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CONCEPT OF AARTAVAVAHA SROTAS AND ITS MOOL- A REVIEW ARTICLE

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ABSTRACT

According Ayurvedic Samhitas, Srotas is a structural and functional unit of the body. Srotas are the hollow spaces or channels which are responsible for any movement or transformation. There are many types of Srotas mention by Acharyas. Maharshi Charaka explains Srotas as a medicinal aspect and Maharshi Sushruta explains Srotas according to surgical aspect. Artavavaha Srotas is Antarmukh Srotas which are also known as Yogawahi Srotas. It is similar to the female reproductive system in modern medical science. As per Maharshi Sushruta, Artavavaha Srotas are two in number and their Moolsthana is Garbhashaya and Artavavahi Dhamanya. The concepts explained in Ayurveda are similar to a tree in which the root is Srotas. If the root of a tree is in proper condition it nourishes the tree (sharira) very well, hence importance is given to Srotas. In this respect here an effort is made to study and understand Aartavaha srotas and its Moolsthan thoroughly.

KEYWORDS: Srotas, Aartavavaha Srotas, Moolsthana (Garbhashaya and Artavavahi Dhamani).

INTRODUCTION

Srotas are the channels that convey the body elements which are undergoing metabolic processes. *Srotas* are the basic source for the vitiation, depletion and maintenance of existing

bodily structures. Srotas are considered as secreatory channels of the body. Srotas are hollow spaces of our body that transport the parinam prad dhatu (essence of the food) from one place to another place. Srotas are the systems or the part of the body systems or the secreatory channels which are responsible for the secreations or transportation of *Dhatus*. [1]

Acharya Sushruta has also explained the concept of Srotas. He described that Srotas are hollow (empty)channel except sira and dhamani, which originating from roots spaces spread in the body and carries specitic entities.^[2]

A female is not only the beautiful but also one of the most important creations of god especially for her ability to reproduce. Among types of Srotas, Aartavavaha Srotas is given prime importance which is only present in females. Acharya Sushruta explained eleven pair of antaramukha Srotas not mentioned Asthivaha, Majjavaha and Swedavaha srotas. But explained aartavavaha Srotas. Acharya Caraka has mentioned 13th Srotas not mentioned Aartavavaha Srotas. Aartavavaha Srotas are two in number. Artavavaha Srotas in the description of Srotas in Vimana Sthana. even though he clearly stated that the description of 13 Srotas which were explained as an example, only these can be elaborated wisely by 'Vaidya'. Beside this, in 30th chapter of Chikitsa Sthan, he had stated some references of Rajovahi Sira and said that, by having the foods with predominance of Vata, the Vata aggravates and gets Mocalised in Rajovahi Sira. Here it increases the volume of blood, this increased volume will create problems of excessive bleeding in females and this disease is called as Asrigdara. These Rajovahi Sira are represented by Artavavaha Srotas which denotes if there is no reference in the Samhita directly, that doesn't means it is not explained in Samhita.^[3]

Aartavavaha Srotas are extremely important as it the foundation for bringing new life in to existence, which is the basic objectives of every living being. According to Ayurveda, health of a female starts in the foetal stage itself. The anatomical and physiological features of women in each age group were well explained by our Acharyas. Just as the river is cleansed by its flow the women are purified by the menstrual flow. That is the reason women are non suspectable to many diseases.

According to Acharya Shushrut there are two roots of Aartavavaha Srotas, Garbhashya and Aartavavaha Dhamnani. Aartavavaha Srotas is Antermukha srotas which is also known as yogawahi Srotas. Aartav is the menstrual blood and Aartavavaha Srotas is the part of female reproductive system in modern medical science, which is responsible for the formation of menstrual blood and the passage which carry the menstrual blood during menstrual cycle. We can consider all the systems including hormones secreatory glands which are responsible for production and maturation of follicles, ovulation, formation of menstrual blood and its menstruration at right time etc.

AIM AND OBJECTIVE

Concept of Aartavavaha Srotas and its Moolsthana with modern point of view.

MATERIAL AND METHOD

- Review of Ayurvedic literature from Ayurvedic classics including relevant commentaries.
- Modern literature, research paper, articles, modern test book.
- Other print media, online information, Index, journals, magazines etc.

REVIEW OF LITERATURE

Avurvedic Review

In the description of eleven pairs of Yogavahi Srotas, Acharya sushruta has included artavavaha Srotas. The Series of Srotas in Sushruta Samhita is as follows- Prana, Anna, Udaka, Rasa, Mamsa, Meda, Mootra, Purisha, Shukra and Artavavaha Srotas. The Mool of Artavavaha Srotas are Artavavahi Dhamani and Garbhashaya as per Sushruta. [4]

As per Maharshi Sushruta the Artavavaha Srotas are two in number and their Moolasthana is considered as Garbhashaya and Artavayähi Dhamanya. Garbhashaya is the uterus which is the reservoir of *Artava* (menstrual blood) in the endometrium up to the date of menstruation.

Garbhashaya, it consists of two words Garbha and Ashaya means the organ holds the Garbha called Garbhashaya. It is situated between Pittashaya and Pakvashayo and is located in third Avarta. [5] As per Acharya Vagbgata, Sushruta and Bhavprakash the structure of Yoni is similar to that of a conch shell and it is made up of three Avarta and Garbhashaya is situated in the third Avarta. [6] It refers to the uterine cavity which is shaped like Rohita Matasva Mukha. [7] Maharshi Sushruta has described the channels carrying the Artava (menstrual blood) out of the body during menstrual cycle called Artavavaha Srotas. He has defined "Artavavahe Dwe" that means Artavavaha Srotas is present in pair and their Moola Sthana are Garbhashaya (uterus) and Artavavahi Dhamanya (uterine tube), injury to these leads to *Bandhyatva* (infertility), *Maithuna Asahishnuta* (dyspareunia or intolerance to compulsion) and *Artavanasha* (amenorrhea).^[8]

Aratavavaha dhamani - Dhamani represent arteries. In Aartavavaha Srotas, Dhamani is having great importance because without Dhamani there is no nutrition to Aartavavaha Srotas, no menstruation has occurred and no conception is possible. While describing Artavavaha Srotas by Sushruta, Dhamani is described as an important source or Mool for the Srotas. Women have two Dhamani to carry Artava and Stanya which correspond to those carry Shukra in males.^[9]

It is quite related to the female reproductive system of modern medical science in which the uterus along the fallopian tube and overy (structurally) alonf with overian and uterine vessels and hormones (functionally). Ayurveda explained different structures or parts of the *Aartavavaha srotas* which are similar to the structures of the female reproductive system.

The terms mentioned in Ayurveda similar to female genital system

S.	Terms used for Aartavavaha	Similar structure in female genital
No.	Srotas and stri prajanan sansthan	system
1	Bhaga	Valva
2	Smaratpatra, kamaatpatra	Clitoris
3	Yoni	Vagina
4	Garbhashaya	Uterus
5	Antarphala	Ovary
6	Aartavavaha dhamani	Fallopian tube or uterinevessels. [10]

Moolsthana of Aartavavaha Srotas

In Ayurvedic classics, *Moolasthana* of any *Srotas*, means a place from where something originates like *Utpatti sthana* (origin point of view), a place where something stores i.e., *Sangraha sthana* (storage) and a place from where some nutrients or *Rasa* etc, carry as *Vahana Sthana* (conduction). In females, additional eighth *Srotas* is explained named as *Artavavaha Srotas*. Ayurveda mentions that *Garbhashaya* and *Artavavahi Dhamani* as a *Moolasthana* of *Artavavaha Srotas*. *Acharya Ghanekar* interpret *Artavavaha Srotas* as uterus and its arteries i.e., ovarian and uterine arteries". *Garbhashaya* is mainly responsible for conception, production and expulsion of *Artava*, from origin point of view. *Artavavahi Dhamani* can be taken as fallopian tube which conducts *Artava* (ovum) towards uterus during menstrual phase and *Dhamana* word refers to contraction, so contraction of fallopian tube conducts the ovum.

In *Garbhashaya*, the word *Ashaya* refers as cavity or space in that particular organ which are prime functional areas or cavities of the body. *Garbhashaya* is a space which helps in implantation and development of *Garbha* (foetus) here it doesn't refers to only a single organ but it is the hollow spacein the body where various bio physiological activities happens. *Yoni* is a very important structure of female body, shaped as "*Shankha Nabhi Akriti*", contains three *Avarta* (circular folds) in its structure. *Garbhashaya* is an important structure situated in third *Avarta* of *Yoni*. Here the term Yoni has ample meaning represent the whole reproductive system of female in which shows three circular folds or subdivision yoni(vagina), *Garbhashayamukha* (cervical canal) and *Garbhashaya* (uterus) from external to internal respectively.

Modern Review

According to Modern science Artavavaha Srotas is quite related to the female reproductive system of medical science in which the uterus along the fallopian tube and ovary (structurally) along with ovarian and uterine vessels and hormons (fuctionally). The uterus is a thick-walled muscular organ in the mid-line between the bladder and rectum. It consists of a body and a cervix, and inferiorly it joins the vagina. Superiorly, uterine tubes project laterally from the uterus and open into the peritoneal cavity immediately adjacent to the ovaries. The cervix is the lower, cylindrical part of the uterus. It is less mobile than the body. It is about 2.5 cm long, and is slightly wider in the middle than at either end. The lower part of the cervix projects into the anterior wall of the vagina which divides it into supravaginal and vaginal parts. The vagina is the copulatory organ in women. It is a distensible fibromuscular tube that extends from the perIneum through the pelvic floor and into the pelvic cavity. The internal end of the canal is enlarged to form a region called the vaginal vault. The anterior wall of the vagina is related to the base of the bladder and to the urethra: in fact, the urethra is embedded in, or fused to. the anterior vaginal wall Posteriorly, the vagina is related principally to the rectum. Inferiorly, the vagina opens into the vestibule of the perIneum immediately posterior to the external opening of the urethra. From its external opening (the introitus), the vagina courses posterosuperiorly through the perineal membrane and into the pelvic cavity, where it is attached by its anterior wall to the circular margin of the cervix.

The body of the uterus is flattened anteroposteriorly and, above the level of origin of the uterine tubes, has a rounded superior end (fundus of uterus) The cavity of the body of the

uterus is a narrow slit, when viewed laterally, and is shaped like an inverted triangle. when viewed anteriorly. Each of the superior corners of the cavity is continuous with the lumen of a uterine tube: the inferior corner is continuous with the central canal of the cervix.

The uterine tubes extend from each side of the superior end of the body of the uterus to the lateral pelvic wall and are enclosed within the upper margins of the mesosalpinx portions of the broad ligaments. Because the ovaries are suspended from the posterior aspect of the broad ligaments the uterine tubes pass superiorly over and terminate literally to the ovaries. The ovaries develop high on the posterior abdominal wall and then descend before birth, bringing with them their vessels, lymphatics, and nerves. Unlike the testes, the ovaries do not migrate through the inguinal canal into the perineum, but stop short and assume a position on the lateral wall of the pelvic cavity. The ovaries are the sites of egg production (oogenesis). Mature eggs are ovulated into the peritoneal cavity and normally directed into the adjacent openings of the uterine tubes by cilia on the ends of the uterine tubes. The ovaries lie adjacent to the lateral pelvic wall just inferior to the pelvic inlet. Each of the two almond-shaped ovaries is about 3 cm long and is suspended by a mesentery (the mesovarium) from the posterior aspect of the broad ligament. [11]

DISCUSSION

While considering the *Moolsthan* of any *Srotas*, following points are taken in consideration like *Utpattisthan* (origin point of view), *Sangrahasthan* (storage) and *Vahanasthan* (conduction). The *Moolsthan* or source is considered that without which the origin, maintenance and destruction of that specific carrier of body nutrient cannot be possible and the place which controls the entire functional dealings and processes of the specific carrier. In females, additional *Srotas* is explained named as *Artavavaha Srotas*. Ayurveda mentions the *Garbhasaya* and *Artavavahi Dhamani* as a *Moolsthan* of *Artavavaha Srotas*. Garbhashava is mainly responsible for conception, production and expulsion of *Artava*, from origin point of view. It shows same structural and functional characteristics of uterusalong with ovaries and both have same pathological and clinical conditions after injury. The concept of *Artavavaha Srotas* can be understood by its functions, *Moolsthan* or retrogression method which means symptoms produced due to injury (*Viddha Lakshana*), or *Dushti Lakshana* (pathological changes) occurs in *Artavavaha Srotas*. *Aratvavaha Srotas* is physioanatomical structure present in female pelvic cavity having *Garbhashaya* and *Artavavahi Dhamani* of its *Moolsthan* i.e, most important parts. It is quite related with female reproductive system of

modern science in which uterus along with fallopian tube and ovary are the most important parts for its structural and functional essentiality.

Concept of *Artavavaha Srotas* has been resolute in two ways-macroscopic and microscopic. Macroscopically it is considered as reproductive tract where menstruation, conception, and foetal development take place. While microscopically we must understand physiological aspect as *Artavavaha Srotas* is physioanatomical concept. Functions of reproductive system like ovulation, menstruation, conception, endometrial changes etc. all these are controlled by various hormones under hypothalamus-pituitary-ovarian axis while some functions happen due to its proper blood supply and nerve supply. Capillary network present in reproductive system also play significant role in nutrition, development and proper functioning of the whole system. Both Ayurveda and modern science accept that fertilization, implantation, nutrition and development of foetus take place in *Garbhashaya* (uterus). Any injury to the *Artavavaha Srotas* or its *Moolsthan* causes symptoms like menstrual disturbances, dyspareunia or even infertility which is also accepted and well explained by modern science. By all the above argument concerning *Artavavaha Srotas* shows reasonably similarities with reproductive system.

CONCLUSION

Artavavaha Srotas shows quite similarity with the female reproductive system of modern medical science. It is determined in two ways macroscopic and microscopic. Macroscopically it is reproductive tract as conducting point of view and microscopically it is capillary network of uterus in context of nutrition point of view. Moolsthan of Artavavaha Srotas are the regions or structures in the body from where Artava originates, store for small duration and carry for ejection outside body. Here Garbhashaya (uterus) and Artavavahi Dhamani (blood vessels and capillaries of uterus) are the Moolsthan of Artavavaha Srotas.

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