

Concept of Kala Sharir with Special Respect to Pericardium

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ABSTRACT-

Rachana Sharir is one of the fundamental sciences. Every concept of Ayurveda has its own importance. Kala is a unique concept explained by Acharya Sushrut in Sushrut Samhita. Kala Sharir is an important part of Ayurvedic Anatomy. Kala means layers or membranes in the body. As the cross section of the wood will shows the different layers and parts of its internal structures as layer by layer and thin layer separates the different layers of structures. Similarly, the membrane appears by the cross section of the fleshy part of the body or any muscular regions or any internal parts of the organs. It is also a limiting membrane or covering between Dhatus and Aashayas.

In RachanaSharir texts refer to the "pericardium" as a "Vishesh Kala." However, there are no references to this "Vishesh Kala" in the SushrutSamhita or CharakSamhita'sSharirSthana. Additionally, we should consider whether the pericardium is referenced in SharirSthana of Charak or Sushrut. Inayurvedic texts explain pericardium as it "Hridayavarana" or "Hridayachadit Kala". The CharakSamhita refers to Hridayarnava as a Kalpa that is highly beneficial for defending the heart against toxins (VishaChikitsa).

It was found that there is just Sevan Kala when Ayurvedic literature was studied and dissected. No other Acharya, including Charak, Sushrut, or Vagbhat, mention Vishesh Kala. The kalais a messy organ. The Fibrous, Serous, or Mucous Membrane includes the neural, intestinal, and mucous membranes, collectively known as the Kala. No particular Kala has been described by Charak, Sushruta, or Vagbhata. It makes sense to include pericardium in Mansadhara Kala because they are extremely similar to each others. In our whole lifespan, formation and development of Bhavpadarthas are going on by these kalas. In this article I can correlate the kala as pericardium layer. The pericardium, which covers the heart, is

discovered during cadaver dissection. . The macro structure known as the pericardium, which can be divided into two layers and covers a critical organ like the heart, is visible to the naked eyes.

KEY WORD-Kala, Pericardium, Visheshkala

I. INTRODUCTION

“कल् शब्द संख्यायाम्”

Here also कल् is used in the two meanings as गतत एवं संख्या i.e. गतत means movement and संख्या means counting. According to Panini Dhatupatha “ कलयतत इतत कला ” means which moves & counts is known as 'Kala'. "कल गतौ संख्यायाम्" This grammatical derivation of word Kala is absolutely appropriate for denoting the functional phenomena as well as structural constitution of the body.

Movement is a crucial component for the development of sensible (chetanaavastita) things. Gatialters several structural and functional features of the human body. This Gatidemonstrates its impact at all scales, from the macro to the micro (cellular level), and it prompts us to count or measure a variety of bodily components. There were only two cells, sperm and ovum, prior to the formation of the human body. The human body is created through the fusing of these cells and numerous cell divisions. One thing is clear from this observation: without Gati in the sperm and the ovum, fusion is impossible, and additional cell growth is required for development. It implies that Gatiand Sankhya have a close relationship. The word "Kala" is used to refer to a thin functional layer that serves as a boundary between Ashayaand Dhātu (constitutional elements) in Ayurvedic literature.

If we examine the function of Kala, it is clear that it is holding the crucial essential

constitutions in the body, which would not be possible without Gati. Kala will develop in the intrauterine life. At a surface level, Kala's role is obvious. However, when we look at the cellular level, Kala is still playing a part. Only Kala makes up a cell. Another component of cellular organelles is Kala (Membrane). Only Kala is responsible for changes in cell activity, excretion, and other physiological events. This is why Kala's aforementioned derivation is appropriate.

Kala's classification -

Acharya Sushruta describes a total of 7 different types of Kalas.

1. Mansadhara Kala
2. Raktadhara Kala
3. Medodhara Kala
4. Shlesmadhara Kala
5. Purishdhara Kala
6. Pittadhara Kala
7. Sukra Kala

Aim- The Concept Of Kala Sharir W.S.R. To Hridaya Avran Kala (Pericardium)

Objectives:

1. Review of literature regarding Kala Sharir
2. Study of Pericardium in anatomical view

Materials & method -

The study was carried out in on concept of Kala Sharir is given by Acharyas:

A conceptual analysis

Detailed Ayurvedic literature on: There have been reviews or studies of (1) Kala Sharir (2) Pericardium from the Samhitas and their comments as well as other contemporaneous material.

II. LITERATURE REVIEW

The skin is described first, followed by the interstitial Kalas and the interplanetary, in the order of the type's position. It is simple to comprehend the meaning of the "Dhatvashyantarmaryada" in light of this example. In short, Kala is an organ of the body that covers the skin, but the skin is outside, the Kala is therefore implicit inside. The Kala is thin and light, the skin is thick and broad (all over the body). In modern texts defines the state that Kala takes the shape of Membrane, Fascia, and Septa. It may be a fibrous membrane, a serous membrane, or a mucous membrane depending on its structural composition.

According to Sushruta there are 7 kalas

1. **Mansadhara Kala**—Deep Fascia, Intermuscular Septa

2. **Raktadhara Kala** - Endothelial lining of the liver and spleen's blood arteries and sinuses.
3. **Medodhara Kala**—Deep Fascia, Omentum
4. **Shlesmadhara Kala** by Synovial Membrane
5. **Purishadhara Kala** The mucous membrane of the big intestine, (Colon & Rectum)
6. **Pittadhara Kala** - Small intestine, Mucous Membrane
7. **Shukradhara Kala** - Vesiculae Seminal Mucus Membrane Vas – differentiate etc. - The fourth sutra of the fourth chapter of Sushruta Sharirasthanagives the number and meaning of Kala.

The explanation for the kala is simple: the stalks of the lotus flower sink deeply into the mud, and the branches of the bloom spread out throughout the surrounding area. In a similar manner, sira, dhamnies, snayus, and srotasestake kala's support and nourish (function) the Mansa. The Manasadharakala on the opposing side supports the delicate structure and creates a shield of protection for it. In accordance with the order in which tissues form, Rasa and Raktadharakala should have been explained before Manasadhara Kala. (Rasa-Rakta-Mansa-Medo-Asthi-Majja-Shukra). Rasa (plasma) and Rakta (blood cells) are moving through the siras and dhamnis which are themselves imbedded in the Mansa material. Finding the Raktadharakala requires splitting the Manasadhara material.

1. **Mansadharakala-** In the initial stratus is explained as Mansadharakala. Functionally, the muscle tissue and the protective sheath, the tiny membranes tying together the muscle cells and compartmentalising the muscle fibres, as well as embedded blood arteries separating the muscle fibres, should be compared, according to Mansadharakala.
2. **Raktadhara Kala-** According to Acharya Sushruta, these are located inside the muscles, particularly the sira, yakrit, and pleehaas. Similar to how milky sap pours out when a branch of a latex-producing plant is cut (bruised on their bark), when a muscle is severed, blood pours out swiftly and in copious amounts.
3. **Medodhara Kala** - Medas is the little bone that all lining beings have and is found in the belly; when entire, it is referred to as Majja. Big bones in particular have Majja (bone marrow) inside of them, but smaller, fatter, curved bones have saraktameda (red colour marrow). Vasa is the term for pure fat found in muscle.

4. **Shleshmadhara Kala-** It is a component of every joint and is vital to existence. Similar to how a wheel spins freely when its axle is greased with fat. Similarity. The shlesmalubricated joint moves without restriction.
5. **Purishadhara Kala-** It is located in the Pakvasayainside the Antahkasthan commencing from Yakrit and intestine, the Maldhara Kala separate as the side of unduke.
6. **Pittadhara Kala-** It receives four different types of partially digested food from the Amasaya and sends them directly to the Pakvasaya. Hold the food until all four types of consumption—chewable, swallowed, drunk, and licked—have finished.
7. **Sukradhara Kala-** It originates and permeates the entire body of all life. Sukra is naturally prevalent throughout the human body, much as ghee is available in milk and jaggery is present in sugarcane juice. Sukra emerges from beneath the aperture of the urinary bladder on the right side, two Angula away, through the man's urinary route. When a man engages in copulation with a woman while feeling content, the Sukra that is present throughout the body emerges.

III. CONCLUSION

Mansadhara Kala is fleshy flesh that holds the Sira, Snayu, Dhamani, and Srotas branches. The Sira spreads in the Mansa, much like the lotus fibres in the murky water, and the description of Mansadhara Kala is quite similar to the pericardium. The Kala of holding the Mansa is Mansadhara Kala (Dhatu). The heart muscle is also kept in the pericardium. In addition, the pericardium is home to a network of coronary arteries, branches of the internal thoracic veins and azygos, phrenic nerves, and sympathetic and vagus nerves.

The absence of a designated location for this Kala of Mansa indicates that it must be present where the Mansa is; otherwise, like the other six Kalas, Sushrutacharya would have indicated its distinctive location. Musculoskeletal blood vessels: The lotus is used as an analogy for Kala, and the Mansadhara Kala is similarly used to explain the Kala. The two share a lot of similarities, the pericardium is Kala and since the heart and its close connection to it are both made of Mansa the connection between them is obvious. Pericardium can therefore be a part of the Mansadhara Kala.

The study of Ayurvedic and contemporary writings, dissection and actual bodily parts in the setting of the Kala and Pericardium led to the following results.

1. Up to a point, the Kala is a gross organ.
2. The Kala are the fibrous, serous, or mucous membranes, which include the neural, digestive, and mucous membranes.
3. There are just seven primary Kalas.
4. In addition to Kala's Dharan, there are additional functions that might change depending on Kala.
5. No unique Kala has been mentioned by Charak, Sushruta or Vagbhata.
6. Since the pericardium and Mansadhara Kala are quite similar.

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