

## Chapter 1:

# *Historical Review on Pradara (Leucorrhoea)*

### ETYMOLOGY

Etymologies are not definition, they are explanations of what our words meant and how they sounded 600 or 2000 years ago. It is the study of history of words, when they entered a language and from what source they are formed. The Sanskrit linguists and grammarians of ancient India were first to make comprehensive analysis of linguistics and etymology. The analysis or extensive studies on etymology is called *Nirukti* or *Vyutpatthi* in Sanskrit. The earliest of attested etymologies can be found in Vedic literature, in philosophical explanations of *Brahmans*, *Aranyakas* and *Upanishads*. As the topic of dissertation is “*Sweta pradara*”, so to explore the word “*pradara*”, we have to go through *Nirukti* and *vyutpatthi* found in different Vedic literature and Koshas.

### AMARKOSH:

*“Pradaraha bhangnaree rugvaanaaha pradeeryate Pradarnamaanenvaa”*

*Pradaraha pu.pra.dra. vidaraneritdorapaha 32/3/5-7 dravidarane (kriya pa.se.)*

*‘ritdorap (3/3/57) ‘pradar rog bhede syadwikare sharbhangyo’ iti medina.*

(Amarkosh – 3<sup>rd</sup>kand – NanarthVarg – 3/164)

“*Pra*” upsargapurvak “*DriVidarane*” dhatu and “*Ap*” pratyaya derivate the word “*pradara*” which is of masculine gender. According to “*Amarkosh*” it also means “*Bhang*” (break down), “*Baan*” (arrow). As per *MediniKosh* “*Vidaar*” means a type of female disorder. Alternatively, it can be called as “*Asrigdara*” which means discharge of blood and other materials from Yoni.

### SHABDAKALPADRUM:

*“Dra vidaranedhatuhu ‘ritdorap’ iti sutren ap vidarahastrirugbhedaha”*

Etymological derivation of word “*pradara*” by “*Amarkosh*” is also followed by “*Shabdakalpadrum*”, “*Halayudhkosh*” and “*Vachaspatyam*” which simply means “*pradarana*” or break down.

### CHARAKA SAMHITA:

*...Pandure asragdare pibet. -- (Ca.Ci. 30/116)*

Commentator Chakrapani Says

*“pandure pradare iti shwet pradare”*

*“Asragdara shabda vyuttpattimah \_kupitoanilityadi”*

***“raktam pramanmutkramya iti raktam pramanadhikam kratva raktamadayatdrajo yasmadwirdhayati (vraddhen rakten yojyitva rajo vivardhayati yasmat)***

***Pavans tasmāt asrag rajo melkarupatvaadyam vyadhirsragdar ityuchyate”***

(Ca.Ci. 30/207-208 Chakrapani Commenory)

When the amount of **“rakta”** increases and flows out through *Yoni*.It is known as **“Asrigdara”**.

**VAIDAIK SHABD SINDHU:**

***“tannamakstreerakatadisravaroge, Rajaha pradeeryate yasmatpradarstensa smrataha,”***

(V.S.S. Kaviraj Umeshchandra Gupt 3<sup>rd</sup> edition 1983)

**SANSKRIT HINDI KOSHA:**

***Pradar ru pra +dra+ap***

1. Todna-Phodna (break down).
2. Asthibhanga, darar, phatav, chidra, vivar (split bone, fissure, gap, hole, opening)
3. Dismissal of army.
4. Teer (arrow)
5. Disease found in women.

**STADMAN’S PRACTICAL MEDICAL DICTIONARY:**

**Leukos -** white                      **Rheen -** to flow

**Leucorrhoea: -** An excessive white flow per vaginum.

**DEFINATION:**

***“rajaha pradeeryate yasmat pradarsten sa smrataha”***

(Ca.Ci. 30/209)

***“pradeeryate iti vistarito bhavati iti pradaraha”***

**(Chakrapani Commentary)**

According to **“Aadarsh hindi shabdakosha”**, *Swetapradara* is a disease in which there is white discharge/*Sweta dhatu* from vagina. **(A.H.S. K, R.C. Pathak 2<sup>nd</sup> part)**

There is no direct definition of disease ***Sweta pradara***,but after seeing the etymology,definition may be excessive white flow through vagina, “leucorrhoea means a running of white substance and the term should be restricted to mean an excessive amount of the normal discharge.If discharge is caused by infection then the substance is mucupurulent or frankly purulent,itscolour therefore varies from cream to yellow or green.(Sir Norman Jeffcoate,Principles of Gynaecology).Leucorrhoea is a symptom of pouring out white discharge per vaginum& vaginal infection is very common cause of leucorrhoea.(C.S.Dawn text book of gynaecology)

## SYNONYMS OF PRADARA

According to “*Vrihat Paryayvachi kosha*” written by Dr. Bholanath Tiwari, the synonyms of *pradara* are as follows-

1. *Kshinata(debility)*
2. *Dhatukshaya*
3. *Vidar(fissure)*
4. *Stiroga (gynaecological disorder)*
5. *Leucorrhoea.*

## Historical glimpse

History is the knowledge of past which helps us to make our future better. It is very essential for the progress of any society or science. With the help of history, knowledge of the subject, its origin, its utility in the past and present scenario is attained. From the historical point of view, time scale has been divided into four periods.

- 1) **Vedic period** - 4000 to 6000 B.C
- 2) **Samhita period** - 1000 B.C to 7<sup>th</sup> century A.D
- 3) **Medieval period** - 8<sup>th</sup> century A.D to 16<sup>th</sup> century A.D
- 4) **Modern period** - 16<sup>th</sup> century A.D to till now.

## Vedicperiod

Vedas have been expected as the oldest available text in the world by the geological experts. Vedas are the endless source of knowledge. Aryans claim that like other branches of knowledge, the science of medicine is also acquired from gods through direct revelation. Vedas are the most ancient treatise of literature. Among four vedas *Rgveda* and *Atharvaveda* are having plenty of references regarding the different aspects of the present context “*yoni*” (female genitalia) and its diseases. On going through Vedas, we find that the gynaecological disorders are not mentioned in details but are described under the topics related to “*prajotpatti*” (producing offspring).

**Rgveda:** Rgveda the oldest vedic literature has description regarding *yoni rogas* (gynaecological disorders) in various contexts has advocated the use of *Agni* (fire) and other measures for their treatment.

**“Brahmanagnihi sambidano rakshoha badhamitah,**

**Ameevayste garbh durnama yonimashaye,”**

**(R. 10/12/162/1-4)**

In this verse *Durnama* disease is described, which affects the *Yoni* (vagina) and *garbhasaya* (uterus).The cause of this disease is mentioned as “*Rakshasa*”which can be compared with microorganism and above mentioned “*Agni chiketsa*” with cauterly which is used now days in modern practice.

**Atharvaveda:** In Atharvaveda, description of *yoni* and its diseases, *garbha*(foetus), treatment of *mudagarbha* (malposition of foetus) are available in concised form

***Ten bhindrami mehnām vi oni vi gaveenike,***

***Mataram cha putram cha vi kumaramjaraunamve(aharva) jarayupadhhtam, (A. 1/11/5)***

During the description of labour in Atharvaveda, Acharyas has explained that in primigravida if the head of foetus does not descend properly then incision of *yoni*, *gavinika* and *mehanaś* to be done. In this way expulsion of foetus as well as placenta occurs simultaneously. In Atharvaveda *Rakshasa* that affect *garbhini* and *prasutastri* are also mentioned.

***“Streenaam shroni pratodinam indra raakshansi nashya,” (A. 8/6/13)***

*Garbhadoshanivarana* is described in Atharvaveda 8/6 and for its eradication & its causative factors *krimis*(microorganism), many drugs are described in Atharvaveda 2/32, 4/37. In treatment related subjects, description of nutrition to foetus, *sukhprasava*(eaisydelivery) is described. In Rgveda aetiology and treatment of *yoni rogas* (gynaecological disorders) is described & in Atharvaveda description of stages of labour and *garbhasaya* (uterus).

Although among four vedas only Rgveda and Atharvaveda has description of *yoni* and *yoni rogas* but the world *Sweta pradara* is not mentioned anywhere.

After studying all Puranas only Agnipurana has described the word *yoni* and Garunapurana has mentioned the word *Asrigdara* in *strirogachiktsadi* chapter.

52th chapter of 2<sup>nd</sup> parva of Mahabharat has desribed the word *pradara* but it is not used for gynaecological disorder but for a specific community.

**GARUNA PURANA:** Here *Asrigdara* word is found in *strirogachiktsa* chapter.

***“Panchpallav yastyarkamaalteekusumairghritam,***

***Ravipakvamstrigdar yoni gandhvinashnam,”***

**(G.P. StriRogaChiktsadi Chapter 127/5)**

Garuna purana Commentary written by Pt.shri Ramshankar Bhattacharya (2<sup>nd</sup> edition 1998) described that foul smell from *yoni* in *Asrigdara* can be destroyed with help of *Panchapallav, Yashti, Arka and Maltighrita*.

**AGNI PURANA:** Here in place of *Asrigdara*, *yoni* word is found.

***“Dashahachdhyudhhayatte vipro janm hanau svayonishu, Shanbhis tribhir aiken kshatra vit shudr yonishu,” (A.P. 158/23)***

In the chapter of *sravadyasochaadhyaya* of Agni purana by Shri Baldeva Upadhyaya 2<sup>nd</sup> edition 1998, the word *yoni* is found.

**BRAHAMAN GRANTHA:** Among Brahman granthas, 4<sup>th</sup> chapter of Shathpath Brahman has described women or stri as 'sri' and considered her as a root cause for producing offsprings. But here also gynaecological disorders and its treatment are not mentioned.

## **SAMHITA PERIOD**

The period of classical Ayurvedic texts, i.e Samhita period plays very important role in the history of Ayurveda. The great authors compiled their classical works & present the subject in a systematic manner. In Samhitas gynaecological disorders in terms of *yonivyapads* (gynaecological disorder) and *pradara* is described in detail.

### **CHARAKA SAMHITA:**

All types of *yonivyapads* are described in Samhita period. The term *pradara* is broadly described in Charakasamhita than any other Samhita. Acharya Charaka has described 20 types of *yonivyapads* first in Sutrasthana.

***“vinshatiryonivyapad iti vatikee paittikee...***

***.....Mahayonishcheti vinshtir yonivyapado”(Ca. Su. 19/9)***

The *yonis* should be free from these *yonivyapads* because *garbha* is produced from *sudbha yoni* and *garbhasaya*. (healthy genitalia)

***“Purushsyanupahatrehsah astriyashchapraddust yonishonitgarbhashayaya....***

***.....tda garbho abhinirvartate”(Ca. Sa. 3/3)***

The etiological factors, symptoms and treatment of *yonivyapads* is detailed in chikitsasthana.

***“Mithyacharen taha streenam pradustenartven cha***

***Jayante beejdoshachch daivaach shranu taha prathak”(Ca. Ci. 30/8)***

While describing the 20 types of *yonivyapads*, the term *pradara* was used for first time as a complication of *yonivyapads*.

***“Tasmat garbh na grahnati stree gachchhaty amyan bahoona***

***Gulm arshaha pradradeenshch vatadhyaisch atipeednam”(Ca. Ci. 30/38)***

Later in the chapter Acharya says

***“updraveshu yoninam pradro yashch keertitaha”(Ca. Ci. 30/131)***

According to *doshik* involvement *pradara* has been divided into four types and their aetiology, symptoms and treatment is described by *Acharayas*.

***“Yaha purvamuktaha pradraha shranu hetvadi abhistutam***

***Chaturvidham vyastastu vattadhyaihe sannipatataha”(Ca. Ci. 30/204-210)***

Here *Acharays* has told *Asrigdara* and *Pradara* one in same thing.

**“Raktam pramanm utkramya garbhashayagataha siraha, Tasmāt asragdaram prahuretāt tantravisharadaha, Rajaha pradeyarte yasmaat pradarsten sa smrataha”** (Ca. Ci. 30/207-209)

When the normal amount of *Raja* (menstrual blood) is increased than its normal amount, then it is known as *Asrigdara*, and due to excess flow of *Raja* it is known as *Pradara*.

Acharya Chakrapani has clarified the above verse, and has given the etymology and definition of *Asrigdara*-

**“asragdar shabdvyutpattimah – kupito anil ityadi, Pradeeyarte iti vistarito bhavati iti pradaraha ‘asrag deeryate yasminni ati asragdar’ itesha api niruktir atra bodhhavya”** (Ca. Ci. 30/207-209 Chakrapani Commentary)

In “*Yonivyapatchiktsam*” chapter, Acharya has told about the treatment of *Asrigdara*. Along *Asrigdara* he has mentioned about *Kaphajapradara* or *Panduresrigdara* and its treatment.

**“Rohitkan moolkalkam pandure asragdre pibet”**

**“Yav yonishu shudhhasu garbh vidanti yoshitaha”** (Ca.Ci. 30/116-125)

While describing the term ‘*panduresrigdare*’ Acharya Chakrapani has given the term “*Sweta pradara*.”

**“Pandure pradare iti shvetpradare”** (Ca. Ci. 30/116 Chakrapani Commentary)

Hence the term ‘*Sweta pradara*’ is basically given by Acharya Chakrapani in Charaka Samhita cikitsasthana. Also, in the 9<sup>th</sup> chapter of “*Siddhi Sthana*” i.e. *Trimarmiya siddhi*, *Yonivyapad* & *Pradara* are defined in the context of Uttar basti.

**“Yonishooleshu teevrashu yonivyaaptva asragdarau**

**“Vidadhyaaduntaram bastim yathasv aushdha sanskratam”** (Ca. Si. 9/64-65)

## SHUSRUTA SAMHITA:

Shusruta Samhita is basically a Compendium of Surgery. So, he has given detailed description of anatomy of female reproductive system & obstructed labour. In the text *Pradara* is not described in detail only in the form of *RaktaPradara*, *Asrigdara* is defined.

**“Tedva atiprasagen pravratm anritaav api asragdaram**

**“Vijaneeyadato anyat raktalakshanat”** (Su. Sa. 2/19)

Acharya Shusruta after defining *yoni* in Sarirasthana 3<sup>rd</sup> chapter and position of *garbhasaya* in 5<sup>th</sup> chapter of Sarirasthana. He has mentioned 20 types yonivyapads in chapter of Uttar tantra naming “*YonivyapadPratishedhaadhyaya*.”

**“Trayanam apidoshanam yathaswam lakshanen tu”**

**“Vinshati vyaapado yonenirdrishta rogsangrahe”** (Su.U. 38/4)

According to Acharya Shusruta some names of *yonivyapads* differ from Acharya Charaka's *yonivyapads* were he has divided twenty *yonirogas* in 4 groups, according to *doshik* involvement. In this context due to *kaphadosha* a group of five *yonivyapads* is described.

**“Atyananda cha yaa yonihī karninee chānadwayam**

***Shleshmalaa cha kafat cha gyeyaa.....”* (Su.U. 38/8)**

This picture of *shleshmajayonivyapad* is not found in Charakasamhita. But aetiology of *shleshmajayonivyapad* can be correlated with the term *Sweta pradara*.

#### **ASHTANGA SANGRAHA (6<sup>th</sup> century):**

Acharya Vagabhatta the later period author has tried to incorporate the entire subject given by Charaka & Shusruta in his compendium. Aetiology and number of *yonivyapad* are mentioned in chapter 38 “*Gubhyarogadhyaya*” while treatment of twenty types *yonivyapad* is described in chapter 39 of Uttarsthana.

**“Vinshatir vyapado yoner jayante dushtbhojnat**

***Vishamsthan shayan bhrashmaithun sevanaih,***

***Dustantar vadap dravyai beejdoshen daivataha”* (A.S.U. 38/34)**

#### **ASHTANGA HRIDYA:**

Ashtanga hridya, which is a summarized form of Ashtanga sangraha. Twenty types of *yonivyapads* is described in chapter 33 of Uttarsthana in “*Gubhyarogadhyaya*” while treatment of *yonivyapads* is described in chapter 34 of Uttarsthana “*Gubhyarogapratisbedham*”. In the treatment of *kaphadusita yoni*, Acharya Vagabhatta says that *Rukshachikitsa* is best for it.

#### **BHELA SAMHITA (7<sup>TH</sup> CENTURY):**

There is no description available about *yonirogas*.

#### **HARITA SAMHITA:**

Mahrishi Harita has not given the separate chapter for *yonirogas* but he has mentioned the same under the heading of *strirogas*.

#### **MADHAV NIDANA:**

Acharya Madhavakar has mentioned, aetiology, symptom, & types of *yonivyapads* in chapter 62 namely “*Yonivyapadnidanam*”. For the very first time he has described a separate chapter “*Asrigdaravidanam*” in which he has mentioned the *nidana, lakshana and bhedadi* of *pradararoga*.

**“Viruddhm adhya adhyashaanat adajeernaat garbhaprata atimaithunat ch**

***Tam shleshm pitta anila sannipatitasch chaturprakaram pradaram vadanti”***

**(Ma. Ni. 61/1)**

Madhavkar has not mentioned the term *Sweta pradara*, but the symptoms of *Shleshmala yonā. ekandu*(itching), *picbhilta*(sliminess) is same as of *Swetapradara*. (Ma. Ni 61/8)

### **KASHYAP SAMHITA (7<sup>TH</sup> CENTURY):**

*Yoni* and its rogas is not described but 64 types of *sutika or dushprajatarogas* (postpartum diseases) is mentioned in Khilsthana of 11<sup>th</sup> chapter.

**“Dusprajata amayaha santi chatushshashtir iti sthitaha**

***Yonibhrasht kshata chaiva vibhinna mutrasangini***

***Sashof sravinee chaiva prasupta vednavatee*” (Ka. Kh. Sutikoupkraminayaadhyā - 11)**

### **MEDEVIAL PERIOD**

Ayurveda as a science did not make much progress only with few exceptions because of the political, economical instability on account of foreign invasions. There was a little original contribution in India for development of Ayurveda during this period.

The word *Sweta pradara* was firstly quoted in the text written by Vrnda Madhav (9<sup>th</sup> century) where it has been mentioned in the context of description of recipes to mitigate the *Sweta pradara* (Vrndamadhav 63/3-4). Commentator Chakrapani (11<sup>th</sup> century) has well narrated the term “*Pandurepradareiteswetapradara*”. In Basvarajiyam there is new entity “*Asthisrava*” which can be explained under this heading.

### **CHAKRADUTTA (11<sup>TH</sup> CENTURY)**

Chakrapanidutta has described the treatment of *Asrigdara* according to *doshik* involvement he has told *Kaphajapradara* as *Panduresrigdara* or *Sweta pradara*.

**“Roheetkan mool kalkam pandure asragdare pibet” (Cak. 61/3)**

Also, according to chakrapanidutta, *Yoninyapadsare* 12 in number and treatment of this is given in *yoninyapadchikitsa*. (cak.ci.62)

### **SHARANGDHARA SAMHITA (13<sup>TH</sup> CENTURY):**

Sharangdhara has mentioned 4 types of *Raktapradara* along with 20 types of *Yoninyapadas* in 7<sup>th</sup> chapter of purvakhanda, but name of *yoninyapadas* are somewhat different and its treatment part is not mentioned in the Samhita.

**“Tatha cha raktampradaram chaturvidhm udahrataṁ**

***Vatpittakafaistradha chaturtha sannipatatāha***

***Vinshatiryoni-roga.....yoniroga it iritaha*” (Sa. sa. Pu kha 7/176) (Sa.sa. Pu kha 7/179)**



### **GADANIGRAHA (14<sup>TH</sup> CENTURY):**

*Yoni* and its *rogas* (gynaecological disorders) are mentioned in 2<sup>nd</sup> chapter of sixth khanda.

**“Vinshativyaapado yonenirdrishta rogsangrahe”**

The disease *swetapradara* is mentioned in Gadanigrahapradarachiktsa 2.

### **MODERN PERIOD:**

In the later period gradually this complaint *Sweta pradara* came to a separate entity and becomes a common problem of discussion in books.

### **BHAVPRAKASH (16<sup>TH</sup> CENTURY):**

In Madhyam khanda, *Pradararoganidana* (aetiology), *bheda* (types), *lakshana* (symptoms) and *chikitsadi* (treatment) are detailed in chapter ‘Strirogadhikar’. In this context Pt. Brahmashankar Mishra says ‘*KaphajaPradara*’ as Leucorrhoea. He explains that leucorrhoea is a type of discharge from genital organs which is thick, white or pale in colour, viscid and contains pieces of mucous membrane.

(Ba.P.M.68/4 Vidyotini commentary)

Acharya ‘Bhavmishra’ has also given the same symptoms of *Kaphajapradara* in the classical text.

**“Aamam sapichchha pratimam sapandu pulaktoy pratimam kafattu” (Ba.P.M. 68/4)**

Other than *Pradarachiktsa*, treatment of *foul smelling yoni* and *Yoni kandu*(itching) has been described in chapter 70 of ‘Yoni rogachiktsa’.

### **YOGARATNAKAR (17<sup>TH</sup> CENTURY):**

In Uttarardha part of yogaratnakar, all the types of *Yonivyapadas* and *Strirogas* are described under the chapter of “Yonirogadhikar” and “Strirogadhikar” where *Nidana* and *lakshana* of *pradararogais* described under the heading of Strirogas.

**“Viruddhmadhyadhyashanaadjeernadpradaramvadanti” (Y.R. StriRogadhikar)**

### **BHAISJYA RATNAVALI (18<sup>TH</sup> CENTURY):**

Acharya Govind das sen has not mentioned the 20 types of *yonirogas* but treatment of these *Yonirogas* are mentioned in chapter 67.

When we take a look at modern medical science, which has developed a separate branch ‘Gynaecology’ for dealing the problems of women, described vaginal discharge in various manner. Now have a glimpse on Leucorrhoea, formerly it was considered as **“Acute catarah of vagina”** by Alfred Lewes Galabin (Diseases of women,P-596), but with the advancement in modern science, the nomenclature in relation to the infectious organisms such as Gonococcus, Trichomonas, Mycotic vulvo- vaginitis, Haemophilus, Nonspecific vaginitis and certain other clinical entities like Erosion of cervix, Endocervicitis etc. have been differentiated according to different causative factors of the vaginal discharge against common problem Leucorrhoea.

## **AYURVEDIC VIEW REGARDING ANATOMY & PHYSIOLOGY OF FEMALE GENITAL ORGANS.**

### **Anatomical consideration of female genitalia:**

For scientific study of Gynaecology the basic knowledge of structures and function of female genital organs is very much essential. The female genital organs “**YONI**” in Ayurvedic classics refers to entire reproductive system and also to individual organs.

The knowledge of the entire reproductive system including their supporting organs is very essential to study this group of disorders. Moreover, the organs of reproduction are last to develop and get differentiated in the process of growth and development. Hence there is considerable difference in reproductive organs of female child & of an adult woman. During the process of these changes the genital organs go under periodical and cyclic changes every month, in the child bearing period of a women & on the onset of menopause, the regressive changes takes place in genital organs.

The descriptive anatomy as well as physiology of female genital organs is not so clear in Ayurvedic texts as compared to modern texts. However, after collecting the scattered references of Ayurvedic literature the idea can be made clear about female reproductive system. Here an effort has been made to study and compile the literature available in Ayurvedic classics with that of relevant modern literature.

### **YONI:**

The word “**Yoni**” is derived from Sanskrit root “**YUJ**” (Amarkosh) which means to **join** or **unite**, which is suffixed by word ‘**NI**’ to form the word “**Yoni**”. Thus, literally *yoni* means place of contact or union. The word *yoni* is used with its different synonyms in different contexts.

### **SYNONYMS OF YONI:**

The following synonyms are used for different parts of genital system in different books of Sanskrit literature.

*Bhagam, Barangam, Upastha, Smarmandiram, Madanalahay, Ratikuharam, Ratigrahum, Ratimandiram, Jananavartamam, Adharam, Abanyadesam, Prakritih, Apatham, Smarkupah, Ratyanga, Kalakam, Kandarapakupal, Pushpapatha, Smarkupika, Randhra, Strinamsadharanacinha, Utapattisthana, Kalatram, Samsaramarga, Puspi, Adhaguhyam, Raktapatha, Raktavaha.*

(Vaidyashabdasindhu, Shabdastomahanidhi, Shabdakalpadrum)

The term *yoni* is used for species in most of literature, even in Ca.Sa 3/16 four yoni's of living being is mentioned. The term *yoni* basically refers to living being belonging to a particular species & by transference of it's meaning from the cause to the effect.

The term “**Yoni**” as per practical sanskrit English dictionary gives the following meanings:

1. Womb, uterus, vulva, female organs of generation.
2. Any place of birth or origin, the generating cause, spring or fountain.

3. An abode, a place, repository seat, receptacle.
4. Home.
5. A family stock, real birth of existence.
6. Seed grain.

The different contexts where the word **Yoni** has been used to denote different parts of genital organs as well as to denote the whole reproductive system are described below:

- 1) MahrishiShusruta&Bhavprakash while giving the description of the shape of genital organs have used the word **Yoni** to denote the reproductive system. (Su.Sa 5/47, Ba.Pgarbhaprakarana 3/13)

**“Shankhnabhy akriti yornis tryavarta sa prakeertita**

***Tasyasta tritiyetvaverate garbhshayya pratisthita” Su. Sa. 5/47***

The **Yoni** is of conch shell shaped. It has three avartas/encirclement in which garbhasaya or uterus is in 3<sup>rd</sup>avarta. The **Yoni** is narrow at intraoitus and very wide at fornices just like conch shell. There is difference of opinion among experts about the avartas (envelopes or encirclement). Vaidya Premwatitewari in her book **“AyurvediyaPrasuti tantra &striroga”** under the chapter Strisarirrachana has described about these avartas in many ways.

- 2) MahrishiCharaka while describing **Yoni vyapadas** used the word yoni to denote the whole reproductive system as well as as individual organs of reproductive system separately. (Ca.Ci 30/7)

## **EXTERNAL GENITAL ORGANS**

- 1) **BHAGA:** Acharya Shusruta has explained the circumference (vistara) of Bhagai.e 12 angulas while explaining the measurements of body parts **Dwadashangulani bhagvistarh.....** (Su.Su 35/8). Acharya Dalhana commenting on this fact classified that the **Bhaga** is Yoni and the word vistara means **randhra** or opening. However, it seems that it is description of circumference of entire vulva. Bhaga denotes the external genital organs of female i.e Vulva, pudendum or intraoitus of vagina.

## **INTERNAL GENITAL ORGANS**

- 1) **APATYA PATH (Birth canal or vagina):**

Acharya Charaka, Shusruta, &Vagabhatta have used the term **Apatyapath** in the context of **“Mudagarbha”** at the time of parturition. (Ca.Sa 6/24). Here the word ‘**Apatya**’ means the offspring or the child & the word ‘**Patha**’ denotes passage or canal, hence the passage through which child passes is known as ‘**Apatyapatha**’. It denotes to vaginal canal, which is musculo- membranous canal extending from cervix upto vulva.

- 2) **GARBHASAYA (UTERUS):**

Women possess an extra **Ashaya** (cavity) known as **Garbhashaya** which is situated in third avarta of **Yoni** (Su.Sa 5/7 ,Ka.SGarbhaprakarna 9)

**“Strinam garbhashayo astam iti” (Su. Sa. 5/7)**

It is in between *Pittashaya* & *Pakwashaya* and behind the bladder.

**“pitta pakwashayor madhye garbhashayo yatra garbha tisthhati”**

**“Shanknabhyakriti yornistryavarya sa prakeertita”**

**“tasyastratiye tvaverate garbhashayya pratisthita”**

**“yatha rohit matsyasya mukham bhavati ruptah”**

**“tat sansthanam tatha rupam garbhasayyam vidurbudha” (Su.Sa. 5/ 39,43, 44)**

Also, in “*Ashmarichikitsa*” chapter Acharya Shusruta says

**“Strinam tu bastiparshvagato garbhashaya sannikrastah...” (Su. Ci. 7/33)**

In this context Vaidya P.V Tewari clarifies that *Pittashaya* should be considered as *Pittadbara kala*, the seat of which is *grabani* / *Ksudhraantra* (coils of small intestine) and *Pakwashaya* (large intestine or rectum). The commentator Arundutta also says *Pakwashaya* as “*Purishtaprapta anna*” or loaded rectum. Hence the position of *Garbhashaya* is somehow clear that it is placed in pelvis behind the *Basti* or between *Basti* (bladder) and *Malashaya* (rectum) & covered with coils of intestine.

Acharya Kashyap has described in between the *Vipulakundala* of *srotas* (multiple coils of intestine) covered with *jarayu*. (Ka.S.garbhaprakarana 6/7).

Now for the shape of uterus Acharya Dalhana explains that it resembles with the mouth of *Robit matasaya*. It is so because of its triangular shape and as fish remains amidst water, so also uterus remains between *Pittashaya* and *Pakwashaya*. This similarity is given by Acharya Sharangdhara & Bhavprakash and the uterus by the word *Dhara*. (Sa.S.Pu.Kh 5/10)

### 3) PHALA SROTAS (OVARIES):

In *Ashmarichikitsadhyaya* dealing with treatment of urinary bladder stone Acharya Shusruta has advised to avoid injury of eight vital parts i.e. *Mutravaha*, *Shukravaha*, *phalasrotas* (testicles or ovaries), *Mutra praseka*, *Sevani* (perineal raphe), *Yoni* (female reproductive system), *Guda* (Anus) and *Basti* (Urinary bladder). (Su.Ci 7/38).

Acharya Shusruta explains that the muscles which are found in *linga* (Penis) and *mushka* (scrotum) of a man correspond to the covering of uterus and from this analogy *mushka*, *srotas* derived in relation to the male body correspond to *phalasrotas* which can be called as ovaries.

### 4) PESI (MUSCLES):

Women possess twenty extra muscles among them ten muscles are in breasts, 5 in each. Four muscles are found in *Apatyayapath* (foetal passage) & of these two are extending inside the abdominal cavity, two at vaginal orifice. *Peshis* in relation to internal as */garbhachidra* are 3 in number, one on anterior side of uterus and two on posterior-lateral side of uterus and three *peshis* are in relation to the entry of semen & ovum i.e one at the site of entry of semen & two at the site of entry of ovum.

## 5) NADIS:

According to Bhavprakash, there are three *nadis* in *Manobhavagarmukha* (vaginal canal) of females namely **Samirana, Chandramasi & Gauri**. *Madnatpatra*(clitoris) is mainly having *Samarinanadi*, *shukra* (semen) falling over it becomes futile. Women having *Chandramasinadi* in *Kandarpgeha* (mid vaginal canal) are early satisfied with coitus & delivers female child. Sexual satisfaction to women possessing *Gauri nadi* in *Upasthagarbha*(depth of vaginal canal) is attained with difficulty & she usually delivers male child. (Ba.P.Pu.kh. garbhaprakara 3/17-20)

## PHYSIOLOGICAL ASPECT OF WOMENS BODY

There is considerable anatomical, physiological & psychological changes in different periods of womens life which are directly related with the activities of the female genital system. Hence the complete understanding of this is very essential in diagnosis and treatment of gynaecological disorders.

There is no clear description of various epochs of womens life particularly in relation to the reproductive system in Ayurvedic classics, however scattered references present a general scenario. So, by reviewing the general classification of age specific approach can be made on womens life. Charaka, Shusruta & Vagabhatta has divided the life span into 3 stages.

- 1) Balyavastha (childhood)
- 2) Madhyamavastha (adulthood)
- 3) Vridhhavastha (old age)

### 1) Balyavastha (childhood):

This stage lasts up to 16 years of age during which *Dhatu*s are immature, hairs on face & axilla are not grown, body is soft & can not withstand troubles easily. Bala (Strength), Varna (Complexion) are not fully explicated. This span is dominated by *Kapha* (Ca.Vi. 8/122, SuSu 35/26, As.S.Sa 8/24). Acharya Vagabhatta follows Charaka view & considered this stage up to 16 years. In this period there is increase in body size & weight with *shleshmodreka*.

Acharya Kashyapa says that *Artava* is generally not manifested in *Balyavastha* because it circulates all over the body, up to that age & she is considered as "*Hinayoni*" (Ka.S. Kh). The term refers to under developed genitalia.

### 2) Madhyamavastha (middle age):

During this stage energy, potency, strength, working capacity, understanding, retention power, memory, analyzing capacity and all *dhatu*s are in mature state. The span is dominated by *Pitta* (Ca.Vi.8/122, SuSu 35/27, As.S.Sa 8/24, Ha.S-117). Charaka and Vagabhatta keeps the age limit up to 60 years, while Shusruta, Kashyapa & Harita extends up to 70 years.

Along with bodily feminine changes, womens of this period undergo cyclic physiological changes every month known as menstrual cycle. The three phases of menstrual cycle are:

- 1) **Rajasravakala** (menstruation period 3-5 days)
- 2) **Ritukala** (proliferative phase including ovulation 12-16 days)
- 3) **Rituvyatitakala** (post ovulatory phase or secretory phase 9-13 days)

Along with menstruation, vagina also serves as canal for excretion of vaginal, cervical & uterine discharges. This feminine change is governed by female hormones. A white mucoid discharge secreted from yoni during sexual act is described as **shukradhatu** by Shusruta and Vagabhatta. But Vagabhatta clearly mentioned that this **shukradhatu** is incapable of conception. This may be correlated with Bartholin gland secretion (Su.Sa 2/38).

### 3) Vriddhavastha kala (old age):

This is a period of declination of all *dhatus* as well as regression of genital function along with achievement of climacteric. This period is mainly dominated by *Vatadosha*.

### STATUS OF DOSHAS IN DIFFERENT EPOCHS OF WOMENS LIFE:

All the three *dosas* are always present in the body but relative predominance changes in different conditions or ages *Artava* being *Agneyain* character likely to increase *TejasMahabhuta* of the body which may result in increase in the amount of *pitta* relatively in earlier age than in males. Considering this aspect, probable status of *dosas* can be considered in the following ways: -

Classification of age	Sub classification	Age limit years	Changes in the body	Status of Dosas
I. CHILD HOOD	1. Bala (Gauri, Kanya Rohini, Bala etc.)	10	General development	Kapha +++, Pitta ++ & Vayu +
	2. Kumari (Premenarche or Mugdha)	10 to 12	Development of secondary sexual character	Kapha +++, Pitta ++A
	3. Rajomati (Menarache established manurity stage or Mugdha-vastha)	12 to 16	Menstruation starts, cycle in fully established & she is capable to conceive	Kapha +++, Pitta ++, Vayu +
II. MIDDLE AGE	1. Yuvati (Yuva, Taruni or Praudha)	16 to 40	Maximum reproductive capacity, full maturity	Pitta +++, Kapha ++, Vayu +
	2. Praudhavastha (Adhirudha or	40 to 50	Pre-menopausal	Pitta +++,

	pragalbha)		symptoms	Vayu ++, Kapha +
	3. Vrddhavastha	50 to onwards	Menopause	Vata +++ Pitta ++ Kapha +
III. OLD AGE	1. Vrddhavastha	After 50-55	General pitta Decline	Vata +++ Kapha +

\* (Prof. P.V. Tiwari, AyurvediyaPrasutitantra Evam StriRoga)

### MODERN VIEW REGARDING ANATOMY & PHYSIOLOGY OF FEMALE GENITAL ORGANS:

Reproduction is the process by which new individuals of species are produced and the genetic material is passed from generation to generation. This process maintains the continuation of species. The whole body grows, develops and gets differentiated from a single cell, the zygote. In the process of development, different organs & systems become mature at different ages and thus the body attains the complete maturity usually at the age of 16 years in female & 25 years in male, when both are capable to initiate the process of reproduction.

Hence the necessity arises for studying and understanding the anatomical & physiological changes occurring during this period as this has influence on vaginal discharges & various gynaecological disorders.

### ANATOMICAL VIEW:

The female reproductive organs can be divided into two broad groups.

- 1) External genitalia
- 2) Internal genitalia

**1) External genitalia:** The external genitalia is known as vulva which includes following parts:

- Mons pubis
- Labia majora
- Labia minora
- Clitoris
- Vestibule
- External urinary meatus
- Vaginal orifice & hymen

- Greater vestibular gland
- Perineum

➤ **MONS PUBIS:**

A pad of fat lying in front of symphysis pubis. This area is covered with hair at puberty.

➤ **LABIA MAJORA:**

Labia majora are two thick folds which form the sides of vulva. The labia majora are covered with squamous epithelium and contain sebaceous gland, sweat glands and hair follicles. It is about 7.5 cm (3 inches) in length. They are homologous to scrotum in male.

➤ **LABIA MINORA:**

Labia minora are two thick folds of skin devoid of fat on either side just with in labia majora. Anteriorly they are divided to enclose the clitoris & unite with each other in front and behind the clitoris to form prepuce and Frenulum respectively. The lower portion of Labia minora fuses across the midline to form fold of skin known as Fourchette. It is homologous to ventral aspect of penis in male.

➤ **CLITORIS:**

Clitoris is a small cylindrical erectile body, measuring about 2.5 cm situated in most anterior part of vulva. It consists of a glans, a body and two crura. The glans is covered by squamous epithelium and is richly supplied with nerves. Clitoris is analogue to penis in male but it differs basically in being entirely separated from urethra.

➤ **VESTIBULE:**

Vestibule is a traingular space bounded anteriorly by the clitoris, posteriorly by fourchette and on either side by labium minus. There are four opening in the vestibule one urethral, one vaginal orifice, & two openings of bartholin ducts.

➤ **VAGINAL ORIFICE AND HYMEN:**

The vaginal orifice lies in the posterior end of vestibule. It is of varying size and shape. In virgins & nulliparae, the opening is closed by a septum of mucous membrane called Hymen. They secrete mucous which keeps vulva moist. It is homologous with bulbourethral gland of male.

➤ **PERINEUM:**

Perineum is the area extending from fourchette to the anal canal. It is roughly triangular in shape & consists of connective tissue, muscle and fat. It gives attachment to the muscles of pelvic floor.

The external genitalia do not play any important role in the causation of leucorrhoea, but internal organs play a significant role in various vaginal discharges.

**2)INTERNAL GENITALIA:** The internal organs of female reproductive system lie in the pelvic cavity & consists of vagina, cervix, uterus, uterine tubes & ovaries.



- **VAGINA:** The vagina is a fibromusculao- membranous sheath communicating the uterine cavity with exterior at the vulva. It constitutes the excretory channel for the uterine secretion & menstrual blood. It is the organ of copulation & forms birth canal for parturition.
- **VAGINAL WALLS:** Vagina has got an anterior, a posterior & two lateral walls. The anterior & posterior walls are opposed together but the lateral walls are comparatively stiffer specially at its middle as such it looks “H” shaped on transverse section.
- **VAGINAL FORNICES:** The fornices are the clefts formed at the top of vagina (vault) due to the projection of the uterine cervix through the anterior vaginal wall where it is inseparable with its wall. There are four fornices- one anterior, one posterior, & two lateral, the posterior one being deeper & the anterior most shallow one.
- **STRUCTURES OF VAGINA:**

Layers from within outwards are –

1. Mucous coat which is lined by stratified squamous epithelium without any secretory glands.
2. Submucous layer of loose areolar vascular tissues.
3. Muscular layer consisting of indistinct inner circular & outer longitudinal.
4. Fibrous coat derived from endopelvic fascia which is tough & highly vascular.

- **VAGINAL EPITHELIUM:**

The vaginal epithelium is under the action of sex hormones. At birth & upto 10-14 days the epithelium is stratified squamous under the influence of maternal oestrogen circulating in the new born. Thereafter upto prepuberty and in postmenopause, the epithelium becomes thin, consisting of few layers only.

From puberty till menopause, the vaginal epithelium is stratified squamous epithelium and devoid of any gland. Three distinct layers are defined – basal cells, intermediate and superficial cells which contain glycogen under the influence of oestrogen.

- **BLOOD SUPPLY:**

The arteries involved are-

1. Cervicovaginal branch of uterine cavity.
2. Vaginal artery – a branch anterior division of internal iliac or in common origin with the uterine
3. Middle rectal.
4. Internal pudendal.

These anastomose with one another & form two azygose arteries- anterior & posterior arteries. Veins drains into internal iliac & internal pudendal veins.

➤ **NERVE SUPPLY:**

The vagina is supplied by sympathetic & parasympathetic nerves from the pelvic plexus. The lower part is supplied by the pudendal nerve.

**THE UTERUS**

The uterus is a hollow pyriform muscular organ situated in the pelvis between the bladder in front & the rectum behind.

**Position:**

Its normal position is one of the ante version & ante flexion. The uterus usually inclines to the right (dextrorotation) so that the cervix is directed to the left (levorotation) and comes in close relation with the left ureter. As we know normal position of the uterus anteversion & anteflexion. The anteversion relates the long axis of the cervix to the long axis of vagina, which is about 90°. Anteflexion relates the long axis of the body to the long axis of the cervix & about 120° in about 15-20%. Normally the uterus remains in retroverted position. In the erect posture, the internal os lies on the upper border of symphysis pubis & the external os lies at the level of ischial spines.

**Measurements & Parts:**

The uterus measures about 8 cm long, 5cm wide at the fundus & its walls are about 1.25cm thick. Its weight varies from 50-80gm. It has got the following parts.

- Body or corpus
- Isthmus
- Cervix.

**1. Body or Corpus:**

The body is further divided into fundus, the part which lies above the openings of the uterine tubes. The body proper is triangular & lies between the openings of tubes & the isthmus. The superolateral angles of the body of the uterus project outwards from the junction of the fundus & body are called as cornua of the uterus. The uterine tube, round ligament & ligament of the ovary are attached to each cornua.

**2. Isthmus:**

The isthmus is a constricted part measuring about 0.5cm situated between body & the cervix. It is limited above by the anatomical internal os & below by the histological internal os (Aschoff). Some consider isthmus as a part of the lower portion of the body of the uterus.

**3. Cervix:**

The cervix is the lowermost part of the uterus. It extends from the histological internal os & ends at external os which opens into vagina after perforating the anterior vaginal wall. It is almost cylindrical in shape & measures about 2.5 cm in length & diameter. It is divided into a supravaginal part- the part lying above the

vagina and a vaginal part which lies within the vagina, each measuring 1.25cm. In Nulliparous, the vaginal part of the cervix is conical with the external os looking circular, whereas in parous it is cylindrical with the external os having bilateral slits. The slit is due to invariable tear of the circular muscles surrounding the external os & gives rise to anterior & posterior lips of cervix.

### **Cavity:**

The cavity of the uterine body is triangular on coronal section with the base above & the apex below. It measures about 3.5cm. There is no cavity in the fundus. The cervical canal is fusiform & measures about 2.5cm. Thus, the normal length of the uterine cavity including the cervical canal is usually 6-7cm.

### **Structures:**

The wall consists of 3 layers from outside inwards:

- **Perimetrium-** It is the serous coat which invests the entire organ except on the lateral borders. The peritoneum is intimately adherent to the underlying muscles.
- **Myometrium-** It consists of thick bundles of smooth muscle fibres held by connective tissues which are arranged in various directions. During pregnancy, however, 3 distinct layers can be identified- outer longitudinal, middle interlacing & the inner circular.
- **Endometrium-** The mucous lining of the cavity is called endometrium. As there is no submucous layer, the endometrium is directly opposed to the muscle coat. It consists of lamina propria & surface epithelium which is a single layer of ciliated columnar epithelium. The lamina propria contains stromal cells, endometrial glands, vessels & nerves. The endometrium is changed to Decidua during pregnancy.

### **Blood supply of uterus:**

**Arterial supply:** The arterial supply is from the uterine artery one on each side. The artery arises directly from the anterior division of the internal iliac or in common with superior vesical artery.

**Veins:** The venous channels correspond to the arterial course & drain into internal iliac vein.

**Nerve supply:** The nerve supply of the uterus is derived principally from the sympathetic system & partly from the parasympathetic system. sympathetic components are from T5 & T6 (motor) and T10 to L1 spinal segments (sensory). The somatic distribution of uterine pain is that area of the abdomen supplied by T10 to L1. The parasympathetic system is represented on the either side by the pelvic nerve which consists of both motor & sensory fibres from S2, S3, S4 & ends in Ganglia of Frankenhauser which lies on either side of the cervix.

### **Changes in uterus with age:**

At birth, the uterus lies in the false pelvis; the cervix is much longer than the body. In childhood, the proportion is maintained but reduced to 2:1. At puberty the body is growing faster under the action of ovarian steroids (oestrogens) and the proportion is reversed to 1:2 and following child birth, it becomes

even 1:3. After menopause the uterus atrophies the overall length is reduced, the walls become thinner, less muscular but more fibrous.

**Fallopian tube:** The uterine tubes are paired structures measuring about 10cm (4 inches) and are situated in the medial three-fourth of the upper free margin of the broad ligaments. Each tube has got two openings, one communicating with the lateral angle of uterine cavity called uterine opening & measures 1mm in diameter, the other is on the lateral end of the tube, called pelvic opening or abdominal ostium & measures about 2mm in diameter.

**Parts:** There are 4 parts from medial to lateral. They are:

1. Intramural or interstitial- Lying in the uterine wall and 1.25cm (1/2 inches) in the length & 1mm in diameter.
2. Isthmus- Almost straight and measures about 2.5cm (1 inch) in length & 2.5mm in diameter.
3. Ampulla- Tortuous part & measures about 5cm (2 inches) in length which ends in wide.
4. Infundibulum – Measuring about 1.25cm (1/2 inches) long with a maximum diameter of 6mm.

The abdominal ostium is surrounded by a number of radiating fimbriae. One of these is longer than the rest and is attached to the outer pole of ovary called ovarian fimbria.

**Blood supply:** Arterial supply is from the uterine & ovarian arteries. Venous drainage is through pampiniform plexus into the ovarian veins.

**Nerve supply-** The nerve supply is derived from the uterine & ovarian nerves. The tube is very much sensitive to handling.

## THE OVARIES

The ovaries are paired sex glands or gonads in female and are intraperitoneal structures. In nulliparae, the ovary lies in the ovarian fossa on the lateral pelvic wall. The ovary is attached to the posterior layer of the broad ligament by the mesovarium & to the lateral wall by the infundibulopelvic ligament and to the uterus by the ovarian ligament.

### Structures:

The ovary is covered by a single layer of cell known as germinal epithelium. The substances of the glands consist of outer cortex & inner medulla.

**Cortex:** It consists of stromal cells which are thickened beneath the germinal epithelium to form tunica albuginea. During reproductive period, the cortex is studded with numerous follicular structures, called as functional units of the ovary in various phases of their development. These structures include primordial follicles, maturing follicles, Graffian follicles & corpus leuteum. Atresia of the structures results in formation of arctic follicles or corpus albicans.

**Medulla:** It consists of loose connective tissues, few unstriped muscles, blood vessels & nerves. There is small collection of cells called “hilus cells” which are homologous to the interstitial cells of testes.

**Blood supply:**

Arterial supply is from the ovarian artery, a branch of abdominal aorta.

Venous drainage is through pampiniform plexus, to form the ovarian veins which drain into inferior venacava on the right side & left renal vein on the left side.

**Nerve supply:** Sympathetic supply comes down along the ovarian artery from T10 segment. Ovaries are sensitive to manual squeezing.

**PHYSIOLOGICAL VIEW**

**Vaginal secretions:** The vaginal secretion is very small in amount sufficient to make the surface moist. Normally, it may be little excess in mid menstrual or just prior to menstruation, during pregnancy & during sexual excitement. The secretion is mainly derived from the glands of cervix, uterus transudation of the vaginal epithelium & Bartholin’s gland (during sexual excitement)

**Doderlien’s bacillus:**

It is a rod-shaped Gram-positive bacillus which grows anaerobically on acid media. It appears in the vagina 3-4 days after birth & disappears after 10-14 days. It appears again at puberty & disappears after menopause. It probably comes from intestine. Its presence is dependant to oestrogen& its function is to convert glycogen present in the vaginal mucosa into lactic acid, so that the vaginal pH is maintained towards acidic side. This acidic pH prevents growth of other pathogenic organisms.

**Cervical Secretions-** Cervical secretions is alkaline mucous with pH 8 like an unboiled white egg. Cervix secretes 20-60mg mucus per day, which may increase upto 700mg/day during menstrual cycle of a women’s reproductive life. The mucous is rich in fructose, glycoprotein and mucopolysaccharide. It also contains sodium chloride. The fructose has got nutritive function to the spermatozoa. Under oestrogenic stimulation, glycoprotein network is arranged parallel to each other, thus facilitating sperm ascent. Progesterone produces interlacing bridges thereby preventing sperm penetration. Cervical mucus contributes significantly to plug which functionally closes the cervical canal & has got bacteriolytic property.

**Functions of fallopian tube & ovaries:**

Fallopian tube transports the gametes, facilitate fertilization & survival of zygote through its secretion.

Ovarian follicles, each of which contains ovum. Maturation of the follicle is stimulated by follicle stimulating hormone (FSH) from the anterior pituitary, while maturing the follicle lining cell produce the hormone oestrogen. After ovulation follicle lining cells develop into the corpus luteum (yellow body) Under the influence of the luteinising hormone (LH) from the anterior pituitary, the corpus luteum produces the hormone progesterone. If the ovum is fertilized, it embeds in the walls of uterus where it grows, develops & produces chorionic gonadotrophic hormone, which stimulates the corpus luteum to continue secreting progesterone for the first three months of pregnancy. If the ovum is not fertilized the corpus luteum

degenerates, menstruation occurs and the next cycle begins. Sometimes more than one follicle matures at a time, releasing two or more ova in the same cycle when this happens & the ova are fertilised resulting in multiple pregnancy.

### Conclusive Remark

Ayurveda has used the term *Pradara*. *Raktapradara* or *Asrigdara* for the discharge of blood from vagina while for discharge of *Sweta* (white) material from vagina, *Sweta pradara* word has been used. In the 'Brihatrayi' *Sweta Pradara* word is not used. Firstly Acharya Chakrapani in commentary of Ca.Ci 30/116 describe *Sweta pradara* as "**pandarupradreitiswetapradre**"

It is not a separate disease entity but it is a symptom occurring in many diseased conditions. But sometimes this condition become so worse that the other symptoms are neglected by the women & she wants to get rid from this particular symptom. These symptoms also persist without having any specific diseased condition. That's why Acharyas Charaka, Vagabhatta have described only symptomatic treatment.

*Sweta Pradara* word itself indicates its symptom of white vaginal discharge. The *Kapha&Vatadosha* vitiated due to abnormal diet or mode of life or with their own aggravating factors reaches the reproductive organs which has become vulnerable due to excessive coitus, abnormal labour, frequent labour, multiparity & abortions, settles the *dosha*& produces thick foul-smelling vaginal discharges. The vitiated *Kaphadosha* has a property of *Prithvi Mahabbhut* (earth element) which causes *ghanata*(thickening) & *gandha*(smell) in vaginal discharges. This pathogenesis of *Sweta Pradara* has similarity with *SbleshmalaYonivyapad pathogenesis*. It has resemblance with etymology "**pandarupradreitiswetapradre**" Hence statistical analysis of proposed drug on symptoms of *SbleshmalaYonivyapad* has also been studied.

Among four vedas *Rgveda* and *Atharvaveda* are having plenty of references regarding the different aspects of the present context "*yoni*" (female genitalia) and its diseases. The female reproductive organs can be divided into two broad groups. External genitalia, Internal genitalia

**External genitalia:** The external genitalia is known as vulva which includes following parts: Mons pubis, Labia majora, Labia minora, Clitoris, Vestibule, External urinary meatus, Vaginal orifice & hymen, Greater vestibular gland, Perineum

**INTERNAL GENITALIA:** The internal organs of female reproductive system lies in the pelvic cavity & consists of vagina, cervix, uterus, uterine tubes & ovaries.

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