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A CONCEPTUAL STUDY OF AVYAVA UTPATTI AS DESCRIBED IN SUSHRUT SAMHITA

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ABSTRACT

Ayurveda is the first ancient knowledge about the shrishti-uttapatti, panchmahabhuta, gunas, doshas, swastha sanrakshana, Vikruti medicine etc. All this knowledge has been compiled by the sages in samhitas. One such samhita is sushrut Samhita that gives us knowledge about the developmentof human being. How every part of the human body got its origin way before embryologyin modern science came into existence. The causative agent in the development of Sharira is the union, division and multiplication of cells by vayu and nature of activities with the latest discoveries and advancement in the field of medicine, each and every minute details and aspect of human embryology has been studied in advance details and still more and more is being explored. This has been possible with the help of different tools and techniques of the modern world. But in this present era of modern science one cannot put aside the thousand years of literature and knowledge of Ayurveda where acharyas have beautifully described human embryology in terms of Garbhadhan vidhi, Masanumasik garbha vriddhi and other aspect of garbha sharir with their deep insight of knowledge even in the absence of present diagnostic tools. Detailed description is available in Samhitsa regarding garbha, garbhavkranti and masanumasik garbha vridhi. Acharya Sushrut has mentioned how the Avyavas of the human body developed by different components. The following article would deal with the correlation of ayurvedic and embryological components forming different avyavas as mentioned in Sushuruta Samhita. The effort would be to highlight the proper understanding of the theme's in present understanding of facts and to corelate the factual ideas in the light of the modern science under the heading of development of Avyavas or role of its governing factors. The Garbhavkranti andunderstanding of 'Grarbha factors taking part in the formation of different avyava of foetus have been delt mainly based on material available in Ayurveda

mainly sushrut Samhita.

KEYWORDS:- *Garbha, Avyava.*

INTRODUCTION

According to 'Vaisheshik Darshan' origin of universe comes in existence due to interaction of atoms called (Parmanu). The atoms form diatoms then triatoms and so on, unite to form a compact structure.

From the physiological angle, Embryology is the key that helps-unlock such secrets as heredity the determination of sex and organic evolution. Embryology may also be able to interpret and explain vestigial structures, growth, differentiation and repair and to throw light on some pathological condition.

In modern science, the developmental anatomy is studied is the branch named as "Embryology". Embryology is the study of the embryo/foetus from the moment of its inception upto the time when it is born an infant.

Intrauterine life of foetus can be divided into

(1) Ovum stage - From fertilization to end of 1st week.

(2) Embryo stage - From second to Eighth week

(3) Foetus stage – From third month to birth.

In ancient literature of Ayurveda "Garbhavkranti Shariram" is the science which deals with all these phenomenon. Veda, Purana, vrihatrayi, Laghutrayi, Commentators of samhitas specially Dalhan, chakrapani, Arundatta etc also has illustrated garbhavkranti-Shariram. It can be divided into three parts so that the gradual development and formation can be studied easily.

(1) *Garbha* Avataran (Inception)

(2) *Garbha* Nirman (Formation)

(3) *Garbha* Poshana (Nourishment)

Garbha Nirmana and formation of different *Avyava* according to acharya Sushruta and its modern correlation in this particular study would throw light on the knowledge of sages in Ancient era. How different mahabhutas, Dhatus plays significant role in the *Avyava* formation.

Review of literature

Definition of *garbha*

According to garbhaupnishada 'Deha' (Body) is formed by Rasa-Raktadi seven dhatus and *garbha* is formed by the conjugation of shukra and artava of male and female Respectively.[1]

Garuna Purana also marked out the formation of *garbha* by the union of shukra andshonita. Presence of chaitanyata in Shukra is the cause of foetal growth.[2]

According to Mahabharta Jeev (soul) which comes from Antariksha (space) enters into the Shukra of man according to the Purvajanmakrita Karma and unites with the ovum to change into garbha.[3]

Union of healthy Shukra (sperm) and Shonita along with panchadhatu and jeev(soul) collectively develops the *garbha* (Embryo) according to the Yajnavalkya Smriti.[4]

Acharya charak defines *Garbha* as the combination of Shukra, Shonita, Jeeva whichreaches to Kukshi (uterus) is known as *Garbha.*[5]

According to Acharya Sushruta in the garbhashaya when shukra and shonita unite and there is fusion of Prakriti (eight) and vikara (sixteen) along with Jeevatma is known as*Garbha* or product of conception.[6]

Acharya Haarit marked out the origin of Deha by the union of Shukra ,Shonita and Panchmahabhuta.[7]

After birth the *garbha* known as 'Baala'.[8] (Neonate baby)

According to laghuvagbhatta Satva (soul) impelled by the affliction of his own past action, entering into the pure and mature shukra and combines with the Artava and give rise to the formation of the embryo, in an orderly manner, just like fire from the piece of wood (by rubbing together).[9]

Role of panchmahabhuta and Matraja and Pitraja bhava in formation of different avyava

Contribution of Panchmahabuta in the formation and development of *Garbha* is very much important in Ayurvedic concept.

Acharya Sushruta has explained the role of panchmahabhuta in the development of *grabha.*According to him vayu leads the process of division and multiplication (vibhajana), Tejas causes Pachana (transformation) Apa caues kledana (moistening), prithvi causes Sanghanana (Consolidation) and Akasha causes vivardhana (spaceformation).[10]

According to garbhaupnishad, Panchmababhuta contribute in growth of garbha e.g prithvi by dharana (retention and maintenance), Jal by pindikarana (solidification), Tej by prakashana (Manifestation), Vayu by Vyuhan (division) and Akasha by formation of Avakasha (space).[11]

Matraja Bhava and Ptiraja bhava are also responsible for *Avyava* formation.

According to Acharya Sushruta there are 6 factors (Shadbhava) which are responsible for foetal development out of these two factors that are mainly taking part in *Avyava* formation and Matraja and pitraja Bhava.[12]

- Matraja bhava gives origin to the following organs (*Avyava*)
  Twacha, Rakta, Mansa, meda, Hridaya,Vrikka, Basti, Yakrit, Kloma, Nabhi, Pleeha, uttara guda, Adhara guda, Purishadhar, Amashaya, Vapavahan kshudrantra, Pakvashaya and sthulantra.
- Pitraja bhava gives origin to following organs (*Avyava*).
  Kesha, loma, Shamashru, Nakha, danta, Asthi, Sira, Snayu, Dhamni, Virya.

Ayurvedic prospective of organogenesis

In puranas a brief description of embryology can also be traced in Garuda Purana. Its description is based on certain philosophical concept and says that there exist two germ cell stages in the uterus during the course of development, first it passes through the stage of "kalala"super imposed by "budbuda". Then blood like fluid, muscles and finally around shaped germinating seed like structure is obtained. The other body parts like digits nose ect. having little movements comes in view.

But the most elaborate and accurate description of the initial stage of development of*garbha* which resembles most to the modern embryological concepts is mentioned in Haarit Samhita.

Charaka opinions that in the first month, atma gets mixed up or vitiated by all the dhatus (tissue) and attains a mucoid appearance. Previously due to prithvi tattva, the shapeis solid,

which later on becomes blastocyst due to predominance of jala tattva. He believes that at this stage all the body parts are present in this mucoid structure but is subtle form (khetbhut).[13]

Sushruta and vagbhata are of the opinion that during the first month, the embryo isin shape of Kalala.[14] As per garbhupinshad the fertilized egg becomes Kalala in one night,budbuhda in7 nights, pinda in 15 days and solid in one month.[15]

Yajnavallkya Smriti has said that after union of Shukra and Shonita along with panchmahabhuta as well as descent of atma all these gets mixed up and are moistened in first month[16] 'Sankledabhut' Harita has elaborated the views of Yajnavalkya and said that after union of Sukra and shonita on the first day, it attains the form of Kalala, On the 10th day it becomes budbuda, on 15rh day a solid and on 20th day a mass of flesh. The Panchmahabutas gets associated with it on 25th day and by the end of one month all the tatavas becomeconspicuous.[17]

Masanumasik Krama

Acharya Sushrut has mentioned the monthwise development of foetus as 'Masanumasik Krama'[18]

S. no.	Month	Avastha of garbha
1	Pratham masa	Kalalavastha
2	Dwitiya masa	Ghanavastha or pind, peshi, Arbudavastha
3	Tritiya masa	Panch- pindakavastha
4	Chaturtha masa	Dauhridavastha or Vyaktangavastha
5	Pancham masa	mana Probudhavastha
6	Shashtha masa	Snayu –sira-Romadi Vyaktavastha
7	Saptam masa	Sarva-ang-pratyang-Vyaktavastha
8	Ashtam masa	Oja-Sancharanavasth
9	Navam masa	Prasavavastha

Stages of fetal development (According to various ancient literatures)

Month	Garbhu. U	C.S.	S.S	A.S	Yaj Smr.	Agni. P	Padma Purana
1st	Ist night Kalala 7th night budbuda 15th night Pinda	Mucoid than kalala	Kalala	Kalala	Liquid Form		Ist day Kalala, 5th day budbda one month solid with 5 buds for neck, head, shoulder, v.column etc.
2nd	Buds of various Body parts appear	Ghana/Pinda /Pesi/arbuda	Pinda/Pesi/ Arbuda	Ghana/Pinda Pesi/ arbuda	Arbuda		Appearance of both Extremities flanks back, etc.

3rd	Buds of lower extremities	All indriyas and organs becomes visible	5 body parts Become conspicuous	Appearance of5 body parts	Indriyas and bodyParts appear	Appearance of body Parts	Appearance of buds
4th	Formation ofFingers, GITPelvis	Foetus Becomes Stable	All the body Parts becomes Clear and Chetna Appears	Shape of Various body parts Appear	Stability in Body parts	Appearance of bones	Appearance of fingers
5th	Formation of Vertibral column	Increase in Volume of Flesh and blood	Mana becomes Enlightened	Appearance ofChetna	Formation of Blood	Formation Of skin and Blood	Formation of mouth, Ear, nose etc..
6th	Formation ofEyes Mouth,nose, Srotas	Bala & Varna	Buddhi	Snayu, Sira Roma, Nails Skin	Bala, varna Nails, hair	Body hair	Formation of mouth, ear,nose etc.
7th	Foetus becomes Viable	All the bhavas increases	All body Parts develop	Fully Development Foetus		Feeling of Vedana	Alll the joints, hairs of the head and body parts are fully developed
8 th	With all the	Unstability	Unstability	Unstablitiy	Unstablity	udvega	Fully developed foetus
9th	Features	Of ojas	Of ojas	Ojas	Of ojas		

C.S Charaka Samhita, S.S-Sushrut Samhita, A.s-Ashtang sangrah, P-Purana, U-Upnishad, Y.S Yajnavalkaya smritri

Anga-Pratyanga nirmana krama

According to acharya Sushruta all the anga- Pratyanga in the foetus develops together and not separately. He mentioned that like in Amra Phala when it is immature all its parts like keshar, majjabhaga, Asthi and Majja are present in it but because of its miniature size they are not visible. But as the amra phala matures (ripens) all these parts becomes visible, in the same way in foetus during its Tarunavastha (early stage) all the parts (anga-pratyanga) forms at the same time but are not visible but as the foetus grows they all become visible together.[19]

Components taking part in the formation of different avyava

According to acharaya shusruta there are different components like dhatus etc thattake part in *Avyava* formation.[20]

S. no.	Avyava	Components

1	Yakrit (Liver)	Formed by Rakta
2	Pleeha (Spleen)	Formed by Rakta
3	Fuffus (lungs)	Formed by Rakta fen
4	Unduk (Caecum)	Formed by Rakta kitta
5	Jihva (Tounge)	Formed by Saarbhaga of kapha rakta and mansa dhatu
6	Vrishan (Testicles)	Formed by Prasad bhaga of mansa, Rakta,kapha and meda
7	Hridaya (Heart)	Formed by Prasad bhaga of Rakta and Kapha
8	Vrikka (kidney)	Formed by the Prasad bhag of Rakta and meda
9	Antra, Guda, Basti(Intestines) (Anal canal) (Bladder)	Formed by Prasad Bhaga of Rahta, Kapha and by vata and pitta doshas

Acharya Sushruta has also mentioned that Pitta yukta vayu accordingly causes the utapatti of srotas. In the same manner Pitta Yukta vayu enters the mansa dhatu and divides it into peshis. Vayu also separates snehansha of meda dhatu and forms Sira and Snayu. vayu valso causes spaces inside the body and causes the formation of aashaya.[21]

Further acharya Sushruta mentions that Ang Pratayanga develops by Swabhava and whatever guna and Avguna take part in the development of these anga, pratyang they all depends on the poorvajanmkrit Dharma and Adharma.[22]

Modern embryological concept[23]

Fertilization of the ovum and sperm takes place. The fertilized ovum is large and itundergoes a series of division i.e clevage.

When 16 cells stage occours it is called morula.

Fluid partially separates the inner cell mass from trophoblast. The morula becomes a blastocycst.

The cells of inner cell man mulitiply and form an embryonic disc having two layers. These layers are epiblast and hypoblast. Later epiblast differentiate in three germ layers called ectoderm, endoderm and mesoderm. The cells of hypoblast becomes flattened and lines the yolk sac.

These three germ layers forms different structures of the body listed below.

Ectoderm	Endoderm	Mesoderm

Epithelium of :-	Epithelium of :-	Epithelium of :-
Larynx	Brain	Muscles
Trachea	Spinal cord	Fibrous connective tissues
Lungs	Peripheral nerves	Adipose tissues
Esophagus	Ganglia	Blood and bone marrow
Stomach	Special Sensory receptors of eye, ear nose, mouth	Blood cells
Intestines	general sensory receptors	lymphatic tissues
Liver	Adrenal medulla	Reticulo endothelial system
Gall bladder	Skin (epidermis)	Skin (fibroues connectivetissues)
Pancreas	Nails	Dermis
Urinary Bladder	Hair	Pleura, Peritoneum, Pericardium
Urethra	Sweat glands, Sebaceousglands, mammary glands	Kidney
Vagina	Salivary glands	Ureters
Inner ear cavity	Nasal Cavity	Gonads and associated ducts
Auditory tubes	Mouth	Adrenal Cortex
Thyroid	And canal	Endocardium and vessels, endothelium
Parathyroid	Enamel of teeth	
Thymus	Anterior Pitutary	

Comparitive analysis of development of foetus

S. no.	Stages	Days according to text				Modern concept
		GU	CS	SS	HS	
1	Kalala	1th	30th	30th	1th	Morula (1-3days)
2	Budbuda	7th			10th	Blastocyst (4th day)
3	Pinda	15th				Implantation of embryo in uterus complete by the 12th day and embryo appear rounded in shape
4	Ghana (Soili dification)	30			15th	Embryo becomes more solid due to rapid division of cells and the formation of primitive streak and neural groove
5	Pesi				20th	In the last 3rd week the embryo becomes 1.5 to 2mmlong and apparently may resemble with Pesi as described in ayurveda

GH- Garbhupnishad, CS-Charak Samhita, SS-Sushrut Samhita, H.S-Haarit Samhita

Avyava described by Acharya Sushrut are formed by following components in modern science (Embryology)

Liver- It develops from the endodermal Hepatic buds. This hepatic bud divides to form large Cranial part pars hepatica that forms the liver and a smaller caudal part pars cystica that forms gall bladder and cystic duct.

Spleen - It develops from the mesoderm. It develops as a collection of mesenchymal cells to form small lobular masses of spleenic tissues. These lobules later fuse to form single mass of spleen.

Lungs- Develop from the lung buds.

Caecum- Develops from the ceacal bud by its enlargement. The proximal part of this bud forms the caecum.

Tongue- It develops in relation to pharyngeal arches. These are rod like thickening of mesoderm present in the wall of the foregut.

Testicles- It develops from the coelomic epthelium that covers the medial side of the mesonephros of the corresponding sides. The germinal epithelium of the region becomes thick. The cells of this epithelium proliferate to form different parts of testis.

Heart - The heart develops from the splanchnopleuric mesoderm related to that part of Intra embryonic coelom that forms the pericardial cavity. This mesoderm is the cardiogenic area.

Kidneys - The kidney develops from two sources. The excretory parts are derived from the metanephros. The collecting part is formed by ramification of ureteric bud.

Intestines, Rectum & Anal canal - Derived from mid gut and hindgut.

Bladder - The urinary bladder is derived from the cranial part of the vesicourethral canal (Endoderm). The epthelium of trigone is derived from absorbed mesonephric duct.

DISSCUSSION

The above description tells about various components of initial embryonic development described by acharyas corresponding to their days in contrast to the various components in the development of foetus described by the modern embryologist.

If we go through the literature described in thousands of years old Samhitas we will find a very minute and explicit description of each and every stage of embryonic development and that to its initial stages which are unvieled by the present day embryologists by means of highly sophisticated and ultra modern techniques and equipments available now a days, and

are acharyas acquired this truthful knowledge by their divine insight observation and intellect.

In this study an effort has been made so as to extract out the observation and facts in support of the insight of the acharyas, those are even up to date to the present scenario of *Garbha* sharir given in Ayurveda.

The *Avyava* formation by different components as described by acharya Susruta is quite difficult to correlate with the component described is the organ formation by the modern embryologist. But the fully formed organs (*Avyava*) can be correlated on the basis of their anatomical and physiological structure. For instance the first *Avyava* described by Sushruta is liver or Yakrit. He described that Yakrit is formed by Rakta. Comparatively it can be explained according to modern view, One of the main function of liver (Yakrit) is the storage of vitamin B12, Iron and folic acid are stored in the liver which are very important for erythropoiesis. In the deficiency of these substances can cause reduction inthe synthesis of DNA in RBC that causes decreases in maturation of RBC that leads to anaemia Secondly liver receives maximum amount of blood in the body i.e 1500 ml / min.i.e about 30% of cardiac output. Thus the formation of Yakrit (liver) by Rakta can be justified by seeing the importance of liver for the maturation of RBC and receiving the maximum quantity of blood in the whole body.

Pleeha (Spleen) has also been described by acharya Sushruta formed by Rakta dhatu. According to modern concept spleen is an important haemopoitic organ during foetal life. RBC can be stored in the spleen and released into circulation wherever needed. Thus the formation of spleen by Rakta can be well justified by these two important functionof spleen.

Fuffus (lungs) are said to be formed by Rakta fen. Now if we see the structure of lungs they are sponge like that gives a bubble like appearance to the lungs thus we can say that seeing the sponge like bubbly structure of the lungs the formation of lungs by Rakta fen described by acharya sushrut can be justified. More ever the function of lungs is to purify and oxygenate the deoxygenated blood. So it has main function associated with blood or Rakta.

Unduk (Caecum) is said to be formed by Rakta kitta or mala by achayra Sushruta. Rakta kitta or mala is said to be pitta But here in this context we would rather take Rakta kitta as the waste product of blood which can be compared to faecal matter. Whatever food we intake all

the nutrients etc are dissolved in the blood and the remaining undigested substance is converted into faecal matter in the caecum. That is why seeing the function of caecum in formation of faeces the formation of caecum by the Rakta kitta (as it stores the faecal matter for some time) can be justified.

Jihva (Tongue) according to acharya Sushrut has been said to be formed by saarbhaga of Kapha, rakta and mansa dhatu. Physiologically jihva is useful in speech, taste sensation etc. Its formation by prasaad or Saarbhag of kapha can by explained as such that all the secretion of salivary gland open in the mouth making a watery solution called the saliva. As we know that Bodhak Kapha is compared to salivary secretion that helps the taste buds of the tongue in sensation of taste and this particular kapha is found is the moola of Jihva. Secondly the tongue is made up of different types of muscles. Which plays an important role in making its structure. The intrinsic muscles of tongue are superior longitudnal, Inferior longitudinal, Transverse and vertical. Extrinsic muscles of tongue are genioglossus. Hyoglossus, Styloglossus and Palatoglossus. These muscles perform various important functions of tongue. Thus we can say that formation of Jihva by Kapha rakta and mansa can be well compared in both ayurvedic and modern concepts.

Vrishan (Testicles) according to sushrut Samhita vrishan are formed by Prasad Bhaga of Kapha, Rakta mansa and meda. Anatomically if we see the structure of testicles we know that testes is suspended in scrotum. In ayurveda scrotum and testes are not mentioned separately so we can say each testicles lies in the scrotum and that particular scrotum is composed of dartos muscle, cremastric muscles and different fascias that are important structural peculiarities. More ever each testicles is covered by tough fibrous layers of tissue called tunica. The outer layer is called tunica vaginalis and inner layer is called tunica albuginea. So mansa utapattti of testicles can be compared as such. Acharya Sushrut would have compared these tough fibrous layers to mansa dhatus. Secondly the secretion of the testicles like spermatic fluid, testosterone can be compared to kapha dhatu. and meda dhatu can be compared to the fat molecules and phospolipids present in the leidyg cells which are imtportant for the nutrition of the sperms.

Hriday (Heart) is described in Sushrut Samhita to be formed by Prasad bhaga of Rakta and Kapha. Acharya Sushruta would have mentioned about the dhamnis that are attached to the heart carrying blood by dhamana process to different parts. More ever he has depicted the importance of Avalambak Kapha by its functions of doing Avalamban of Hridaya. This

concept can be correlated as such that Heart receives the blood from the whole body and after purification sends it back to the whole body so its main function is to conduct blood in the body continuously so physiologically its development from blood can be justified. Movever avalambak kapha is correlated to paricardial and pleural fluids.

Vrikka (Kidney) is formed by the Prasad bhaga of Rakta and meda. The anatomical structure of kidney shows that the kidney is surrounded by various covering, one of them is perirenal or Perinephric fat. This layer is of adipose tissue lying outside the fibrous capsule, It is thickest at the borders of the kidneys and fills the extraspaces in the renal sinus it provides protections against damage so meda canbe compared to these fat covering around the kidney. We can say that thousands years ago when there were no specific means then also acharya sushruta so minutely studied the structures and guided us about the different viscera's.

More ever kidney receives 1300 ml of blood per minute that is 26% of candiac output. It is the second organ after to receive such a great amount of blood. The main function is to filter this large amount of blood and put it back into the circulation. Thus the main function of kidney is to filter blood. Thus we can say that the finding of acharya Sushruta that kidney is formed by blood and meda can be justified.

Antra, guda, Basti (Intestines, Anal canal, Bladder): These structures according to acharya Sushrita has been formed by the Prasad bhaga of Rakta and kapha along with the pachana kriya of Pitta and sanyog of vayu. If we see the function of Intestine mainly large Intestine and guda they cause the faecal matter to expel out of the body. Purish is Agni and Vaya Pradhan. Sthoolartra is related with the utpatti of stool and guda is related with sanchaya and utsarjana kriya of mala or stool so seeing their main function of excretion of pitta and vayu pradhan stool, along with the presence of mucous layer and secretions in these structures like succus entericus from small intestine and secretion of large intestinal juices which usually contain 99.5% water these secretion can be compared to kapha.

Basti on the other hand is also related with the excretion of urine. Mutra is agni and jala Pradhan. Basti is also the Aashya for urine. So because kapha pradhan mutra is stored in the Basti we can say on the basis of physiological anatomy that Basti is formed by Kapha.

Now in all the *avyavas* Rakta has been the main component taking part in the formation of different *Avayas* along with the other elements. This is because Rakta is the connective tissue

of the body connecting all the structures together It is an important fluid that supplies oxygen. Oxygen provides nutrients to the tissues and helps in removal of waste products from the body. Without Rakta it is impossible to survive. Acharya Sushruta has also mentioned about its formation, sthana, Praman etc of Rakta in sutra sthan 14th chapter giving it a great deal of importance for the living being. Thus he has included Rakta as the main component in the formation of all the *avyavas* moreover Rakt is important for the growing foetus The formation of blood cells begin very early in embryonic life[before somites have appeared]and continues throughout life. Blood formation is rapid in emryo to provide for increase in blood volume with the growth of the embryo.In the 3rd week of embryonic life,formation of blood vessels and blood cells is first seen in the walls of yolk sac. A continuous supply of blood through the placenta is of great deal of importance for the healthy development of the foetus.

If we take notice of the placental circulation we see that the mature placenta has the capacity of 500ml of blood. 300ml being occupied in the villi system and 150ml lying in the intervillous spaces. As the intevillous blood flow at term Avyava, is estimated to be 500-600ml per minute. The blood in the intervillous spaces is completely replaced about 3-4times per minute, failure of blood to reach to the foetus or low amount of blood reaching to the foetus can cause severe complications because the foetus totally depends on blood for oxygen and nutrients. So the importance of blood and its contribution in development of different *Avyavas* according to sushruta can be justified.

CONCLUSION

The conclusion which has been extracted from this study is that the deep knowledge, keen observation and valuable literature described in sushrut samhita holds quite truth and accuracy with the discoveries and modern literature explored by the modern day embryologists.

Exact correlation between ayurvedic and modern Rachna Sharir is quite tough but some texts can be correlated based on physiological anatomy and the same effort has been done in this particular study. In this study only a minute sphere of Ayurvedic concept of *avayas* development in *garbha* has been tried to dealt with. The treasure of knowledge pertaining to the embryology in the ancient literature though retaining behind the roots and its branches, could not have the attraction of deserved workers and was left neglected. It is time when the hidden truths of this particular branch of Rachna Sharir should get explored and

proved with the advance and highly spectacular and sophisticated technology of the modern science. So an effort should be made by Ayurvedic scholars for more and more exploration and to extract out the ancient and fruitful concepts and ideologyof acharyas into its practical significance.

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