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# CRITICAL ANALYSIS OF THE CONCEPT OF MENSTRUAL BLOOD AND OVUM IN

## **AYURVEDA**

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#### ABSTRACT

During the monthly hormone cycle, the mucous membranes lining the inside of the uterus prepare for the possibility that the egg might be fertilized and settle in the uterus. If not get fertilized then the ovum along with shaded uterine wall, every month during reproductive period in the form of menstruation blood and the monthly period, also called menstruation. *Artava, sonita, asrk, raja, rakta, lohita, rudhira, pushpa* etc words are used in the classics in Ayurveda to denote menstrual blood and ovum at different places. In this study we tried to evaluate the female reproductive component related to menstrual blood and ovum in Ayurveda and its applied references are interpreted with the available Ayurvedic references. It is a conceptual study; materials were collected from different Ayurvedic literatures and online articles related to the topic. In this study we have seen after analysis all the references that reproductive element and menstrual blood can be understood with terminology like- *Artava. Raja, Asrik, Rakta, Lohita, Rudhira, Sonita Puspa Bija.* Here *puspa* is specific for ovum while *raja* is specific for menstrual blood. Keywords: Menstrual bood, Ovum, Artava. Raja, Asrik, Rakta, Lohita, Rudhira,

**INTRODUCTION**: The ovum in ovary comes out from graffian follicles every month during reproductive period in the form of menstruation. There are different terminologies mentioned in the text which hypothesize the concept of ovum and menstruation. During the monthly hormone cycle, the mucous membranes lining the inside of the uterus prepare for the possibility that the egg might be fertilised and settle in the uterus. If the egg cell is not

fertilised, at the end of the cycle some blood vessels in the mucous membranes of the uterus open up for some time, and the uppermost mucous layer detaches. In order to discharge it, the muscles in the uterus contract and then relax again in an irregular rhythm. That allows the tissue to detach from the wall of the uterus and be shed through the vagina together with some blood. This is the monthly period, also called menstruation. Sometimes, these terminologies are mentioned for a single purpose while it also emphasize for both the tasks respectively.

#### **AIM & OBJECTIVE:**

- Evaluation of female reproductive component related to menstrual blood and ovum in Ayurveda.
- Applied references are interpreted with the available Ayurvedic references.

**MATERIALS & METHODS:** It is a conceptual study; materials were collected from different Ayurvedic literatures and online articles related to the topic.

These terminologies to understand the menstrual blood and ovum in ayurveda are as follow – *Artava*, *Raja*, *Asrik*, *Rakta*, *Lohita*, *Rudhira*, *Sonita*, *Puspa*, *Bija*.

#### 1. ARTAVA - Artava as Ovum -

- Here the word 'Artava' is used in the reference of formation of multiple pregnancy, where vayu divides the sukra and artava.<sup>3</sup>
- In the context of fertilization where *sukra* after entering the uterus through appropriate passage gets admixed with *artava* (ovum).<sup>4</sup>
- In the formation of embryo, where the characteristics of *artava* is mentioned which possesses the same character as of blood.<sup>5</sup>
- In reference to the context of conception where *sukra*, predominant of *apa* (water) and *artava* (ovum), predominant of *agni* and others in minute form.<sup>6</sup>
- In the verses, it is stated in the context of sex differentiation- as *sukrabahulya* forms male and *artavabahulya* forms female child.<sup>7,8</sup>
- Here, in reference to ovulation, Acharya Vagbata mentioned that healthy and *kapha* constitution women will retain *artava* (ovum) for long time while those of qualities of opposite nature will not retain long.<sup>9</sup>
- Is mentioned in the context of ovulation, where the time of *ritu kala* (ovulation) is on 12<sup>th</sup> night from menstruation.<sup>10</sup>
- Is stated in the reference of movement of ovum during conception-as *ghee* liquifies coming in contact with fire.<sup>11</sup>

#### Artava as Menstrual Blood-

- Is described in the characteristics of menstrual blood (*artava*) which appear like rabbit's blood, lac-juice and which does not cause any staining colour to the cloth. <sup>12</sup>
- Again, in the context of characteristics of menstrual blood (*artava*)-like *gunja* fruits, lotus flower and *indragupta*
- Is mentioned in reference to the context of definition of menstrual blood (*artava*), where it is discussed that *artava* is the monthly vaginal bleeding (*ritu bhavam*) in particular time which is slightly blackish, unusual smelling, *vayu* mixed digested blood. 14
- In stating the definition of menstrual blood (*artava*)-is said as it is the monthly vaginal bleeding which is slightly blackish ,unusual colour and *vayu* helps to take it to vaginal canal.<sup>15</sup>
- Is described in the context of quantity of artava (menstrual blood) is of 4 anjali praman. <sup>16</sup>
- Is mentioned in the context of production –usually in a month ,rasa form sperm in male and menstrual blood (*artava*) in female.<sup>17</sup>
- Is stated in the context of sign and symptom of primary amenorrhoea (vandhya). 18
- Again, it is described in the context of sign and symptom of Sanda yonivyapad. 19
- Is mentioned in the cause of impotency (*klaibya*)-sukra artava dosha.<sup>20</sup>

#### 2. RAJA: Raja as Ovum-

- The word 'Raja' is mentioned in the context of Vamini yonivyapad- (seeds) sperm mixed with ovum (raja) expels out along with vata.<sup>21</sup>
- Is described in reference to the context of *panchamahabhuta* formation in zygote which is derived through their ovum (raja) and sperm and get nourishment from *rasa*.<sup>22</sup>

#### Raja as Menstrual Blood-

- Is mentioned in the context of *Udavarta yonivyapad* where it is described about frothy menstrual blood (*raja*) come out with difficulty.<sup>23</sup>
- In context of Karnini yonivyapad –raja marga gets obstructed. 24
- Is referred in *Lohitakshaya yonivyapad* pathogenesis where *raja* (menstrual blood) get diminished due to *vata-pitta*.<sup>25</sup>
- Is mentioned in context of ovulation (ritumati)-after menstruation is over (purana raja), new cycle starts. 26
- Is described in the formation of menstrual blood-rakta forms raja after 12 yrs of age. 27
- Again it is mentioned in the formation of menstrual blood-rasa forms raja in every months. <sup>28</sup>
- In context of formation of menstrual blood –which occur in raja vaha sira.<sup>29</sup>
- Is mentioned if conception occurs just after menstruation, then defective baby is born. 30

• In context of *pradar-raja* which gets expelled out more is pradar. <sup>31</sup>

#### 3. ASRIK: Asrik as Ovum-

- 'Asrik' is mentioned in reference to the context of normalcy of foetus, which depends on normalcy of asrik (ovum).<sup>32</sup>
- Is also mentioned in the context of abnormality of foetus, which depends on abnormality of asrik (ovum).<sup>33</sup>
- Is discussed in case of multiple pregnancy which forms due to uneven division of sperm and ovum (asrik).<sup>34</sup>

#### Asrik as Menstrual Blood-

- It is described in context of menarche and menopause-menstruation starts in 12 yrs and ceases after 50 years of age. 35
- Is mentioned in the context of cause of amenorrhoea apart from pregnancy.<sup>36</sup>
- Is stated in the complication of *Rakta gulma-dusta asrik*.<sup>37</sup>
- In context of *Rakta yoni-asrik* (menstrual blood) is secreted more. <sup>38,39</sup>

#### 4. RAKTA: Rakta as Ovum -

- Is mentioned in case of conception –women's position may or can effect the *rakta* (ovum) and *sukra* and hence can affect the child.<sup>40</sup>
- Is stated in context of progeny –in garbha utpadana process.<sup>41</sup>
- Is mentioned in the formation of body parts, sperm gets enclosed with *rakta* (ovum) and then further division occurs by *prana*.<sup>42</sup>

#### Rakta as Menstrual Blood-

- Is described in the formation of *Rakta gulma*, where *rakta* (menstrual blood) gets obstructed. 43
- Is stated in context of conception-after menstruation (*rakta*) is over, one should avoid sex for 3 nights. 44
- Is discussed in reference to context of menstruation that at the end of the month, rakta which remains in *dhamani* gets expelled out by *vayu*, which is slight blackish, foul smell. 45,46

#### 5. LOHITA: Lohita as 0vum-

• It is mentioned in the formation of *karmapurush* where consciousness, ovum (*lohita*), sperm and *panchamahabhuta* along with soul form *karmapurush*.<sup>47</sup>

#### Lohita as Menstrual Blood-

• It is stated in case of false pregnancy ,unintelligent says retention of menstrual blood (*lohita*) as sign of pregnancy. 48

#### 6. RUDHIRA: Rudhira as Menstrual Blood -

• Is discussed in context of menstruation, where *Rudhira* expels out as menstrual blood.<sup>49</sup>

#### 7. SONITA: Sonita as Ovum-

- Is mentioned regarding fertilization –for *garbha* formation, women should have healthy yoni, *sonita* (ovum) and *garbhasaya*. <sup>50</sup>
- In the context of definition of garbha, where union of sukra and sonita (ovum) forms embryo. 51,52
- Is stated regarding the process of fertilisation.<sup>53</sup>
- Is discussed in context of abnormalcy-in female foetus after birth. 54,55
- In context for factor for hereditary defect.<sup>56</sup>
- Is described in the formation of *prakriti* after fertilisation.<sup>57</sup>
- In context of abnormality of the foetus as *Nagadara* etc.<sup>58</sup>
- Is discussed in reference to the context of formation of *Vandhya*, female child-if the parts of *sonita* (ovum), which is responsible for formation of uterus gets vitiated, then there will be the birth of female child who will be sterile.<sup>59</sup>

#### Sonita as Menstrual Blood-

- Is stated in context of *sukra* and *sonita* which is present since childhood. 60
- In the reference of pathogenesis of *Rakta gulma-sonita*(menstrual blood) gets obstructed. 61
- Is mentioned in immediate pregnancy symptom- one of the symptom is amenorrhea (sukra sonitayar vandha).<sup>62</sup>

#### 8. PUSPA: Puspa as Ovum-

- Is described in context of sex differentiation- in *puspakaal* (ovulation period), one should perform sexual contact in even days for male child and odd days for female child.<sup>63</sup>
- Is mentioned in context of progeny- after *puspa pravritti* (ovulation), following some rules (*ritumaticharya*) like cleaning, bathing, one should conceive for male and female child. <sup>64</sup>
- In context of *ritucharya* regimen .It is done for 3 days at menstruation (*puspakhan*). 65,66
- In context of *puspa* (ovum) *dosa chikitsha*.<sup>67</sup>

#### 9. BIJA: Bija as Ovum-

- Is described in the context of sex differentiation and twin pregnancy-if *rakta* remains more, a female child is born and if *sukra* remains more, a male child is born. If both *bija* remains more ,twin pregnancy occurs and their sex accordingly.<sup>68</sup>
- Is discussed in teratological defect- when the portion of *bija* gets vitiated, which produce genital cells of foetus, then the offspring will become hermaphrodite (*dwiretas*).<sup>69</sup>
- Is mentioned regarding normal or abnormal progeny, where formation of proper organ system depends on *bija*, *atma*, *asaya*, *kala*, *ahara*, *vihara*.<sup>70</sup>
- Is described in hereditary defect-the portion of bija (ovum and sperm) which is responsible for formation of a particular organ is vitiated, then this will result in the vitiation of the respective organs. <sup>71</sup>
- In context of twin pregnancy.<sup>72</sup>
- Is stated in one of the 4 main causes of yonivyapad –mithyacharana, pradusten artava, bijadosha, daiva. 73,74
- In context of one of the pathogenesis of *Sanda yonivyapad*-vitiated *vata (vataupatapa)* at pregnancy cause *bijadosha* and thus *Sanda yonivyapad*. 75,76
- Is referred in congenital sexual defect of a baby-defect *in bija*, *bijabhaga*, *bijabhaga-ava yava*, *bijamsha* etc. produce *vandhya*, *putipraja*, *varta* in female and *vandha*, *putipraja* and *trinputrik* in male.<sup>77</sup>

**Discussion**: Terminologies in relation to context of ovum and menstrual blood can be differentiate as below

#### • ARTAVA

As Ovum	As Menstrual Blood	
• In relation to multiple pregnancy.	In context of characteristics of menstrual blood.	
• In context of fertilization.	• In definition of menstrual blood	
• In description of formation of	In relation to quantity of menstrual blood.	
embryo.	In context of production of menstrual blood.	
• In context of conception.	• In relation to sign and symptom of Primary	
• In context of sex Differentiation	amenorrhoea	
• In reference to ovulation.	• In discussion of Sign and symptom of Sandi	
• In context to movement of ovum	yonivyapad	
during conception.	• Mentioned in the Cause of impotency ( <i>klaibya</i> ).	

#### • *RAJA*:

As Ovum	As Menstrual Blood	
Mentioned in <i>vamini</i>	In relation to udavarta yonivyapad.	
yonivyapad.	Described in karnini yonivyapad	
• In context of	• Stated in the pathogenesis of <i>lohitakshaya yonivyapad</i>	
panchamahabhautic	In context of ovulation	
formation of zygote	Mentioned in the formation of menstrual blood	
	Discussed in context of conception	
	Described in reference of <i>pradar</i>	

#### ○ *ASRIK*:

As Ovum	As Menstrual Blood	
Mentioned in normalcy and abnormalcy	Stated for menarche and menopause	
of fetus	• In context of cause of amenorrhea	
In context of multiple pregnancy	Mentioned in relation to raktagulma	
	• Discussed for raktayoni.	

#### o RAKTA

As Ovum	As Menstrual Blood
Mentioned in reference to conception.	Stated in the formation of rakta gulma
Described for progeny	Elucidated for conception
Stated in formation of body parts	In description of menstruation

#### o LOHITA

As Ovum	As Menstrual Blood
• In context of formation of <i>karmapurush</i> .	In context of false pregnancy

#### **RUDHIRA-** As Menstrual Blood

In reference to context of menstruation

#### • SONITA

As Ovum	As Menstrual Blood
In context of fertilization.	• In reference to context of sukra
• In definition of <i>garbha</i> .	and sonita.
Mentioned in context of process of fertilization.	• In description of pathogenesis of
In relation to abnormalcy of fetus.	rakta gulma.

• In context of factor for hereditary defect.	• In context of immediate symptom
• In formation of <i>prakriti</i>	of pregnancy.
• In description of abnormality of fetus in discussion	
of Vandhya	

#### o PUSPA- As Ovum only

- Mentioned in referring to sex differentiation
- In description of progeny
- In discussion of regimen of ritucharya
- In context of puspa (ovum) dosa chikitsa

#### • BIJA- As Ovum only

- In discussion of sex differentiation and twin pregnancy
- In context of teratological defect
- In description of normal or abnormal progeny
- In relation to hereditary defect
- In context of twin pregnancy
- In discussion of cause of *yonivyapad*
- In description of pathogenesis of sandi yonivyapad
- Mentioned in congenital sexual defect of baby

**CONCLUSION:** Fertilization takes place within the union of *sukra* and *artava* where *atma* descends. The reproductive element and menstrual blood can be understood with terminology like- *Artava*. *Raja*, *Asrik*, *Rakta*, *Lohita*, *Rudhira*, *Sonita Puspa Bija*. Here puspa is specific for ovum while raja is specific for menstrual blood.

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