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PARATANTRAVALOKANAM FOR SCIENTIFIC UNDERSTANDING OF JATAHARINI IN GARBHINI AVASTHA-: A CONCEPTUAL **STUDY**

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ABSTRACT

Disorders encountered in the OPDs of prasuti tantra & stree roga are specific to age & phase of the woman's reproductive life. They are again variants of menstrual disorders & disorders of pregnancy. Most of them have a specific reason (cause) for the development of the disease, while some are idiopathic (unknown origin). These disorders of unknown origin are difficult to understand & even more difficult to treat; probably because the cause is obscure. While seeing from the Ayurvedic perspective we may think about sahaja vyadhis, daiva or graha doshas as the cause for these diseases of unknown origin & Jataharini is one such graha dosha. These are a spectrum of diseases

caused by affliction of Revathi graha in the form of Jataharini at various stages of women's reproductive age. In this conceptual study a modern perspective of these Jataharini based on their general cause, general & specific symptoms are described. The common ante natal disorders or complications where Jataharini should be one of the considerations for an ayurvedic obstetrician.

INTRODUCTION

Story of origin of jataharini^[1]

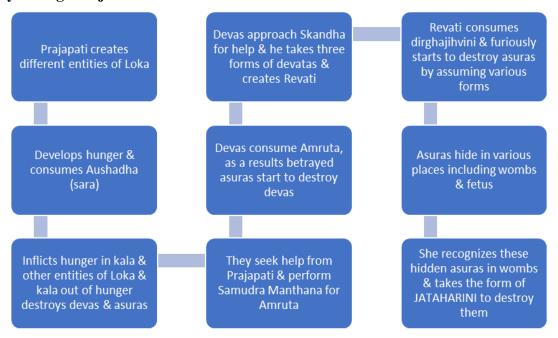


Fig. no. 1: Story of jataharini.

The story of origin of jataharini goes back to the time of Samudra manthana when devatas & asuras fought for amruta. Being deceived by devatas asuras barged a war upon devatas for mass destruction. Then the devatas seek help from skandhas the warrior god, in return he takes forms in 3 forms of most powerful devatas. With their powers he creates a graha called Revathi who is designed to destroy these asuras, specially deerghajihvini who is most ferocious & destructive of them all. She on consuming deerghajihvini turns destructive & starts to locate asuras from all their hidings & kills them. That is when asuras take refuge in garbhashaya & garbha of all creatures. In fury to destroy them all, she started destroying garbha & garbhashaya of these women. In this conceptual study, an attempt has been made to correlate the ante-natal disorders for their probable association with jataharini in garbhini avastha.

Classification

Jataharini is discussed solely in Kashyapa Samhita, they are a cluster of disorders caused through the reproductive age of women affecting her menstruation & fertility. These are categorized based on different factors as tabulated in Fig no.2.

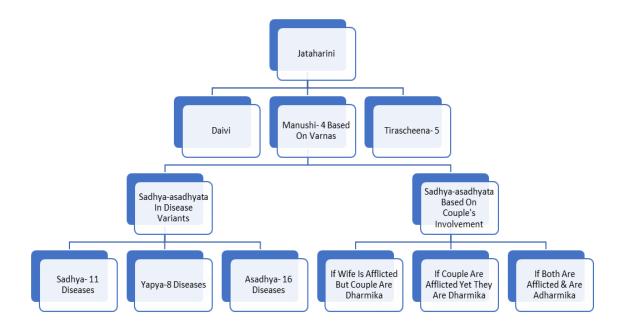


Fig. no. 2: Classification of jataharini.

Acharya kashyapa has classified jataharini in different variants, based on forms of life it is classified as^[2]

- i) Daivi- Those which affect daiva loka,
- ii) Manushi- Those which affect humans,
- iii) Tirascheena- Those which affects other creatures on earth like bird, animals etc.

In this variant; manushi is further classified based on the 4 varnas (classes) of society which are kshatriya, brahmana, Vaishya & kshudra. [3]

The second variant is specific to humans; hence, we incorporated these under the manushi type in our flow chart. This is further categorized into sadhya-asadhyata as; sadhya, yapya & asadhya as based on the vyadhi & based on the righteous practices of the couple.^[5]

Kashyapa maharshi has also explained sadhya-asadhyata based on phase of life. If a woman afflicted by Jataharini presents with menstrual disorders or is pushpa upaghatakara then it is asadhya. If the woman afflicted by Jataharini presents with pregnancy loss or are garbha upaghatakara then it is sadhya. [17] So, despite the fact that some of the diseases in garbhini avastha are asadhya or yapya, considering the above explanation; we can treat them before planning for next pregnancy provided the possibility of Jataharini affliction is diagnosed and addressed.

Table no.1: Sadhya-Asadhyata of jataharini. [4]

Sadhya साध्य	Yapya	Asadhya
1. शुष्करेवती	1. वश्या	1. नाकिनी
2. कटम्भरा	2. कुलक्षयकरी	2. पिशाची
३. पुष्पघ्नि	3. पुण्यजनी	3. यक्षी
4. विकुटा	4. पौरुषादिनी	4. आसुरी
5. परिस्रुता	5. संदंशी	5. कलि
६. अण्डघ्नी	6. कर्कोटकी	6. वारुणी
७. दुर्धरा	7. इन्द्रवडवा	7. षष्ठी
8. कालरात्रि	8. बडवामुखी	8. भीरुका
9. मोहिनी	याप्य	9. याम्या
10. स्तम्भनी		10. मातङ्गी
11. क्रोशना		11. भद्रकाली
साध्य		12. रौद्री
		13. वर्धिका
		14. चण्डिका
		15. कपालमालिनी
		16.
		पिलिपिच्छिका

Who can get afflicted by jataharini?

The classification itself justifies that, this disease affects all forms of life including extraterrestrials (daivi loka), humans (manushi), birds, animals (tirascheena) and so on. The main concern is to understand and diagnose the human beings who are afflicted by this disease^[6]; further, Acharya Kashyapa went on to describe the probable at risk population in human beings where he quoted that, among humans both men & women can be affected. Women can get afflicted by jataharini in any phase of reproductive life. [7] She is afflicted by Jataharini from other afflicted women even by sharing her belongings, beddings & baths. [8] Women can transmit this disease to and get transmitted from domestic animal herds that she owns like go-avi-mahisha. Even healthy & normal woman during her pregnancy which is devoid of garbha & garbhini samskaras; when cast by evil and jealous eyes of other people, she can get afflicted by Jataharini. Men get afflicted from women by three different means like coitus during rutukala^[9] or by coitus with a parastree who is afflicted by Jataharini & from his wife who is afflicted by Jataharini. [10] This portrays to the possibility that man can be a case or a carrier.

Based on these factors, it appears to be a contagious disease where one afflicted person transmits the disease to the other by various means like coitus indicating towards sexually transmitted infections, by sharing belongings with afflicted person- points towards direct contact or droplet infection for spread of the infection, even from domestic animals in close contact- indicating towards probable vector transmission or transmission from animal reservoirs.^[11]

Samanya nidana

Like every other disease these diseases are also caused by following certain habits or involving in certain mis deeds or by behaving in impermissible manner. The people who indulge in these factors invite this Revati Graha in them. These are the causative factors or nidanas for affliction of Jataharini, can be categorized into entities like ritualistic, behavioral, familial & mental factors which are tabulated in table no. 1.

Table no. 1: Samanya nidana of Jataharini. [12]

Ritualistic	Behavioral	Familial	Mental
Tyakta dharma,	Tyakta pathya vachana	Putreshu nihsneha	Vigatasadhvasa, aksmat- prahasana, prarodhana, shochana
Tyakta mangalaacharana	Tyakta pathya bhojana	Pratipa bhartari,	Ahankruta
Tyakta devakriya	Tyakta soucha karma & suchi kriya	Swashura Tatsthaniyan mahato avamanyate	Anavasthita
Deva-go-brahmana- guru-vrudhha- sadachara-sathya dveshini	Vaira-kali-mansa- himsa-nidra-maithuna Priya	Balam abhihanti murdhni, na cha esham sukha- dukkhagya	Chanda
anya purvaka ashubha karma	Ghasmara, Sarvshiniati pana-bhojana- Swapna-vyayama sevana	Mitradrohi	Aruntuda
One who does not do proper social activities even in the right place & time. Like shanti, homa, japa, dana,	Anrutavadini, Durachara, svamatakarini, parartha vilambini, svarthapara		Vavadooka

avashtivana, chumbana, alingana, etc		
		Dandashooka

Though Jataharini is a graha roga, acharya has described vivid causative factors of this disease. These factors are not directly causing the disease proper but are the cause for inviting affliction of this graha. If we go back to the story of origin of Jataharini, we came to know that asuras hide in the garbha of other humans, asuras hide in the people who are assuri in nature like those indulging in kali-vaira-himsa like activities, or those who are deva-gobrahmana dhyeshi as these are the characters imbibed in asuras. This may be the reason for affliction of Jataharini is such people. With this reason ritualistic causes (dharmika vrutti) for affliction of Jataharini has been placed first which include- tyakta dharma, mangalacharana, deva-go-brahmana-guru-vrudhha-sadachara dhveshini, the one who does not follow proper accepted social behavior. These are the exact replica of the characters of an asura, which invite them into her and Jataharini follows.

The second category is of the behaviors which invite the asuras and Jataharini in a woman, which are tyakta pathya vachana (she who has quit pleasant cognitive speech), tyakta pathya bhojana (she who has quit consuming wholesome diet), tyakta soucha/suchi karma (she who has quit hygienic practices and cleaning), vaira-kali-himsa-nidra-maithuna Priya (she who has made lot of enemies and always involves in fights and disputes-she who always abuses or bullies others-she who is only fond of sleeping or is fond of indulging in coitus), she who is sarvashi- can engulf anything- who has a large appetite for food and beverages and overdoes sleeping and exercises. The other behavioral traits of the woman include anrutavadini (always lies or manipulates), Durachara (dushta achara- evil or wicked deeds), svamatakarini (always acts on her own opinions, stubborn), parartha vilambini (avoid or delays doing others works or is not helpful) svarthapara (selfish in nature).

When coming to familial causes, enlisted features are putreshu nihsneha (she who is unaffectionate towards her own kids), taishcha nitya shapatha (who uses her kids' name to swear on her deeds), pratipa bhartari (she who is meritorious with her husband), swashura... tatsthaniyan avamanyati (she who constantly disobeys, insults, harms, quarrels and beats the elders & other members of her family), sapatnim paapachakshurabhidhyaayati (she who is jealous of and casts wicked tricks against her step wife), balanam abhihanti moordhni (she who beats her kids on the head), na cha esham sukha-dukhagya (she who does not realize her kids' emotions), mitra drohi (she who betrays her friends).

Moving on to the mental factors, vigatasadhvasa (unafraid or over confident), ahankruta (egoistic), chanda (cruel or demonic), aruntuda (she who is fond to attack on sensitive spots), vavadooka (talks rubbish), anavsthita (fickle), aksmat prahasana-prarodhana-shochana (she who laughs, cries or shouts suddenly without a cause) these are the indicators of mental instability and villain like state of mind. We included the mental causes in the end as these could be both the cause and the effect of the other traits of woman.

These characters portray lack of cognition or affection towards her kinsmen. These negative behaviors & negative mental states are antagonistic to GnRH pulse secretion^[13]; hence, they lead to irregularity of the GnRH pulsatility. Chronic inhibition or irregularity of this pulsatile secretion leads to disruption of HPO axis. Such negative characters keep the woman constantly in pessimistic zone which results in constant agitation & mental disturbance \rightarrow constant cortisol & adrenal secretions \rightarrow reduced dopamine \rightarrow reduced oxytocin & serotonin \rightarrow reduced GnRH pulsatility \rightarrow HPO axis dysregulation \rightarrow menstrual disorders (if pregnant-pregnancy disorders) \rightarrow infertility. [14]

Samanya lakshanas

Jataharini affliction presents with a spectrum of features starting from general debility of the woman's physical health till destruction of family tree. We have tried to classify these under relevant categories as tabulated below in table no. 2.

Table no. 2: Samanya lakshanas of Jataharini. [15]

Physical	Mental	Behavioral	Effect on kinsmen
Pramlana tana	Bhrashta satva	Vepareethasamarambha	Arthasiddhi na
(debilitated body)	(mental imbalance)	(always starts every	bhavati (can't earn
		work in wrong	money)
		direction or with wrong	
		foot)	
Sarva roopa hani	Nirutsaha	Vipareethanishevana	Sampat pralopa
(reduction in all the	(uninterested	(her deeds function in	(depletion of
features)	complete loss of	wrong way)	finances)
	interested)		
Drushti vyakulata	Ucchishtha (her		Go-aja-mahi-avi
(weakness of	mind is filled with		vatsaka na jeevanti
vision)	dirty and negative		(the calves of her
	thoughts,		herds do not

	pessimistic)	survive)
Yatha kalam na		Ghora ayasha
pushyati (body does		prapnoti (social
not nourish over		defaming & social
time)		embarrassment)
Kukshishoola		Vidhwa gacchati
nipeedita (constant		(death of spouse)
pain abdomen)		
Roga upadrava		Kulakshayakari
yukta (exsisting		(destruction of
diseases develop		family tree)
complications)		
Apriya roopa		
(unpleasant		
appearance)		

Gross understanding of these features can be debilitation of physical, mental, social & financial resources for the woman & her family.

The physical features of pramlana tana, sarva roopa hani, na pushyati etc are indicating towards the possibility of dhatu kshaya or wasting. The woman afflicted by Jataharini does not conceive or does not sustain pregnancy till term. Artava & Stanya are the upadhatus of rasa dhatu^[16], any pathology in artava is a resultant of rasa dhatu dushti & vise- versa. In presence of rasa dhatu dushti uttarottara dhatu poshana is deranged & as a result poshana is improper; which in turn causes sarva roopa hani & pramlana tana. With rasa kshaya, drushti vyakulata, apriya roopa like features along with deranged mental behaviors like bhrashta satva, nirutsahata are seen. Social behaviors & general behaviors are also affected due to constant mental & physical agony; she is frustrated & gets irritated or agitated with minute aspects which results in unaccepted social behavior.

When coming to the last few features of Samanya lakshanas which include the effect of Jataharini on the kinsmen; there are no scientific reasonings. Considering the infertile state of the woman, the couple would be spending a lot on the treatment of this condition which may lead to financial crisis & Sampat Pralopa. Since, fertility/Santana Prapti is the most important aspect of married life then, unable to fulfill this may lead to defaming in the society & ghora ayasha, na prapnoti arthasiddhi is a resultant. Which leads to kulakshaya.

Go-aja-avi-mahi vatsaka na jeevati could be understood as the resultant of inter-transmission of the jataharini between the species are explained in the context of 'at risk population'.

Understanding of jataharinis

Andaghni^[18]

Alakshyam, alaghnam andam prapatati. Alakshya- which have no manifested signs of pregnancy, alaghna- which has not yet adhered. Since it is not yet adhered or shown any signs of pregnancy it is termed as anda & not garbha. When this anda is expelled, then it is called andaghni jataharini. It is said daruna jataharini because, the lady has not yet shown signs of pregnancy & neither has it adhered to uterus so we are unaware of the pregnancy that is occurring and destroying. Hence, it is left undiagnosed and there is no question of treatment. This condition is pre implantation loss of pregnancy i.e., quoted as 'alghnam andam'. It could be co related with conditions like luteal phase defect, implantation failure due to unreceptive endometrium, inadequate placentation etc. [19]

$Durdhara^{[20]}$

As the quote goes 'na ati nivrutta dehanga garbha vinashayati'. Here acharya has used the term garbha, indicating that the fertilization has occurred and the embryo is implanted hence it fulfills the definition of garbha i.e., "shukra shonitam garbhashayastham". [21] But the loss of pregnancy is because after implantation the uterus is unable to retain the products of conception in-situ. Hence the term durdhara. [27] i.e., the dharana karma of the garbhashava is not achieved. The burden of retention of pregnancy is on the endometrium primarily then the uterus as a whole and cervix. When this ability is lost or is deranged, it leads to loss of pregnancy. In cases like thin endometrium, hypoplastic uterus, congenital uterine anomalies like septum, horns, or arcuate uterus, further low implantation, or short cervix, the ability of the uterus to retain the products of conception is reduced or is lost; this leads to pregnancy loss. The phrase na ati nivrutta dehanga denotes to early pregnancy when the body buds are not yet differentiated or are not well formed. This points towards the pregnancy loss during the late 1st trimester and early second trimester when the body parts of the fetus are not conspicuous. In presence of conditions like improper placentation, placental abnormalities like partial mole, chromosomal abnormalities, TORCH infections; loss of pregnancy is inevitable.

Kalaratri^[23]

Acharya has quoted this jataharini presents with symptoms like, "sampurnaangam garbha haret" also added that "dukkhat stree tatra jeevet" indicating pregnancy loss after complete development of the fetus and the consequence of this can be fatal to the mother as well. sampurnanga garbha is attained at 7 months of gestation,^[24] according to most of the acharyas. Kalaratri is a jataharini which when afflicted kills the fetus after complete development and may cause difficulty in maternal survival. This condition points towards loss of pregnancy in later stages of pregnancy when the fetus is completely developed and is capable of independent survival. This loss adds to the maternal morbidity and development of complications requiring maternal resuscitation. Conditions like PIH, pre-eclampsia and eclampsia, PRROM with amniotic fluid embolism in mother, APH; where fetal death in any stage of pregnancy and in third trimester^[25] is a common occurrence and maternal complication can be incidentally seen.

Mohini^[26]

Here, garbhini is seen as vishajjita garbha prapatati/munchati i.e., just attached, or implanted embryo is destroyed, indicating the loss of pregnancy just after implantation. Also, this jataharini is quoted as "stree vinashaya prokta". This adds to the understanding of this jataharini as the conditions leading to pregnancy loss along with maternal death. Conditions like ectopic rupture, septic abortion, criminal abortion etc. in early pregnancy which are fatal for the mother are included. Even when considering late pregnancy uterine rupture, placental abruption etc. conditions where along with fetal loss, maternal mortality is likely high due to excessive hemorrhage & shock. This understanding can be substantiated by the word meaning of moha^[28] i.e., loss of consciousness, delusion of mind, fainting etc. indicating the result of the pregnancy loss is loss of consciousness for the mother probably due to maternal hypovolemia & shock. This disease is presented as loss of a well attached pregnancy which becomes the cause for maternal death.

Sthambhini^[29]

Acharya described sthambhini is a single sentence as "na spandate garbha". Like we have seen in shareera sthana Kashyapa Maharshi has explained of garbha spandana^[30] in 3rd month of pregnancy. Considering this understanding, we can consider that loss of pregnancy anytime after 3 completed months of pregnancy or after establishment of garbha spandana is sthambhini. Spandana^[31] word means a sudden movement/ quivering/throbbing with life/quick motion like kick; indicating fetal movements, fetal heart sounds (quivering) which are signs of life in the fetus. In this disease woman presenting with reduced or loss of fetal movements anytime in second of third trimester of pregnancy from any cause is included. The conditions like IUGR, oligohydramnios, FGR, Placental insufficiency, and IUD^[47] can

be included. If we go by the word sthambha^[32] it means stiffness /solidification /obstruction /arrest. Loss or reduced fetal movements is considered in relevance with stiffness. But obstruction or arrest can indicate towards still birth due to all first and second stage labor complications. In rare cases the fetus solidifies and retains in situ for years without movement which is termed as 'lithopedia', this condition occurs from fetal demise of a large baby in abdominal pregnancy and can be included under the diagnosis of sthambhini.

Kroshana^[34]

Kroshana^[35] as the word itself means 'to cry', here the explanation of the disease kroshana is given as 'udarastho kroshate' i.e., to cry while in udara (garbhashaya). But the understanding of this can be taken in to two different ways;

- i) When the fetus has to undergo various complications of the maternal conditions like maternal anemia, hypertension, diabetes etc. which may result in oligohydramnios, fetal growth abnormalities like IUGR, fetal growth restriction^[36] and so on.
- ii) During labor, if the fetus is in breech presentation & breathing reflex starts before the delivery of the head either due to prolonged labor, obstruction in perineum or from tactile stimulation during delivery of breech. As a result of this breathing reflex baby cries while the head is still in the birth canal & results in fetal death from meconium aspiration or asphyxia.^[37]

Nakini^[38]

It is a daruna yapya vyadhi & is characterized by repeated mruta garbha janma. It is daruna as the pregnancy is uneventful till term but results in IUD^[39] at term pregnancy or still birth^[40] or birth asphyxia during labor which makes it difficult to predict the outcome and even more difficult to treat. Still birth and birth asphyxias from any complication of first and second stage of labor can be included under this heading. All labor complications like obstruction or prolongation and fetal hypoxia or hypoglycemia, early placental separation (abruption) etc. during labor become the cause for fetal death. With advancement of modern science most of the complications of first and second stages can be anticipated early and required action is taken, hence incidences of IUD and still births are successfully reducing in current times. Probably for this reason this disease may go unnoticed or undiagnosed in most of the cases.

Vashva^[41]

In this condition, garbha shows proper developmental features until 5th, 6th or 7th month but later ends in fetal demise. This condition could be correlated to second trimester pregnancy

losses from any relevant reasons like cervical incompetence, infections, etc. Acharya has included this under asadhya vyadhis; as retaining a threatened pregnancy in the second trimester is of great difficulty and so is the survival of the fetus if delivered at this stage. Chromosomal abnormalities^[42] and infections are the major cause of fetal loss during this stage of pregnancy which is incurable or difficult to cure till date. Hence this has been enlisted as asadhya by acharya Kashyapa.

Indravadava^[43]

Further, Acharya Kashyapa has explained about various twin pregnancy complications, which are Indravadava & Badavamukhi. Indravadava is the condition where there is fetal loss, either one of the twins dies or both the twins end up in demise. In a twin pregnancy, all the conditions where one twin dies are twin with single fetal loss, discordant growth, vanishing twin can be considered. Among the loss of both the twin fetuses twin reverse arterial perfusion sequence, etc. can be considered. In most of these disorders the cause is obscure; hence relevance of Jataharini for being asadhya vyadhi is strong in these conditions.

Badavamukhi^[45]

This condition is specific to monochorionic twins which is characterized by death of one twin followed by death of the other one. Monochorionic is here termed as 'eka nabhi prabhavo'. Acharya has also specified that the cause for death of both the fetuses is the same. Here the conditions like monoamnionic cord entanglement leading to twin fetal death, twin to twin transfusion syndrome^[46] are most relevant due to specific consideration of monochorionic monoamnionic twins.

DISCUSSION AND CONCLUSION

Jataharini of garbhini avastha includes in them all the conditions or disorders from early pregnancy till the post-partum period which lead to fetal loss, fetal disorders, maternal disorders, maternal mortality either individually or in combination. A spectrum of medical & surgical conditions, their complications & high-risk pregnancies can be included under this heading. Jataharinis are formed from the affliction of revati graha in the woman which leads to the development of these conditions, hence it is important for an Ayurvedic obstetrician to be able to recognize and differentiate these medical & surgical pregnancy complications occurring due to a definitive cause from those occurring from revati graha; as their treatment may require integration of daiva vyapashraya chikitsa for the aushadha chikitsa to be fruitful, otherwise blind treatment of these may be defaming for the physician.

Diagnosis of Jataharini may be made easier with better understanding of jataharinis & proper consideration of relevant modern counterparts of these diseases. After proper diagnosis of Jataharinis better results may be expected in treatment of infertile couple by integrating authentic jyotishya shastra in our treatment plan.

REFERENCES

- 1. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 282-85.
- 2. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 293.
- 3. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 294-95.
- 4. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 289.
- 5. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 285-86.
- 6. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 289.
- 7. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 294.
- 8. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 286.
- 9. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 287.
- 10. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 287.
- 11. K Park. Textbook of Preventive and Social Medicine, 24 ed. Jabalpur: M/S Banarasidas Bhanot, 2017; 976: 99-103.
- 12. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 285-86.
- 13. Oakley, A. E., Breen, K. M., Clarke, I. J., Karsch, F. J., Wagenmaker, E. R., & Tilbrook, A. J. Cortisol reduces gonadotropin-releasing hormone pulse frequency in follicular phase ewes: influence of ovarian steroids. *Endocrinology*, 2009; 150(1): 341–349. https://doi.org/10.1210/en.2008-0587.

- 14. Roger. J.H. Physiological aspects of female fertility: role of environment, modern lifestyle and genetics, Journal Article: Physiological reviews, 2016; 96(3): 873-909. https://journals.physiology.org/doi/full/10.1152/physrev.00023.2015.
- 15. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 289.
- 16. S Gouda, Ayurvedic shareera kriya vigyan,1 ed. Rohtak:Nath Pustak Bhandar,1973; 312: 148-51.
- 17. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 291.
- 18. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 290.
- 19. HiralalKonar, Dutta D.C. D.C.Dutta's Textbook of Obstetrics, 8th edition, New Delhi: Jaypee the health sciences publisher (p) Ltd, 2015; 659: 159-60.
- 20. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 290.
- 21. H. Kapoorchand, A Comprehensive Treatise on Prasuti Tantra, 1 ed. Varnasi: Chaukambha Bharati Academy, 2019; 1016: 109-110.
- 22. HiralalKonar, Dutta D.C. D.C.Dutta's Textbook of Obstetrics, 8th edition, New Delhi: Jaypee the health sciences publisher (p) Ltd, 2015; 659: 151-159.
- 23. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 290.
- 24. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 103.
- 25. HiralalKonar, Dutta D.C. D.C.Dutta's Textbook of Obstetrics, 8th edition, New Delhi: Jaypee the health sciences publisher (p) Ltd, 2015; 659: 587, 557-62.
- 26. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 291.
- 27. Monnier william's. Sanskrit Dictionary, 2021; 23. http://sanskritdictionary.com
- 28. Monnier william's. Sanskrit Dictionary, 2021; 23. http://sanskritdictionary.com
- 29. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 291.
- 30. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana; 2018. PP-578, Pg No.- 102.
- 31. Monnier william's. Sanskrit Dictionary, 2021; 23. http://sanskritdictionary.com

- 32. Monnier william's. Sanskrit Dictionary, 2021; 23. http://sanskritdictionary.com (accessed
- 33. HiralalKonar, Dutta D.C. D.C.Dutta's Textbook of Obstetrics, 8th edition, New Delhi: Jaypee the health sciences publisher (p) Ltd, 2015; 659, 587: 557-62.
- 34. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 291.
- 35. Monnier william's. Sanskrit Dictionary, 2021; 23. http://sanskritdictionary.com
- 36. HiralalKonar, Dutta D.C. D.C.Dutta's Textbook of Obstetrics, 8th edition, New Delhi: Jaypee the health sciences publisher (p) Ltd, 2015; 659: 431-37.
- 37. HiralalKonar, Dutta D.C. D.C.Dutta's Textbook of Obstetrics, 8th edition, New Delhi: Jaypee the health sciences publisher (p) Ltd, 2015; 659: 357-63.
- 38. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 291.
- 39. Cunningham, Leveno, Bloom, Dashe, Hoffman, Casey, Spong. William's obstetrics, 25th edition, McGraw Hill education, 6, 9, 2049: 987-89.
- 40. HiralalKonar, Dutta D.C. D.C.Dutta's Textbook of Obstetrics, 8th edition, New Delhi: Jaypee the health sciences publisher (p) Ltd, 2015; 659: 303-305.
- 41. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 292.
- 42. HiralalKonar, Dutta D.C. D.C.Dutta's Textbook of Obstetrics, 8th edition, New Delhi: Jaypee the health sciences publisher (p) Ltd, 2015; 659: 160-161.
- 43. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sansthana, 2018; 578: 292.
- 44. Cunningham, Leveno, Bloom, Dashe, Hoffman, Casey, Spong. William's obstetrics, 25th edition, McGraw Hill education, 6, 39, 2049, 1363-66.
- 45. Vruddha jeevaka, Kashyapa Samhita, Ed- Pt. Hemaraja Sharma, Varanasi: Chaukambha Sanskrit sanst hana, 2018; 578: 292.
- 46. Cunningham, Leveno, Bloom, Dashe, Hoffman, Casey, Spong. William's obstetrics, 25th edition, McGraw Hill education, 6, 39, 2049: 1350-60.
- 47. Cunningham, Leveno, Bloom, Dashe, Hoffman, Casey, Spong. William's obstetrics, 25th edition, McGraw Hill education, 6, 39, 2049: 902-12.
- 48. HiralalKonar, Dutta D.C. D.C.Dutta's Textbook of Obstetrics, 8th edition, New Delhi: Jaypee the health sciences publisher (p) Ltd, 2015; 659: 302-303.