



**ORIGINAL RESEARCH PAPER**

**Ayurveda**

**ANATOMICAL STUDY OF ARTAVAVAHA SROTASA W.S.R TO "TASYA TU TRATIYE AVARTHE GARBHASHAYYA PRATISHTHITA"**

**KEY WORDS:** *Artavavaha Srotasa, Ayurveda, Sharira Rachana, Srotasa*

<b>Dr. Archana Verma</b>	Asst. Professor, Dept. of Sharira Rachana, FAS, Jayotividyapeeth Women's University, Jaipur.
<b>Dr. Shreeram Kumawat</b>	Ph.D Scholar, Dept of Maulika Siddhant, National Institute of Ayurveda, Jaipur.
<b>Dr. Sunil Kumar Yadav</b>	Asst. Professor, Dept of Sharira Rachana, National Institute of Ayurveda, Jaipur

**ABSTRACT**

*Sharira Rachana* is a important branch of Ayurveda. Knowledge of *Sharira Rachana* is mandatory for students of any system of medicine. It is vital subject in preclinical studies. The concepts of *Ayurveda* are like roots of the tree, in which one of root is *Srotasa*. *Acharya Sushruta* in field of *Sharira* has gone through anatomical structure under the name of *Srotosharira*. He has considered twenty two *Yogavahi Srotasa* in his *Sushruta Samhita Sharira Sthana* 9/12 including *Artavavaha Srotasa* and its *Moolasthan*. Among the type of *Srotasa*, *Artavavaha Srotasa* (which does *Artavavahana*) is given prime importance which is only present in females. The root (*Moola*) of *Artavavaha Srotasa* is considered as *Garbhashaya* and *Artavavahi Dhamani* (vessels carrying *Artava*). Injury to *Artavavaha Srotasa* leads to infertility, dysperunia and dysmenorrhoea that are diseases of different part of Female reproductive system. *Acharya Sushruta* compared *Yoni* with *Shankha Nabhi Akriti* in which there are three *Avartha* and *Garbhashaya* is situated in third *Avartha*. So *Artavavaha Sroatsa* can be considered as a whole Female Reproductive System.

**INTRODUCTION:-**

*Artava Vaha Srotasa*, an important part of clinical anatomy of gynecology. This needs to be understood properly because the foremost duty of a physician, especially the female is to understand the structural importance of the female anatomy and physiology to treat a female patient.

*Sushruta* has counted the *Artava Vaha Srotasa* as a different entity while counting the twenty two of *Yoga vahi Srotasas*. *Acharya Sushruta* mentioned that the *moolas* of the *Artava Vaha Srotasa* are –*Artava Vahini Dhamanis* and *Garbhasya*<sup>1</sup>. While describing the signs and symptoms of the "*viddha*" (puncture) of the *Artava Vaha Srotasa*, *Acharya Sushruta* told that after the puncture of the *Artava Vaha Srotasa* there will be – *Vandhytava*(Impotence), *Maithuna asahishnuta* (Dyspareunia) and Loss of Monthly Cycle –*Artavanasha*<sup>2</sup>.

*Acharya Charaka* has not counted the *Artava Vaha Srotasa* in list of the *srotasa* while discussing the *srotasa* in *Vimana Sthana*. *Acharya Charaka* has given some references about the *Rajovahi Siras* in the thirtieth chapter of *Chikitsa sthana*<sup>3</sup>. These *RajoVahi Siras* are nonetheless represents the *Artava Vaha Srotasa* only.

**MATERIAL AND METHOD:-**

According to *Acharya Sushruta Yoni's* shape like a conch shell it is broader at start, kinked at middle and again broader at end. There are circular striae seen on its wall. It is described to be composed of three *avartha*. In the third *avartha* of *Yoni*, *garbhashaya* is situated<sup>4</sup>. According to modern Anatomy Female reproductive system consist of following parts:-

**Ovaries<sup>5</sup>:-**

The almond-shaped ovaries are typically located near the attachment of the broad ligament to the lateral pelvic walls, suspended from both by peritoneal folds, the mesovarium from the posterosuperior aspect of the broad ligament and the suspensory ligament of the ovary from the pelvic wall . Because the ovary is suspended in the peritoneal cavity and its surface is not covered by peritoneum, the oocyte expelled at ovulation passes into the peritoneal cavity but is usually trapped by the fimbriae of the uterine tube and carried to the ampulla.

**Uterine tubes<sup>6</sup>:-**

The uterine tubes (formerly called fallopian tubes) extend laterally from the uterine horns and open into the peritoneal cavity near the ovaries . Each uterine tube is divisible into four parts:- Infundibulum, ampulla, isthmus, uterine part .

**Uterus<sup>7</sup>:-**

The uterus (womb) is a thick-walled, pear-shaped, hollow muscular organ. The nongravid (not pregnant) uterus usually lies in the lesser pelvis, with its body lying on the urinary bladder and its cervix between the urinary bladder and the rectum. The adult uterus is usually anteverted (tipped anterosuperiorly relative to the axis of the vagina) and ante flexed (uterine body is flexed or bent anteriorly relative to the cervix) so that its mass lies over the bladder. The position of the uterus changes with the degree of fullness of the bladder and rectum.

**The uterus is divisible into two main parts:-**

The body of the uterus- forming the superior two thirds of the structure, includes the fundus of the uterus and the isthmus of the uterus. The uterine horns (L.cornua) are the superolateral regions where the uterine tubes enter.

The cervix of the uterus- the cylindrical, narrow inferior part of the uterus, which has a supravaginal part between the isthmus and the vagina and a vaginal part that protrudes into the vagina and surrounds the external os of the uterus.

The wall of the body of the uterus consists of three layers:- Perimetrium, Myometrium, Endometrium

**Vagina<sup>8</sup>:-**

The vagina, a mostly sub peritoneal musculomembranous tube, extends from the cervix of the uterus to the vestibule of the vagina. The vestibule contains the vaginal and external urethral orifices and the openings of the two greater vestibular glands. The superior end of the vagina surrounds the cervix of the uterus.

**The vagina:**

- Serves as a canal for menstrual fluid.
- Forms the inferior part of the birth canal.
- Receives the penis and ejaculate during sexual intercourse.
- Communicates superiorly with the cervical canal, and inferiorly with the vestibule. The cervical canal extends from the isthmus of the uterus to the external os (opening) of the uterus.

The vagina is usually collapsed, so its anterior and posterior walls are in contact, except at its superior end, where the cervix holds them apart. The vaginal fornix, the recess around the protruding cervix, is usually described as having anterior, posterior, and lateral parts. The posterior vaginal fornix is the deepest part and is closely related to the recto uterine pouch.

**DISCUSSION:-**

According to *Acharya Sushruta "Artavavahe Dwe"*<sup>9</sup>. That means *Artavavaha Srotasa* is present in pair in body. So structures which are present in pair in body one of them can be consider as *Artavavaha Srotasa*. These organs are-

1. Ovaries
2. Fallopian Tubes
3. Uterine Arteries

All of these are important in terms of the working of female genital organs, but these cannot fulfil the complete working and understanding of the Female Genital Organs.

Ovaries are the essential part of the female genital organs, because these shed off the ovum, the most important part for the development of the fetus. But, in few cases this is seen that if there will be some problem with ovaries, like polycystic ovarian disease, this can hamper the activities (Menstrual Cycle) in females but other *Lakshana* of *Viddha* of *Artavavaha Srotasa* like *Maithuna Asahishnuta* (Dyspareunia) doesn't appear. So all alone ovary cannot be said as *Artavavaha Srotasa*.

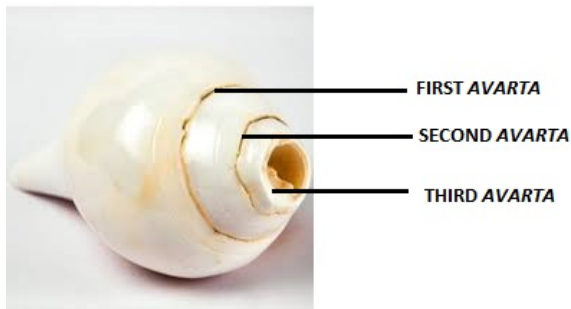
Fallopian tubes performs the function of carry of the ovum from ovary to the uterus. It is also an important site of fertilisation. But when we discuss about the *Viddhalakshana* of *Artavavaha Srotasa* only *Vandhyatva* is the symptom that comes due to ligation of fallopian tubes. There is not any role of fallopian tubes in other two symptoms.

Next are the uterine arteries in Uterus. Which performs the function of *Poshana* i.e. supply nutrition to all organs of female genital system. When there is ligation or tubectomy is performed in female body, there is not any interruption in functions of female genital system.

When we discuss about endometrium in Uterus and consider that it is responsible for menstrual flow. Then this is not a complete view because neither endometrium alone is responsible for this nor it is responsible for good health and all functions of female genital system.

Any system works properly, when all of its components are working well, even small tiny cells are important in well functioning of the system. So, the whole female genital organs can be taken as *Artavavaha Srotasa*, single organ and structure of cannot be compared with *Artavavaha Srotasa*.

According to *Acharya Sushruta Yoni* that is a very important structure of female body, shaped as "*Shankha Nabhi Akriti*", contains three *Avartha* in its structure. One more important structure is "*Garbhashaya* or *Garbhashayya*", situated in third *Avartha* of *Yoni*. If we take whole reproductive system as *Yoni* and *Garbhashaya* instead of only Vagina and Uterus respectively. Then everything would be cleared.



**SHANKH NABHI AKRITI & AVARTA IN YONI**

**CONCLUSION:-**

In *Sushruta Samhita*, when *Acharya Sushruta* starts the topic of *srotasa* he himself claims that these *srotasas* are innumerable and again he has classified all these in eleven pairs.

Anatomy of *Artavavaha Srotasa* and in that description of *Yoni* with its *Traya Avartha* concept is unique to *Ayurveda*. In Anatomical Position Uterus, Cervix and Vagina are placed in Anteverted-Anteflexed Position that *Sushruta* called as *Avartha*. These three *Avartha* of *Yoni* should be

1. First *Avartha* should be Vagina: - It Starts from Vestibule to External Os.
2. Second *Avartha* should be Cervix: - It starts from External Os to Internal Os.
3. Third *Avartha* should be Uterus:- It starts from Internal Os to Fundus of Uterus (Alpa Mukha and Anta Sushria) The Third *Avartha* in which *GarbhaShaaya* should be Uterus/ Uterine Cavity which is like *RohitMatsyamukha*<sup>10</sup> that is compared with cervix opening.

*Aartava* constitute both parts *Bahipushpa* and *Anatahpushpa* which are compared with menstrual discharge and ovum respectively. So their their production sites Uterus and ovaries and flow pathway Fallopian tube and Vagina all are included in *Artavavaha Srotasa*.

So we should understand the whole female genital tract as *Aartava Vaha Srotasa* and this thought should be carried well to define all the anatomical Deformities of the same.

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