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A Comparative Study of *Masanumasik Garbha Vikas Krama* according to Ayurveda with Its Clinical Importance

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ABSTRACT

In universe human is the best creation of Nature. It is a miracle and wonder of the nature which have proper shape, size and weight of human body. Procuring a baby is a lifetime dream of every female in the society. A malformed alive fetus is one of the worst aspects of pregnancy. Ayurveda gives precise description of *Garbha Vriddhi* and *Vikas Kram,* though there were no modern imaging techniques like sonography, MRI etc. Different Texts of *Ayurveda* gives various views regarding *Garbha Utpattiand Garbha Vriddhi.* Ayurveda has also mentioned *Garbhini Lakshana* which are helpful in diagnosis of early pregnancy and prevents the fetal anamolies. This study is an attempt to elaborate and compare both ancient and modern concept of embryogenesis and its clinical significance.

Key words: *Garbhavkranti, Embryogenesis, Garbha Vikas Kram, Foetal development, Garbha Vikar.*

INTRODUCTION

Foetus in a womb is always in a record since time immemorial. Since long ago society has also striven to protect the pregnant women and foetus in the uterus. But as long as the development of a foetus from a single cell (zygote) is concerned, it has been put forward time to time.

Luminaries of *Ayurveda* like *Charaka, Sushruta, Vagbhatas* have enumerated the development of the foetus in immaculate manner. The embryology, an important discipline of anatomy, is at its zenith regarding knowledge of every aspect of the development. But several years ago, whatever our authorities of *Ayurveda* have stated, can be compared with the knowledge of modern embryology.

An estimated 295 000 newborns die within 28 days of birth every year, worldwide, due to congenital anomalies. Congenital anomalies can contribute to long-term disability, which may have significant impacts on individuals, families, health-care systems, and societies. The most common, severe congenital anomalies are heart defects, neural tube defects and Down syndrome. Some congenital anomalies can be prevented by Vaccination, adequate intake of folic acid or iodine through fortification of staple foods or supplementation, and adequate antenatal care are just 3 examples of prevention methods.[1]

In Ayurveda this developmental disorder is known as *Garbhaja Vikrati*. *Garbhaja Vikriti* is one of the worst

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aspects of pregnancy presenting a malformed alive fetus. Due to innate or acquired factors like chromosomal errors (*Beejabhagavikriti*) or medications during pregnancy, infections etc. The description of *Garbhaja Vikrati* is scattered in the *Ayurvedic Samhitas*. The prevalence of these congenital anomalies has increased in this era may be due to environmental factors, changed lifestyle, dietary factors and various new teratogenic drugs and infections. So before knowing to *Garbhaj Vikrati* are necessary to know about *Garbha* and *Garbha* development.

Garbha

Acharya Charaka says that the *Samyoga* of *Shukra*, *Shonita* and *Jeeva* (*Atma*) inside the *Kukshi* is named as *Garbha*.[2] According to *Maharshi Sushrut* - a combined state of *Shukra* and *Shonita* in the *Garbhashaya*, intermixed with the *Prakritis* (*Mula-Prakriti* along with its eight categories) and *Vikaras* (her sixteen modifications) and ridden in by the *Atma* is called *Garbha*.[3]

Garbha Dharana

When unimpaired *Shukra* and unimpaired *Shonita* unite in pure womb and lying pure genital tract. Then this definitely results in the formation of *Garbha*. This is like to transformation of milk into curd after abandoning its previous from just by the addition of a few drops of curds.[4]

Shukra

The wise call it as '*Shukra'* which is implanted for the origin of *Garbha*. It is constituted of four quarters of *Vayu*, *Agni, Prithvi and Ap* (Four *Mahabhutas*) and is originated from six *Rasas*.[5]

Raja/Artava

The menstrual blood in women is produced by *Rasa* (*Dhatu*), and *Rakta* named as *Raja* is formed.[6]

Garbhadhana

Sushruta opines that the *Teja* or heat generated at the time of coitus activates *Vayu*, then the *Shukra* excreted due to the action of both *Vayu* and *Teja* reaches *Yoni* gets mixed up with *Artava*, thus formed *Garbha*.[7]

Process of *Garbhadhana*

During the coitus after *Shukrachyuti* (ejaculation), *Vata* carries *Shukra* through Yoni and deposits it in *Garbhashaya*. This *Shukra* unite with *Shuddhartava* and forms *Garbha*.[8]

Garbha Sambhav Samagri

Acharya Sushruta says- Four factors i.e., "*Ritu*" (menstrual period) "*Kshetra*" (uterus) "*Ambu*" (*Ahara Rasa*) & "*Beeja*" (*Shukra and Shonita)* are the essential raw ingredients for the production of *Garbha*, provided *Beeja* (*Shukra* and *Shonita*) should be pure.

In *Ayurveda* development of fetus is known as *Garbhavakrant*.

In *Ayurvedic* science *Shadbhavas* have important contribution in the development of *Garbha*. These *Shadbhavas* as described by *Acharya Charaka, Sushruta* and *Kashyap* are *Matrija, Pitrija, Atmaja, Satmyaja, Satvaja, and Rasaja. Maharshi Charaka* says that the following factors help in the growth of the *Garbha* in the *Kukshi* of the mother;

- *Satbhava Sampat*
- *Upasneha* and *Upasweda*
- *Ahara, Vihara* of mother
- *Kala Parinama*
- *Svabhava*

Garbha Vridhi

The entire growth and development of *Garbha* have been described to be influenced by *Triguna* and *Panchamahabhutas*. According to *Ayurveda, Rasadhatu* is necessary for the development of *Garbha*. The role of *Rasa-Dhatu,* besides meeting the nutritional requirement to a growing *Garbha*, has been also recognized in respect to contribute towards the mother health and formation of milk.

Garbha Poshana

Garbha nourishment by *Ahara Rasa. Nabhi Nadi* of the *Garbha* is connected with the *Rasavaha Nadi* of the mother, this conveys the essence of food and vitality from the mother, and nourished by this materialist grows, from the time of deposition till all the major and minor parts which are undeveloped fully, the fetus derives its nourishment by *Upsneha* way through the *Rasavaha Dhamni* which are spread obliquely in all the arts of its body and survives.

Masanumasik Garbha Vridhi (According to Brahattrayi)

Month	Charak[9]	Sushrut[10]	Bagbhatta[11]
1.	In the first month *Atma* possessing all the qualities, getting mixed up or vitiated by all the *Dhatus (Bhutas)* attains the shape resembling the *Sleshma* in which all the body parts though present are not conspicuous	first month product of conception is in the shape of *Kalala*	In the first month, during the first seven days, the embryo becomes a *Kalala* (Astaang Hridaya) In the first month there will be formation of *Kalala (Astaang Sangraha)*
2.	Second month of gestation, shape of the *Garbha* decides the sex determination of child. *Garbha* takes a compact form in the shape of a *Pinda, Peshi* or *Arbud.* The *Pinda* shaped *Garbha* leads to the production of a male child, the *Peshi* shaped to an enough one	Second month *Tridosha* and *Panchamahabhta* processed in Kalala the foetus was solid shape, the shape of foetus decide sex of progeny. If as *Peshi-rupa* (elongated muscles/spindle shape) then female, if *Arbuda* shape (tumour shape) then *Napumsak* will be born	During the second month, from the *Kalala* state (jelly mass) are produced the *Ghana* (hard mass), *Peshi* (muscle) and *Arbuda* (ant-hill) to be born as a male, female or eunuch (hermaphrodite) respectively (*Astaang Hriday* and *Astaang Sangraha)*
3.	In the third month *Sarva Indriya, Sarva Angavayava* manifests them simultaneously	In the third month, five buds develop, one each of the arms, legs and head; even the differentiation of major and minor manifests minutely	During the third months, the five parts of the body become manifest, the head, two legs, two arms, and also all minor parts. Simultaneously with the head etc; the knowledge of pleasure and pain also (*Astaang Hridaya)* In the third month there will be five branching in the foetus, such as the two for the legs, two for the arms and one for the head. *(Astaang Sangraha)*
4.	*Garbha* gets stabilised. Therefore, at that time, pregnant women specifically get excessive heaviness in her body	In the fourth month *Anga, Pratyanga Vibhaga* (demarcation of organs) is more prominent. The *Chetana Dhatu* also gets manifested because the *Hridaya* (heart) becomes obvious. Seat of *Chetana (Atma*) is *Hridaya.* The woman now possesses two hearts and is known as *Dauhridini*. If these desires are ignored, the lady would deliver the child *Kubja, Kuni, Khanja, Jada, Vaman* and	In the fourth month, all the parts become manifest *(Astaang Hridaya)* During the fourth month, all the major and minor parts of the body become clearer and the foetus become stable *(Astaang Sangraha)*

		Vikritaksa. Hence, whatever she desires should be provided to her, if desires are fulfilled, she delivers powerful and long lived son	
5.	In comparison with previous months, the pregnant women grow excessively thinner because growth (*Upachaya*) of *Mamsa, Shonita* in foetus more prevalent in this month. Therefore at that time, pregnant woman specifically gets excessive in her body	in the fifth month, mind becomes clearly manifest	In the fifth month, the *Chetana* (consciousness). *Astaang Hridaya* Mind becomes well active due to increased *Maansa* and *Shonita* during the fifth month *Astaang Sangraha*
6.	In comparison with other months, there is excessive increase in *Bala*, *Varna* of the *Garbha* during the sixth month of gestation. Therefore, at that time the pregnant women loss her *Bala* and *Varna* considerably	In the sixth the intellect	In the sixth month, the tendons, veins, hair, strength, colour, nails and skin (become manifest *(Astaang Hridaya)* In the sixth month, hairs on the head and on the body, nails, bones, tendons, etc. become patent and there will be increase of strength and colour *(Astaang*

			Sangraha)
7.	There is an all-round development of the *Garbha* during the seventh month. Therefore, a *Garbhini* (pregnant woman) becomes exceedingly deficient in all aspects of her health	In the seventh month differentiation of all the major and minor parts becomes clearer	In the seventh month, it (foetus) is developed in all its part and nourished well (*Astaang Hridaya* and *Astaang Sangraha)*
8.	In eight month of pregnancy is fatal period because *Garbhaja Ojas* which becomes unsteady.	In the eight month, *Ojas* becomes unstable; if *Garbha* born in this month does not survive firstly because of the absence of *'Ojas'* and secondly because of the „*Nirritih*‟ (demons).so the demons should be offered oblation of rice cooked along the meat,	Eight month of pregnancy is foetal period of *Garbha* and *Garbhini*. During the eight month, *Ojas* travel between the mother and the child alternately; because of this, they become fatigued or contented respectively; the child born during this month does not survive, and life of the woman is also doubtful, because of the absence of the *Ojas (Astaang Hridaya)* *Ojas* is unstable and moves between her body and of the foetus along with rasa. Some other says that death of the foetus (born during eight month) is due to

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			influence of *Nivrtti (Astaang Sangraha)*
9.	From the first day of the ninth month till the end of the tenth month is known as the period of *„Prasava-Kala'* (period of parturition).	Birth may take place in any one of the ninth, tenth, eleventh or twelfth months. Birth taking place apart from these months is abnormal	After even one day after eight month, is the time for the birth of the child; if it (foetus) is retained inside the abdomen for a year by Vata, leads to abnormalities (Astaang Hridaya and Astaang Sangraha)

Masanumasik Garbha Vridhi According to other different Ayurveda Texts

Month	*Kashyap*[12]	*Harita*[13]	*Bhavprakash*[14]	*Garbhpnishad*
1.	Beej Dhatu divided by Jeevatma Prana and Sharir Pravishta is surrounded by Rakta	1st day – *Kalala* 10 th day – *Budbudakara* 15th day – *Ghana* 20th day- *Mamsa Pinda* 25th day – *Panchabhtatamaka* 1 month - *Panchtatva*	*Dravibhuta* (liquefied) same as *Shukra* and *Aartava*	1st day – Kalala 7th day – Budbudakara 15th day- *Pistha* 1month – *Kathin*
2.	Formation of *Asthi, Mamsa* And *Snayu* in *Garbh* by *Shukra*	50th day presence of *Garbhankur*	Panda – purush Peshi –stri Arbuda- -napunshaka	-
3.	Formation of *Sarvaangavyav* (organogenesis) sequencely, *Praspandan Chetyati* (heart beat start), *Vedna* (sensation)	*Pravdhhaman Avastha* of *Hasta* and *Pada* (advanced stage of limbs)	*Doveloped shir (Head), Avastha* of *Hasta*, *Pada* and all *Sukshmang* (small organs)	-
4.	*Garbh Sthira* (stable fetus)	3.5 month – *Shir Sarvata* 4th month *Loma Utpatti*	All *Anga* and *Pratyang* doveloped, heart beat and sensation present	-
5.	Mamsha Shonit Vridhhi (formation) and Garbha become Jeeva (live)	*Garbha* become *Sujeeva*	*Mana Pratibuddhata* (doveloped brain)	Prashtavansa (vertebral column) developed
6.	*Bala, Varna* and *Ojas Vridhhi* (Formation) *Shrama Adhika* (tiredness) present in gravida	*Sphurana* (fetal activity) present	*Buddhi* (advanced doveloped brain) present	*Mukha, Nasha, Akshi* and *Srotas* present
7.	*Sarvdhatu* and *Vata, Pitta, Kapha* present	-	*Sarvang Anga Vyakta* (doveloped)	-
8.	*Ashira Oja* (unstable life)	*Garnha Agni Sanyoga*	-	-
9.	10th month *Prashavkala*	*Chestautpatti (fetal* activities*)*	9-12th *month Prashavkal*	-

		10-11th month Prashavkala	*a*	

According to Modern Science

The science dealing with development of fetus is called Embryology. Embryology in its widest sense means the science of growth from one cell stage to the adult one. Embryology mainly concerned with the pre-natal life which can be generally further sub-divided into period of ovum, embryonic period and foetal period. Total period of development is of nine months i.e., 38 weeks or 266 days. The first two month is important as the unborn baby. During embryonic period all the primitive organs and systems are formed and just begin to be recognizable as human. This developmental process is called as 'general embryology'. It is the development of accessory structures like chorion, amnion, umbilical cord and placenta. Further development and functional maturation of various organs and systems which take place in foetal period is called as 'systemic embryology'. In briefly fetal development describe as

Month	Development
First month	Modern obstetrics states that at the end of first month, a fertilized egg grows within a water filled sac which is called as amniotic cavity. Development of placenta takes place which has nutritive and excretory functions.[15] In process of embryogenesis, after fertilisation, development of morula takes place from embryoblast. Morula contains multicellular mass and fluid. Some fluid passes into the morula from the uterine cavity. As quantity of fluid increases, the morula acquires the shape of cyst. As pregnancy continues morula get transformed into blastocyst. Blastocyst gives rise to three germ layers-1).Endoderm 2). Ectoderm 3). Mesoderm. All tissues these three layers.[16]
Second month	At sixth week, baby's heart begin to separate into four chambers and it beats about 150 times in a minute. Embryo has comparatively large head than trunk.[17] Central nervous system, sensory organs and digestive system start to develop.[15] Branching of nerve cells in foetal brain results into formation of early neural pathways. Although it is not possible to confirm gender of foetus by ultrasound until after 15 weeks, his genitals begin to form at 9thweek.[17]
Third month	Centres of ossification appear in third month. Fingers and toes get differentiated. Development of skin, nails and hairs takes place. Variation in external genitalia begin.[18]
Fourth month	Eye movements begin which indicates maturation of midbrain.[18] The part of foetal brain responsible for complex thoughts, such as problem solving and memory starts to form at 13thweek.[17] Determination of foetal sex is possible as external genitalia show definitive signs of male or female.[18] Total weight gain during the course of singleton pregnancy for a healthy women averages 11kg. Major weight gain occurs during second and third trimester which is around 5 kg in each.[19]
Fifth month	There is greater increase in anabolism of blood and flesh in foetus so weight loss observed in mothe.[25] Modern Science - Foetus becomes more active. It shows lanugos covering all the body and hairs at scalp. Maturation of cochlear function begins so foetus can respond to sound. At 19thweek foetal brain start to form separate areas which are specialized for sense of smell, test, hearing, vision and touch.[17]
Sixth month	Eyebrows and eyelashes become recognizable. Lung development almost completed. A fetus born at this time will die due to absence of terminal sacs. Development of neural pain system takes place.[18]
Seventh month	Skins become red and get covered with vernix caseosa. Foetus show isolated eye blinking. Production of blood cells start at bone marrow at seventh month. It take place in liver and spleen before seventh month.[17]
Eighth month	Brain becomes more complex. Bones continue to harden. Skin become more smooth.[29] Most internal systems are well developed.[16]Final trimester of pregnancy can bring about stressful emotions and mood swings. Hormone levels change during pregnancy which affects brain chemicals in charge of regulating moods. The first and third trimesters are the most common times for irritability and issues of mood swing.[21]
Ninth month	Pregnancy is considered as full term at end of this month. Foetus swallow lanugos hairs and vernix caseosa which result into meconium after birth.[17]

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Garbha Vikriti

Abnormality of fetus in intra uterine life due to defects of gene, the self, past deeds, uterus, time and mother's food and behavior; the vitiated *Doshas* produce various abnormalities in shape, complexion and sense organs.[22]

Charakas view of congenital abnormality are due to specific morbid condition of *Beeja* (sperm and ovum), *Atmakarma* (deeds of previous life), *Ashaya* (uterus), *Kala* (time factors), and *Matuaharvihar* (diet and regimen of mother). *Beeja* is further elaborated as *Beeja Bhaga* and *Beeja Bhaga*bayava. Their abnormalities collectively indicate abnormality of chromosome, gene, and DNA materiel which causes morbidity in different ways. *Atmakarma* is included in this category which exhibit vulnerability of one's unknown chance for susceptibility of environmental factors.

According to *Susruta* birth defects are due to *Adibala* and *Janmabala*. *Adibala* is due to *Matrija* (maternal) and *Pitrija* (paternal), and *Janmabala* is due to *Rasakrita* (dietary indiscretion) and *Dauhrida Bimanan*.[23] *Vagbhata* mentioned *Sahaja* and *Garbhaja* in this context.[24] The *Adibala* and *Sahaja* exhibit genetic abnormality due to autosomal dominant, auotosomal recessive and sex link dominant while abnormalities cause by *Janmabala* and *Garbhaja* are due to morbid nature of diet and regiments of mother during gestational period. Abnormalities due to excessive unrighteous behavior of the mother causes congenital malformation,[25] where fetus exhibit characters like-*Sarpa* (snake), *Vrischika* (scorpion), *Kusmanda* (field of pumpkin) etc. which indicate monster, found in conjoined twin (specifically in monozygotic monochorionic monoamniotic) and parasite twin. Associating parasite limbs are also can be understood under this heading. Some other disorder are caused by *Dauhrida Bimanan like Kubja, Kudi, Pangu, Muka* & *Minmin* etc.[26]

Aanuvaanshika Vikriti of Garbha

Hereditary abnormalities depend upon the condition of *Beeja*, not on the physical status of couple. Or in other words what-so-ever part of *Beeja* is defective; the body part developing from that portion of *Beeja* will be abnormal.[38] *Charaka* mentioned *Sandi Yonivyapat* which occurs due to *Beejadosa*.[27] *Vandhyaa occurs* due to abnormality in *Beejabhaga*. *Trinaputrika* occur due to abnormality in *Beejabhagabayava* and *Beejabhaga*.[28] In modern trisomy, clinofliter syndrome, down syndrome etc.

According to *Acharya Bhavamishra* has described *Dohsa Vishistha Ahara* which led to produce abnormality in foetus[29]

SN	Pregnant women consuming *Doshas* vitiating diet	Effect on Progeny
1.	*Vata Dosha*	Dumb, hoarse or nasal voice, lame, dwarf, number of body parts.
2.	*Pitta Dosha*	Baldness, premature graying of hairs, absence of hairs on face, tawny color of skin, hair and nail.
3.	*KaphaDosha*	*Kushta* (leprosy), *Kilas* (type of skin disorder) and congenital presence of teeth

Acharya Charak has also described various types of *Ahara* which led to disease in foetus[30]

SN	Pregnant women consuming constantly	Effect on Progeny
1.	Wine	thirsty, poor in memory and unstable in mind
2.	Iguana	gravels, stone or *Shanermeha*
3.	Pork	red eyes, obstructed, respiration and very rough body hair
4.	Fish	delayed closure of eye or stiff eyes
5.	*Madhur Rasa*	Diabetes (*Prameha)*, Dumb (*Mook)*, or over-obese (*Atishoulya*)
6.	*Amla Rasa*	internal haemorrhage (*Raktapitta*), eye disorder (*Akshiroga*) and skin disorder (*Twakroga*)

7.	*Lawan Rasa*	wrinkles and grey hairs (*Valita Palita*) and Baldness (*Khaliyta*)
8.	*Katu Rasa*	weakness (*Durbal*), deficient in semen (*Alpashukra*) and infertile (*Anapatya*)
9.	*Tikta Rasa*	consumptive (*Shosh*), weak (*Abala*), under developed (*Anupchita*)
10.	*Kashaya Rasa*	Blackish color (*Shyav Varna*), *Anaha* and *Udavarta*.

Shad Garbhakara Bhavas[31]

SN	*Bhava*	Features
1.	*Matrija*	*Twak, Rakta, Mamsa, Meda, Majja; Nabhi, Hridayam,* *Kloma, Yakrit, Pleeha, Vrikka, Vasti, Purishadhanam, Amashaya, Pakvashaya, Uttara Guda, Adhara Guda, Kshudrantra, Sthulantra, Vapa, Vapavahanam*
2.	*Pitrija*	*Sukra, Kesha, Smasru, Nakha, Loma, Danta, Asthi, Sira, Snayu,Dhamani*
3.	*Atmaja*	*TaasuTaasu, Yonishu Utpatti, Ayu, Atmagnanam, Vignanam, Prerana of Prana* and *Apana, Swara, Sukha, Duhkha, Ichcha, Dvesha, Chetana, Dhriti, Buddhi, Smriti, Ahankara, Prayatna,Kama, Krodha, Lobha, Bhaya, Harsha, Dharmadharmaseelata, Upachaya, Mana, Indriyas, Akriti, Varna*
4.	*Satmyaja*	*Arogyam, Analasyam, Alolupatvam, Indriya Prasadanam, Svara Varna BeejaSampat, Praharsha, Veeryam, Balam, Medha, Ayu, Ojas, Prabha, Uthanam, Santosham*
5.	*Rasaja*	*SharirasyaAbhinivrittiSharirasyaAbhivriddhi, Prananubandhata, Tripti, Pushti, Utsaham, Balam, Varnam, Sthiti Hani, Aloulyam, Buddhi, Vritti*
6.	*Sattvaja*	*Bhakti, Sheelam, Saucham, Dvesham, Smriti, Moham,* *Tyagam, Matsaryam, Souryam, Bhayam, Krodham, Tandra, Utsaham, Taikshnyam, Mardavam,* *Gambhiryam, Anavasthitatvam*

Gharbhaja Vikrati is mainly cause by *Shadbhava* & diet of mother during pregnancy, during developmental stage of fetus Ayurved explain *Garbhini Parichrya* for fetal wellbeing in detail, according to every month. When disturb of *Shadbhava* they cause *Gharbhaja Vikriti* respectively related organ and during growth organogenesis required special neutrition for organogrenesis. In the 4th month of development, the *Garbhini* is called as *Dauhrida* at that time, whose wishes and desires, not being honored and gratified lead to the birth of a paralysed, hump-backed, crooked-armed, lame, dwarfed, defect-eyed, and a blind child. Other Gharbhaja Vikar like- Pangu, Sheershambu/ hydrocephalous, *Hraday Rog/* congenital heart disease etc.

Discussion

At the beginning of Embryological growth, the origin of any organ is not clear. At this moment only *Garbh Sthapaka Dravyas* are needed. *Acharya Sushrutan* has prescribed *Madhura*, sheet and *Drava Ahara* for first three month of *Garbh*.[32] According to different *Acharya Masanumashik Vikashkrava* (fetal development) are describe in detail with requirement of *Ahar* and *Ausadh* separately month wise as per organogenesis requirement. This *Masanumashik Vikashkrava* (fetal development) is help to prevent any fetal deformality development. For example, first month for better child

Punsavana Karma is also done. Fourth month for cardiac bellowing *Acharya* prescribe better diet for o Where some drugs like *Lakshmana*, *Vatankur*, *Sahadeva*, *Vishvadeva* etc mixes with milk and given as nasal drop for *Uttam Santana Prapti*.

In fifth month all *Mansik Bhava* are related to *Mana*. So, here the prevention of mental disorder can be done. Selected *Medhya Dravyas* can be given to *Garbhini*, which cannot harm or affect the pregnancy.

Similarly, modern medical science also believes that development of Cerebrum become completed in sixth month of intra uterine life. All intellectual things are related to this month. In this month, we can think of the preventive measures related to the intelligence retardation. So, the disorder related to the *Buddhi* or intelligence disorder i.e., Alzheimer's disease, Mental etc. *Medhya Dravyas* can also be used in this month.

If delivery happens in seventh month, the child is more likely to survive, because body parts are well Defined or well formed. For meeting the objective of a healthy progeny, for proper fetal development these six factors are also responsible.

In Ayurveda diagnosis by *Trividhapariksha* i.e., *Darshana* (Inspection), *Sparshana* (Palpation, Percussion), *Prashana* (questionnaire) is diagnostic method described in various ayurvedic texts which forms the basis of all the other diagnostic method explain in Ayurveda as well as modern science. The diagnostic method in Ayurveda classified into two categories; *Rogpriksha* and *Rogipariksha*

According *Masanumashik* maternal characteristics/risk factors appropriate screening method can be used: USG

First trimester screening: for chromosomal abnormality.

Second trimester screening: between 15th and 20th weeks of pregnancy

Anomaly Ultrasound: it is used to know about different parameters of foetus and looks for any birth defects. Fetoscopy, Radiography, Sparshanpariksha (palpitation, percussion), Prasanpariksha; history taking plays a key role in ayurveda it is an important part for screening to the high risk of congenital anomalies. It is also useful in carrier screening for common recessive disorder e.g., thalasaemia and sickle cell disorder. Her personal history used to rule risk of anomalies. Maternal age, her addiction daily activity that i.e *Matrijvihar* and *Aahar* also a causative factor for the congenital abnormality.

Other Blood and Serum Analysis

First trimester blood test: beta-hCG hormone and low levels of pregnancy associated plasma protein A (PAPP-A) are related with certain birth defects.

2nd trimester blood test

Triple screen test/ quad screening: Involves three specific substances: Alpha-fetoprotein test (AFP), human chorionic gonadotrophin (HCG), and estriol estimation.

The integrated test (first trimester screening tests plus the quad screening in the second trimester) correctly finds Down syndrome in about most of the cases. **Additional testing** such as amniocentesis, chorionic villus sampling, cell-free fetal DNA or other ultrasounds may be needed for accurate diagnosis.

Conclusion

Whole world is looking towards Ayurveda for better life style and preventive method of congenital anomalies and hereditary disorders. A malformed alive fetus is one of the worst aspects of pregnancy. These diseases affect the life of parents, society & nation. Over government have millions of rupees for child health. But not controlled yet. The Ayurveda suggest that the prevalence of congenital disorders controlled by various approaches like; Dietary regimen related to *Garbhini Paricharya*, avoiding *Garbhopghatkar Bhava* and *Tridosha* vitiating. The healthy progeny may also be achieved by obeying rules of Ayurveda. For achieving this one is special think know about *Garbha* and its *Masanumashik* (monthly stage wise) development. Different fetal anomaly developed at different stages and prevented or manage easily at initial stage by proper *Ausadh* (medications/intervention), *Aahar* (diet) and *Vihara* (daily routine). For knowing proper time and are essential to know about development and how to prevent it. *Masanumasikagar Paricharya* if properly followed will not only avoid the defects in the fetus but also help in normal delivery. So an anatomically *Garbhaja Vikrtis* are prevented by the proper knowledge of development stage with proper life style & diet as indicated in *Ayurveda*.

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