

**UNDERSTANDING OF DAURDA PERIOD OF PREGNANCY BY MODERN
EMBRYOLOGICAL PARAMETERS****¹*Dr. Suman Kumari and ²DrAnjana Saxena**¹*Junior Resident, Deptt. of Prasuti Tantra and Stri Roga, Govt. Ayurvedic P.G. College and Hospital, Varanasi.²Assistant Professor, Deptt. of Prasuti Tantra and Stri Roga, Govt. Ayurvedic P.G. College and Hospital, Varanasi.***Corresponding Author: Dr. Suman Kumari**

Assistant Professor, Deptt. of Prasuti Tantra and Stri Roga, Govt. Ayurvedic P.G. College and Hospital, Varanasi.

Article Received on 03/06/2021

Article Revised on 24/06/2021

Article Accepted on 14/07/2021

ABSTRACT

Ayurveda is a very scientific & very detailed health science in all the fields of health. Nothing is out of it but need is to explore it more & more, for that very keen mind is needed. Care of women is given very much importance in Ayurveda because women is indicated here as “STAYATI GARBHO YASYAMITI STREE”¹ means who carries fetus into her womb. Because what will be produced, will make the society that’s why in this health science it is indicated that pregnancy should be planned only, not by any chance and the course of pregnancy should be very watchful. Women during pregnancy needs very much attention because she is not only representing herself but also to the fetus in her womb so what the signs or symptoms we are getting from her will definitely have impact on her conceptus. The Field of Obstetrics in ayurveda is mainly dedicated towards producing progeny like a king means investing best qualities to the conceptus in physical as well as psychological aspects. Keeping all this in mind classics has given very detailed description of Daurda period, when it starts, why it starts, what as a doctor we have to advice and why, what are its impact if not taken care and what be the nature of child according to its previous life experiences that will definitely help to decide whether we have to change it or promote it. So this article is mainly focused on enlightening the importance of dauhrda by making it to understand by the parameters of the science that is called scientific in this modern era & is understandable to all.

KEYWORDS: *Daurda, Mana, Atma, Indriya.***INTRODUCTION**

Daurda literally means women possessing two hearts, one of her own & other of fetus. The period of Daurda & specific longings during this period have been described elaborately in ayurvedic classics. During this period fetus express his desire by mother as it is completely dependent on the mother during his life in the womb.

Period of dauhrda

Only Acharya Sushruta clearly described the period of Daurda which is considered during 4th month.^[2]

For other acharya it’s period is assumed on the basis of the explanation of Daurda given in the month of embryonic development so some considered 2nd month, 3rd month or from 3 paksha to end of 4th month. Although it seems that there is variation in the explained timing of origin of dauhrda stage but by deep study it can be said that these variations are minute and are basically due to individual variability in terms of their body, their parity etc.

According to Acharya Charaka

“Yat kalamev indriyani santisthate, tat kalamev chetasi vedana nirbandam prapnoti”^[3]

So Charaka opines that when Indriyas of fetus become conspicuous the Mana gets association of vedana that is feeling of happiness & sorrow due to this fetus starts quivering & expresses the desires based on the experience of previous life because fetal heart is connected to mother’s heart via. Rasavahi channels. Acharya Cakrapani in the commentary of this quote of charaka says that fetus quivers to get rid of sorrows & obtain happiness. Charaka has given importance to the time when Indriyas got conspicuous in the origin of dauhrda period because “Sukhadukha uplabdhisadhanam indriyam Mana”⁴ & also “yebhyo budhi pravartate”⁵ indicating sensory & motor pathways made by nerves can be Indriyas.

If Indriyas are considered as sensory and motor nerves and their tracts then by the study of embryology it is found that neural tube formation completes at end of 4th week & approx. at this time CNS as well as peripheral nervous system also starts developing. Also neuroblast

called as primitive nerve cell formation and their further proliferation and migration start during 4th week. But the myelination of nerve cells in central as well as peripheral nervous system starts from 4th month, in other words the tracts in the nervous system become myelinated at about the time they start to function. So the concept of Daurhda period from 3rd month onward by Acharya Charka is

approximately the time of 13 weeks so it can be assumed that acharya may be talked about the end part of third 3month because if he considers Daurhda in whole duration of 3rd month then he might have described it in quote of 3rd month fetal development like acharya Sushruta has explained Daurhda in 4th month fetal development.^[6]

Time period in developmental weeks	Embryological development of nervous system
3 rd week	-Neural plate form and starts neural tube formation process
4 th week	-Neural tube closes at both ends -Rapid neuronal division into bipolar neuroblast -Migration of nerve cells begin and glia appears
5 th week	-Forebrain, midbrain & hindbrain become evident -Neuronal migration largely complete -Dorsal and ventral horn of spinal cord appears -Peripheral nerve appears
6-8 th week	-Ear developed, -limbs develop -all major organs are under developed
To9-12 th week	-Gross brain structure established Glial development & migration appears -Very rapid growth of axons & synapses -Muscle contraction begins
13- 20 week	-Rapid brain growth and myelination of nerves of central as well as peripheral nervous system begins approx at 4 the month
21-40 th week	-Primary cerebral fissure appear followed by secondary cerebral sulci -Myelination continues

As neuronal migration to their places is largely completes around end of 5th week. Even peripheral nerves also appears during this week. Then In between 9-12 weeks, very rapid growth of axons take place & synapses formation between neurons also starts. Glial cells differentiates into astrocytes in mental layer of spinal cord and serve metabolic function while situated between blood vessels & neurons. Also glial cells those migrated in the marginal layer differentiate into oligodendrocytes which forms myeline sheath around ascending and descending axons. Axons of nerves extends over long & short distances so as to reach their targets & ultimately connecting neurons with other nerve tissue, muscle tissue or sensory organs. These Axons transmit signals to target organ or tissue in form of electrical impulses, however the axons alone are not enough to produce rapid conduction of electrical current necessary for this signal to be sent. For this glial cells are the key elements for supporting the messages the neurons send & receive all over the body, much like the insulation of wire in electrical system glial cells forms a membranous sheath surrounding axons. This myelination can greatly increase speed of signals transmitted between neurons⁶. Though the first glial cells appears in 4th week but their development and migration appears around 9-12 the week that's why the muscle contraction in fetal body begins afterwards. So pregnant womens can feel fetal movements around 14 to 18 weeks depending upon their status of parity. That's why Charka said that the time when Mana get associated with vedana, at that same time "garbha spandate" fetal movements starts and also with this "pratheya Cha janmantranubhutam" means

expresses the desires based on experiences of previous life.

Mana according to ayurvedic concept is dynamic but unconscious entity, in other words whatever the action is taken by brain without being aware of the event, is because of mana. For example if anybody by mistakenly touches flame while his concentration is in other work, as soon as burning stimulus received, the very first action is fetching of the hand from the flame without being aware what has happened.

Indriyas, Mana along with body are considered as seat of dukha & sukha where as Atma carrying the experiences of previous life is seat of knowledge.

According to Acharya Sushruta

Sushruta opines that due to conspicuousness of garbha hrudaya (fetal heart) cetana becomes appearant. Hrudaya here may be taken for Mana because according to Amarkosha book hrudaya is Manas. Also according to Sabdhasagar hrudaya is mind, the seat or faculty of thought & feeling. Also it is said by classics that hrudaya is seat of Mana where as mastishka is working site of mana. So likely here also Acharya Sushruta opines that when Mana becomes functional than only the signs of life became apparent.^[7] As Daurhda description is given in 4th month that is very much similar to the modern concept of rapid brain growth & starting of myelination of CNS between 13- 20th developmental week.

DISCUSSION

The variations in the Daurda seems to be minor & that may be due to individual variations in prakruti, satava etc. But Every Acharya has a common view in regards of development of this stage of pregnancy.

Basically it is the maturation and functioning of Indriyas due to which Mana is able to circulate in whole body and react accordingly & the knowledge of these events kept stored by Atma. This description seems very scientific.

CONCLUSION

Nothing is Out of this Ayurvedic science. It seems unscientific due to inability of people's to understand this science in this era of modern science. So there should be very keen and careful study of both the sciences to have a better understanding of Ayurvedic concepts. Women in pregnancy should be cared for her general health, for her pregnancy signs and symptoms, treat if her pregnancy symptoms are severe enough to affect the womens health and when other medical problems arose. To get progeny like king Every desire of pregnant women should be fulfilled even though if she desires of some avoidable things we should fulfil them by making them beneficial to her by some kind of manipulations. Otherwise it will either affect the physical health of fetus or it's psychology.

REFERENCES

1. By Sabdhkalpdrum book.
2. Kaviraj Ambika dutta Shastri, Sushruta Samhita of Acharya Sushruta; sharer 3/18.
3. Pandit Kashinath and Goraknath Chaturvedi, Charak Samhita 'vidyotini vyakhya' Hindi Commentary sharer sthana 4/15.
4. According to nayaye darshan.
5. Pandit kashinath and Goraknath Chaturvedi, Charak Samhita 'vidyotini vyakhya' Hindi commentary sharer sthana 1/24.
6. Langmans medical embryology, T.W. sadler, 14th edition.
7. Myelin. A Specialised membrane for cell communication by Keiichiro Susuki, M.D, Ph.D (dept. of neuroscience, Balyore college of medicine @2010 nature education Citation Susuki, k 2010.