishnamurthy Edited by Prof. Priyavrat Sharma, Chukhamba, Viswavharathi, Varanasi 1st Edition, 2000, Page 330.
13. Prof. K. R. Srikantha Murthy, Charak samhita, sharirsthan, Chaukhamba Orientalia, Varanasi, Ed. 2004, pp.391.

14. Prof. K. R. Srikantha Murthy, Sushrut samhita, sharirsthan, Chaukhamba Orientalia, Varanasi, Ed. 2012, pp.52.
15. Prof. K. R. Srikantha Murthy, Charak samhita, sharir sthan, Chaukhamba Orientalia, Varanasi, Ed. 2004, pp.45

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