

# Sushrutoktha Koshtanga in Relation with System

Dr. Aisha Resmi C.P<sup>1</sup>, Dr. Swapna Kumary<sup>2</sup>.

<sup>1</sup>P.G Scholar, <sup>2</sup>Professor & HOD, Department of PG Studies in Shareera Rachana, Alvas Ayurveda Medical College and Research Centre, Moodabidre, Karnataka, India.

Date of Submission: 01-11-2021

Date of Acceptance: 09-11-2021

#### **ABSTRACT:**

Ayurveda has some unique entities, Koshta and Koshtanga is one of them. Word Koshta is used for vacant place having covering, where things can be kept in a lot. The organs located within the Koshta are called Koshtanga. Organs like Amashaya, Agnyaashaya, Pakwashaya, Mootrashaya, Rudhiraashaya, hrudaya, Unduka, Pupphusa etc. are situated within the koshta. The present study is to analyse and understand the structure of koshtangas with present scenario.

#### Key word: koshta, koshtanga

# I. INTRODUCTION:

The term koshta is derived from the union of two word "kus" and "stham". "kus" means empty space or lumen. "stham" means stable firm wall. Hence anything with a wall enclosing a lumen can be considerd as "koshtha". Koshta is defined as the potential space for the location of the organs like amashaya, agnyashaya, pakwashaya, mutrashaya, rudhirashaya, hrudaya, unduka and phupphusa.<sup>1</sup>

#### Amashaya

#### "Tatra aamashayah pittashayo uparishtaath" Su.Su 21/12

The Amashaya lays Urdhva (proximal) to the Pittashaya (seat of Pitta) above the Nabhi<sup>2</sup>. It is called so because the Anna (food) found in this will be in Apakwa form (undigested). According to Dalhana, the Amashaya primarily meant for the Adhisthana (seat) of all type of food. SushiraSnayu is present in Aamashaya Anta.

#### Agnyaashaya

# "Na galu pitta vyatirekaat anyo agnihi upalabyathae" Su.Su 21/9

Sushruta states that both pitta and agni are one and the same<sup>3</sup>. Agnyaashaya is the site of Agni, and it helps in digesion of food.

#### Pakwashaya

# "Pakwashayagatatatranaadyomootravahastuya aha" Su.Ni 3/20

Acharaya Sushruta states that pakwashaya is connected to mootravahanadi<sup>4</sup>. While explaining the location of Doshas, Acharya quotes that Pakwasahaya exists above the Shroni , Guda and below the Nabhi. In Shareera Sthana, while explaining Ashayas , Acharya says that "Pakwashaya lies below the Pittashaya". It contain shushirasnayu and pureeshadhara kala.

#### Mutrashaya

# "Mootrashayo malaadhaaraha praanaayatanam uttamam" Su.Ni 3/20

Mutrashaya is the seat for Mala and Prana<sup>5</sup>. Mutrashaya is also known as basti. Sushruta states that Basti is surrounded by Nabhi , Kati , Mushka, Guda, Vakshanas and Sepha.

The Basti is Alabu shaped and it is adhomukha. Basti is fixed on all sides by Sira and Snayu. Basti has been counted as one of the vital parts i.e. Marmas of the body (SnayuMarmas).

#### Rudhira Ashaya or Rakta Ashaya

"Sonitasya sthanam yakrit pleehanoh". Su.Sutra.21/16

#### Yakrut

#### "Hrudayasya dakshinatho yakrut kloma cha" Su.Su 4/31

The site of the yakrut is dakshina to hrudaya<sup>6</sup>. In Sharirsthana Acharya states that Yakrut is originated from Rakta Dhatu. Acharya had mentioned seven types of kala out of which raktadharakala is specifically found in Yakrut and pleeha.

Out of the sixty-six muscles found in the abdomen, six are situated in relation to the Yakrut, pleeha and unduka.

Sushruta had described forty main sira out of which ten are raktavaha, which are bound to Yakrut and pleeha. These ten siras further get divided into



175 raktavahasira that supply rakta all over the body.

# Pleeha

# "Hrudayasyatasyathovaamathahapleehapupphu sashcha" Su.Sa 4/31

Pleeha is located in left side of Hridaya along with Phupphusa<sup>7</sup>. Pleeha have been considered as Mulasthana of RaktavahaSrotas with Raktavahidhamani. During embryonic development origin of Pleeha takes place from Shonita . After attaining Rakta Varna in Pleeha, it is conducted to different parts of body by Raktavahidhamani.

# Hrudaya:

#### "ShonitaKaphaPrasadajamhrudayam" Su.Sa.4/34

The term hrudaya is composed of the three words viz Hra Harane, (to take, or to acquire.), Da Dane (to give) and YaGatau(one in which transport takes place). Embryologically hrudaya is produced from the essence of rakta and kapha<sup>8</sup>. The dhamanis carrying prana to the body part are attached to hrudaya. Sushruta believes that it develops in the beginning of fourth month. According to him hrudaya is derivative of matruja bhava (maternal factor).

Hrudaya is situated between the two breasts in the chest at the opening of amasaya.

Sushruta has mentioned the size of hrudaya is panitala(four anguli).

# II. DISCUSSION

#### Amashaya

The Amashaya lays Urdhva (proximal) to the Pittashaya (seat of Pitta) above the Nabhi, it is compared as the stomach is situated mainly in left hypochondrium which similar as mention in Ayurveda.

It is called so because the Anna (food) found in this will be in Apakwa form (undigested) whereas in modern, it is the place where the process of digestion occurs. Same as the stomach where the meal stays for a while to facilitate the proper mixing and digestion by mixed gastric juices.

Aamashaya Anta is the place of Sushirsnayu and function of Snayu is to bind and thereby help in weight bearing whereas medical science has described that pyloric sphincter is the last part of the stomach and similar in function, structural hardness and strength. The binding nature here is clear in the fact that the sphincter is always in a Acharya has clearly mentioned that there are two peshies within the hrudaya. The hrudaya resembles like a pundarika (red lotus), with its apex turned downwards (adhomukha). It has mandala sandhi . The nadis spread all over body are related to the hrudaya.

The hrudaya has been especially described as the seat of chetana in all human beings. Hrudaya opens when a person is awake (jagrata) and closes when he is asleep (svapata).

# Unduka

#### "Shonithakittaprabhavahaundukaha" Su.Sa 4/25

Sushruta states that, Unduka derives from end metabolite of blood<sup>9</sup>. Appearance of Unduka is given like Pottali by Dalhana.

According to Dalhana's opinion, Unduka is situated in the Pakwashaya and provides storage place for the separated Mala (which was separated from the rest part). Word Unduka represents the proximal part of Guda by Dalhana.

# Pupphusa

#### "Shonithaphenaprabavahapupphusha" Su.Sa 4/25

Sushruta states that pupphusa are developed from shonitaphena (froth of the raktha)<sup>10</sup>. As per Dalhana , Phupphusa has been defined as Avayava which is attached with Hrdayanadika (attached to heart).

constricted state thereby bearing the weight of the contents present above it.

# Agneyashaya

Agneyashaya is Pittasthana. As it consist of pitta and it is helpful in digestion of food. Thus agneyashaya can be considered as pancrease whereas in modern, pancreas produce pancreatic juices called enzymes which can be considered as pitta. These enzymes break down sugars, fats, proteins, and starches which helps in digestion. **Pakwashaya** 

Acharaya while explaining the location of Doshas, quotes that Pakwasahaya (large intestine) exists above the Shroni (pelvis), Guda (anus) and below the Nabhi. All these organs are placed in abdominal cavity so it is clear that Pakwashaya is the organ placed in abdominal cavity.

In Sushruta ShareeraSthana, while explaining Ashayas (organs), he says that "Pakwashaya (large intestine) lies below the Pittashaya"i.e; gall bladder. In modern, transverse



colon has relationship with liver and gall bladder in it's superior surface.

It contain shushira snayu and pureeshadhara kala which can be related to pyloric spincter and anal spincter. Pureeshadhara kala can be correlated as mucous lining in the intestine.

According to Sushruta, Amashaya (stomach) and Pakwashaya (large intestine) have muscles on their walls. It can be correlated as longitudinal and circular muscles in intestine.

# Mutrashaya

Organ holding urine, mainly the term Mutrashaya can be urinary bladder. Sushruta states that Basti (Bladder) is surrounded by Nabhi (Umbilicus), Kati (Waist), Mushka (Scrotum), Guda (Rectum), Vakshanas (Inguinal region) and Sepha (Penis/Vagina). According to modern anatomy, apex of the urinary bladder is related to umbilicus by the median umbilical ligament, the upper part of the base separated from the rectum by the rectovesical pouch and the lower part is related to the seminal vesicles and the terminal part of the vas deferens. In males the bladder rests on, and is in direct continuity with the base of the prostate.

It is of the Snayu Marmas, it can be compared as true and false ligament of urinary bladder. The Basti is Alabu (Bottle gourd) shaped and is fixed on all sides by Sira and Snayu. According to Sushruta, basti is adhomukha, In modern anatomy it is mentioned that the outlet of urinary bladder is directed downwards and at lower end or the neck of which the urethra is connected.

#### Yakrut

The site of the liver is below and right to the heart, it is related that liver is located right upper quadrant of the abdomen, below diaphragm.

Yakrut is a site of Raktadhatu, whereas in modern anatomy, liver is a large, expandable, venous organ capable of acting as a valuable blood reservoir in times of excess blood volume and In Ayurveda explained the functions of hrudaya in following way

The hrudayahas been especially described as the seat of chetanain all human beings. It is considered as a seat of chetana based on its uninterrupted work throughout the entire period of life and stop working at the end of life leading to death, which then makes body achetana(nonconscious, lifeless). Here the word chetana can be considered as the source of energy. Hrudaya is the source of energy for all the other functions happen capable of supplying extra blood in times of diminished blood volume therefore Raktadhara or Raktashaya words have been used in Ayurveda Samhitas.

### Pleeha

Pleeha is located in left side of Hridaya (heart) along with Phupphusa (lungs). In modern anatomy it is mentioned that spleen is located in the left upper quadrant of the abdomen.

Yakrit and Pleeha have been considered as Mulasthana of RaktavahaSrotas with Raktavahidhamani (blood vessels). In modern anatomy it is mentioned that, About 25% of white blood cells and 30% of platelets in the body are stored in the spleen.

# Hrudaya

The heart performs three functions of giving blood, receiving blood and circulating blood by acting as a pump.

Hrudaya is situated between the two breasts in the chest (thorax) at the opening of amasaya. The pliha and puppusa are situated below and beneath the hrudaya on the left side and the yakrut and kloma below and beneath the hrudaya on the right side. In modern anatomy it is mentioned that, In thoracic cavity, heart is placed in between two lungs . 1/3 of the heart lies to the right and 2/3 to the left of median plane.

Sushruta has mentioned the size of hrudayamarma is panitala (four anguli) It can be referred as the size as a closed fist (panitala).

The hrudaya is an assemblage of fleshy muscular structure. While describing the peshi, Sushruta has clearly mentioned that there are two peshies within the hrudaya. It can be interpreted as the pericardium and myocardium of heart. The hrudaya resembles like a pundarika(red lotus), with its apex turned downwards (adhomukha). It can be compared as the heart is cone shaped and narrow apex faces downwards.

in the body. Modern studies reveal that even after the Brain death; the only organ which functions for a while is heart. The conduction system of the heart is functions itself without nerve impulses.

# Unduka

Word Unduka represents the proximal part of Guda (rectum) according to Dalhana. Appearance of Unduka is given like Pottali by



Dalhana. It is compared to Caecum because it is a large blind pouch.

# Pupphusa

As per Dalhana, Phupphusa has been defined as Avayava which is attached with Hrdayanadika (attached to heart). According to modern anatomy, the lungs are situated on either side of the heart.

The thoracic cavity include organs such as hrudaya and pupphusa helps in circulation and respiration. Abdominal cavity accommodates organ such as amashaya, pakwashaya, agnyashaya, yakrut, pleeha helps in digestion and pelvic cavity includes basti which helps in excretion etc. Thus, the organs located within the Koshta are called Koshtanga.

# **III. CONCLUSION**

Ayurveda have its own concepts and Sidhantas. All concepts have its own importance. Koshta and Koshtanga is the basic and important concept in Ayurveda. The knowledge of Koshta gives us a precise anatomical knowledge of the cavities of the human body and the viscera's included them. The knowledge of Koshta and Koshtanga helps to understand and treat the underlying pathologies.

#### REFERENCE

- [1]. Sushruta, sushrutasamhita Chikitsa sthana sadhyovrana chikitsa 2/12 edited with English translation of text and dalhana's commentary along with critical notes by Priyavrat Sharma, vol. 2, chaukhambhavisvabharti, Varanasi.
- [2]. Sushruta, sushrutasamhita Sutra sthana vranaprashna adhyaya 21/12 edited with English translation of text and dalhana's commentary along with critical notes by Priyavrat Sharma, vol. 1, chaukhambhavisvabharti, Varanasi.
- [3]. Sushruta, sushrutasamhita Sutra sthana vranaprashna adhyaya 21/9 edited with English translation of text and dalhana's commentary along with critical notes by

Priyavrat Sharma, vol. 1, chaukhambhavisvabharti, Varanasi.

- [4]. Sushruta, sushrutasamhita Nidhana sthana ashmari nidhana 3/20 edited with English translation of text and dalhana's commentary along with critical notes by Priyavrat Sharma, vol. 2, chaukhambhavisvabharti, Varanasi.
- [5]. Sushruta, sushrutasamhita Nidhana sthana ashmari nidhana 3/20 edited with English translation of text and dalhana's commentary along with critical notes by Priyavrat Sharma, vol. 1, chaukhambhavisvabharti, Varanasi.
- [6]. Sushruta, sushrutasamhita Sutra sthana prabhashaniya adhyaya 4/31 edited with English translation of text and dalhana's commentary along with critical notes by Priyavrat Sharma, vol. 1, chaukhambhavisvabharti, Varanasi.
- [7]. Sushruta, sushrutasamhita Sharira sthana garbha vyakarana sharira 4/31 edited with English translation of text and dalhana's commentary along with critical notes by Priyavrat Sharma, vol. 1, chaukhambhavisvabharti, Varanasi.
- [8]. Sushruta, sushrutasamhita Sharira sthana garbha vyakarana sharira 4/34 edited with English translation of text and dalhana's commentary along with critical notes by Priyavrat Sharma, vol. 1, chaukhambhavisvabharti, Varanasi.
- [9]. Sushruta, sushrutasamhita Sharira sthana garbha vyakarana sharira 4/25 edited with English translation of text and dalhana's commentary along with critical notes by Priyavrat Sharma, vol. 1, chaukhambhavisvabharti, Varanasi.
- [10]. Sushruta, sushrutasamhita Sharira sthana garbha vyakarana sharira 4/25 edited with English translation of text and dalhana's commentary along with critical notes by Priyavrat Sharma, vol. 1, chaukhambhavisvabharti, Varanasi.