Development of Foetal Body Parts as per Garbhaavakraanti Shaareera - An Ayurvedic Perspective

Prabhu Rohit Ramesh¹, Ranjith Kumar Shetty², Sri Nagesh K.A³

¹Final Year Post Graduate Scholar, Dept of PG studies in Ayurveda Samhita & Siddhanta, Sri Sri College of Ayurvedic Science & Research, Bengaluru, Karnataka, India.
²Professor & Guide, Dept of PG studies in Ayurveda Samhita & Siddhanta, Sri Sri College of Ayurvedic Science & Research, Bengaluru, Karnataka, India.
³Professor and HOD, Dept of PG studies in Ayurveda Samhita & Siddhanta, Sri Sri College of Ayurvedic Science & Research, Bengaluru, Karnataka, India.

ABSTRACT

The conception and development of a healthy offspring have been a paramount concern for humanity throughout history. This concern is deeply rooted in various cultures and traditions, and Ayurveda, an ancient Indian system of medicine, offers a holistic perspective on factors that influence the growth and development of a fetus. Ayurveda underscores several critical factors to ensure the birth of a normal and healthy progeny. These factors include "Garbha Saamagri," which pertains to the quality of reproductive materials, emphasizing the significance of the parents' health at the time of conception. "Dauhruda" relates to the timing and season of conception, asserting that environmental factors play a role in the child’s health. The "Pitrujadi Six Factors" encompass inherited attributes from both parents, stressing the importance of genetic compatibility between partners. Additionally, Ayurveda places a strong emphasis on the lifestyle and nutrition of the pregnant woman, her emotional well-being, and the regimen during her menstrual cycle. All these factors are believed to influence the child’s constitution and overall health. "Svabhava" considers the inherent nature and constitution of both parents, which can affect the physical and mental attributes of the child. It is important to note that Ayurveda offers a holistic and ancient perspective on these factors. In conclusion, Ayurveda provides a comprehensive framework for understanding the factors that influence fetal growth and development.

Key words: Garbha Saamagri, Dauhruda, Pitrujadi bhaavas, Svabhava

INTRODUCTION

The desire of giving birth to a healthy and thriving progeny has been a top priority throughout human history. The intricate journey of conception and gestation unfolds in a carefully organised succession of critical phases and events, each of which plays an essential part in determining the development of a well-formed and strong child. Any abnormalities or interruptions in these crucial processes might lead to reproductive problems and developmental or congenital defects in the developing foetus. Understanding the idea of normality in this context is also essential for revealing the numerous fertility-related problems and possible flaws that might arise during the complex stages of conception and gestation. The quest of healthy children is dependent on a complex interaction of numerous elements. By paying close attention to these factors, the prenatal environment may be optimised to promote the fetus’s unhindered growth and development, guaranteeing that the child delivered has all body parts completely developed and functional. This comprehensive approach to reproduction emphasises the importance of tireless care and attention throughout the complex process of bringing new life into the world.

AIM

To analyse the factors responsible for the development of the foetal body parts as per the Ayurveda
OBJECTIVES

1. To outline the various factors responsible for the development of the foetal body parts according to Ayurveda.

2. To explore the relationship between these factors and their impact on the development of foetal body parts.

MATERIALS AND METHODS

In the present study, Brihatrayees along with its commentaries, relevant data from other Ayurvedic literature and dictionaries were referred to compile, organise, describe and analyse the content in the systematic manner.

REVIEW OF LITERATURE

Garbha is formed when Shukra and Shonita combine together in Garbhaashaya and when the Aatma, Prakruti, and Vikara unite. The Garbha develops within Garbhaashaya for 9-12 months after they unite. Throughout this time, the growth and development of Garbha’s bodily parts can be observed. According to various references, the usual growth and development of Garbha throughout these 9-12 months is as follows:

Table 1: Maasanumaasika Garbha Vruddhi till fourth month according to different Aacharyas

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Shape of Kaalala</td>
<td>Khetabhuta (looks like Kapha/mucus)</td>
<td>It looks like mucus</td>
<td>Mucus</td>
</tr>
<tr>
<td>3. Five protruding points appear for All the Indryas/ sense organs and</td>
<td>Sakthi, Bahu and Shiras will be manifested</td>
<td>Gatra- Panchakam will be</td>
<td></td>
</tr>
<tr>
<td>4. Anga- Pratyanga will be evidently formed, Chetana Dhatu is established, Daurhruda is seen, Garbha attains Shthirata</td>
<td>The differentiaio n in between the body parts evidently seen</td>
<td>All the body parts will be distinctly seen and the foetus will experience the knowledge of Sukha-Dukha</td>
<td></td>
</tr>
<tr>
<td>5. Manas will be more awakened/ prominently functional</td>
<td>Maamsa and Shonita development happens</td>
<td>Manas will be evidently formed and developmen t of the Maamsa and Shonita happens</td>
<td>Chetana Dhatu is well developed</td>
</tr>
<tr>
<td>6. The intellect of Garbha develops</td>
<td>Bala-Varna is attained</td>
<td>Hair, body hair, nails, bones, tendons, etc. will be well formed</td>
<td>Hair, body hair, nails, bones, tendons, etc. will be well formed</td>
</tr>
<tr>
<td>7. All Angas and Pratyangas will develop evidently and distinctly.</td>
<td>All the Bhavas will be well formed</td>
<td>All the body parts will be well formed</td>
<td>All the body parts will be well formed</td>
</tr>
<tr>
<td>8. Ojus will be unstable. When the delivery happens, there are high chances of foetal death</td>
<td>Ojus is unstable and moves from mother to foetus, causing the mother to become fatigued on and off.</td>
<td>Ojus is unstable and moves from mother to foetus, causing the mother to become fatigued on and off.</td>
<td>Ojus is unstable and moves from mother to foetus, causing the mother to become fatigued on and off.</td>
</tr>
</tbody>
</table>

The growth and development of Garbhaashaya is as follows:

- The body parts start growing. Also, Daaurhruda Avastha is seen, and when the Aatma, Prakruti, and Vikara unite.
- The growth and development of Garbhaashaya for 9-12 months after they unite.
- Throughout this time, the growth and development of Garbha’s bodily parts can be observed.
- According to various references, the usual growth and development of Garbha throughout these 9-12 months is as follows:
- Table 1: Maasanumaasika Garbha Vruddhi till fourth month according to different Aacharyas

The intellect of Garbha develops with Bala-Varna attainment. The body parts will be well formed and the foetus will experience the knowledge of Sukha-Dukha.

The intellect of Garbha develops with Bala-Varna attainment. The body parts will be well formed and the foetus will experience the knowledge of Sukha-Dukha.

The intellect of Garbha develops with Bala-Varna attainment. The body parts will be well formed and the foetus will experience the knowledge of Sukha-Dukha.

The intellect of Garbha develops with Bala-Varna attainment. The body parts will be well formed and the foetus will experience the knowledge of Sukha-Dukha.

The intellect of Garbha develops with Bala-Varna attainment. The body parts will be well formed and the foetus will experience the knowledge of Sukha-Dukha.
Growth and development of various organs of foetus depends on several factors that are described in Samhitas. All of the conditions necessary for the growth and development of the foetal body parts must be met in order to produce progeny that are healthy, well-developed, and well-grown. The following are these factors:

1. **Garbha Saamagri** \[5\]

The main four factors for Garbha to exist are as follows, Rutu, Kshetra, Ambu and Beeja.

**Rutu** means the Rutu Kaala; proper time for the union of sperm and ovum. It is considered as twelve days after menstrual flow stops. In some cases, the menstrual flow might not be seen, where one should understand Rutu Kaala based on the signs seen in a female. The signs are - the women whose face is corpulent and cheerful; excessively moistened body gams, and gums; who has longing for a man; talks sweetly; laxity in Kukshi, Akshi and Murda; develops twitching in arms, breasts, pelvis, umbilicus, thighs, buttocks; excessive desire for coitus.

**Kshetra** means Garbhaashaya, the place where the Garbha stays for 9-12 months. It should be proper and should be able to withstand the foetus during its growing phase after the fertilisation of sperm and ovum.

**Ambu** means the Rasadhatu which is formed after complete digestion of Aahaara-Rasa. This Aahaara further helps in nurturing the foetus in Garbhaashaya. The nurturing of foetus is based on two factors - Upasveda and Upasneha. Mother’s Aahaara Rasa-veerya is transmitted to foetus via the connection between her Rasavaha Naadi and the Garbha’s Naabh Naadi after the body parts of the foetus start developing. Garbha Dhatu development occurs with the help of Upasneha. After the fusion of sperm and ovum and before the creation of foetal body parts, the Upasneha is brought about by Tiryagkata Rasavaha Dhamanis that are dispersed throughout the mother’s body. Upasweda is responsible for the Swedana of the Garbha which further helps in the growth of the Garbha.\[7\]

**Beeja** is nothing but the Aartava (ovum) and Shukra (sperm), without which the creation of the foetus is not possible. Here the Aartava and Shukra is to be considered as Shuddha Aartava and Shukra. This Shodhana of Aartava and Shukra is to be done before planning for conception.

The first three factors (Rutu, Kshetra, and Ambu) are responsible for the proper growth of the foetus in the Garbhaashaya whereas the last factor (Beeja) is responsible for the creation of the foetus.

2. **Daurhruda During Pregnancy**\[8\]

Any Indriyaartha that a Garbhini wishes to perceive during Daurhruda Kaala must be made available to her by a Vaidya who fears her Garbhabaadha. Such a Garbhini/Daurhruda who has been granted with her desires gives birth to a progeny with good qualities, while the Garbha of a Daurhruda who has not had her wishes fulfilled will be concerned about its Aatmavishaya being hindered. Any unfulfilled Indriyaartha desire in Daurhruda will result in misery for the corresponding Indriya of the progeny.

3. **Pitrujadi Six Factors**\[9\]

The Pitruja factors are hair, mustachio, bodily hair, bones, nails, teeth, veins (Sira), Snaayu, Dhamani and semen which are all Sthira in nature. The Maatruja factors are muscular tissue (Maamsa), blood (Shonita), fatty tissue (Meda), bone marrow (Moja), heart (Hrut), umbilicus (Naabh), liver (Yakrut), spleen (Pleeha), intestines (Aantra) and anal canal (Guda) which are all Mrudu in nature. The Rasaja factors are responsible for the growth of Shareera (Shareera-Upachaya), strength (Bala), complexion (Varna), maintenance (Shhit) and instability in the body (Haani). The AAatmaja factors are Indriya, Jnana, Vijnana, Aayu, Sukha, Dukha, etc. The Sattvaja factors are the ones which are seen in the Maanasika Prakriti that is Satvika, Rajasika and
Tamasika Prakriti. The Satmyaja factors are Veerya, Aarogya, Bala, Varna and Medha.

4. **Aachaara Followed By Pregnant Lady**\[^{10}\]

Those who are devoted to God and Brahmana, engaged in cleanliness, good conduct and benevolence will give birth to child having good virtues, otherwise devoid of good virtues. This also includes Garbhini Paricharya which includes proper Vihara and Aahaara which pregnant lady should follow. Vihara like maintaining hygiene, wearing white clothes and garments, should avoid touching and be with the people who are unhygienic, should not go to the places where there is foul smell and the place which is untidy, etc. Aahaara which is Hrudya, Drava, Madhura Rasa Yukta, unctuous, Deepaneeeya Dravya Samskruta, etc. Garbhini should also follow the Aahaara according the month which is responsible to maintain the health of the foetus as well as Garbhini.

5. **Aachaara Followed By Female In Her Bleeding Phase**\[^{11}\]

In Rutudarshana Kaala (bleeding phase), from first day the female should be Brahmacaarini and should avoid day sleep, application of collyrium, crying, bathing and application of Sugandhi Dravyas, Abhyanga, cutting nails, running, laughing, excessive talking, listening to loud noise, combing hair and exposure to wind. The reasons for these contraindications are as follows –

<table>
<thead>
<tr>
<th>Contraindication for female in bleeding phase</th>
<th>Effect of contraindication on foetus if followed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diva- svapna (Day sleep)</td>
<td>Swapnasheela (drowsy/sleepy)</td>
</tr>
<tr>
<td>Application of Anjana (collyrium)</td>
<td>Andha (Blindness)</td>
</tr>
<tr>
<td>Rodana (Crying)</td>
<td>Vikruta Drushti (Impaired vision)</td>
</tr>
<tr>
<td>Snaana (Bathing) and application of Sugandhi Dravyas</td>
<td>Dukhasheela (always sad)</td>
</tr>
</tbody>
</table>

6. **Beeja, Beeja Bhaga and Beeja-Bhagavayava**\[^{12}\]

A female who indulges in Dosha Prakopaka Nidana, Doshas will move all over the body and then moves towards Shonita and Garbhaashaya. When the Doshas does not vitiate the whole Shonita and Garbhaashaya then the foetus formed will have defect in any of the either part of body contributed by mother. When certain of the part of the Beeja responsible for the development of certain body part gets vitiated then there will be abnormality seen in that particular part of the foetus. When part of Shonita responsible for the development of the Garbhaashaya or the Beeja (Shonita) is vitiated then the foetus born will be infertile or Vandya. When the single part of Shonita which is responsible for the development of the Shonita in Garbhaashaya of the foetus is vitiated then Pooti Prajaa will be born. When the part of Shonita which is responsible for the development of the body parts of female is vitiated then foetus born will be a female but will not have all the characters of female in her. Similarly, the concept of Shukra Dushti can be understood.
7. Svabhava as a factor for growth and development of body parts of foetus[13]

Formation of Anga-Pratyanga takes place by Svabhaava. Whatever Guna or Aguna occur in Anga-Pratyanga should be known as caused by previous life righteous or unrighteous deeds of the foetus.

DISCUSSION

Discussion on Garbha Saamagri

The basic four components for the formation of foetus are Rutu (proper time for conception), Kshetra (Garbhaashaya), Ambu (nourishment) and Beeja (Aartava and Shukra).

The proper time for the conception is twelve days after the bleeding phase. If the conception happens in the bleeding phase, then the foetus born will be deformed. The deformities seen based on day of conception are as follows

Table 3: Qualities of child if the fertilization happens in Rajasvalaa Stree (bleeding phase)[14]

<table>
<thead>
<tr>
<th>Day in Rajasvalaa Stree (bleeding phase)</th>
<th>Characteristics of child</th>
</tr>
</thead>
<tbody>
<tr>
<td>First day</td>
<td>Phalashoonya child (that child will not be able to reproduce further)</td>
</tr>
<tr>
<td>Second day</td>
<td>Garbhapaaata (Garbhasaavaa or Garbhapaaata - Abortion)</td>
</tr>
<tr>
<td>Third day</td>
<td>Child will die in the Sootikaagruha, if not death, it will have Alpaayu and Heena Anga.</td>
</tr>
</tbody>
</table>

Based on the day of fertilization during Rutukaala, the qualities of the foetus vary. These qualities are told in following table -

Table 4: Qualities of child born due to Maithuna during 4th - 16th Raatri[15]

<table>
<thead>
<tr>
<th>Maithuna Raatri (after menstrual cycle)</th>
<th>Phala</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chaturtha Raatri (4th night)</td>
<td>Alpaayu Putra</td>
</tr>
<tr>
<td>Panchama Raatri (5th night)</td>
<td>Kanyaa</td>
</tr>
</tbody>
</table>

Hence, the importance of the Rutu in the conception and growth and development of the foetus.

Kshetra here is the area or a place where the foetus stays which is of the female which should be well built and should be capable for bearing the foetus. Any deformity in the Garbhaashaya will lead to either improper development of the foetus or there might be abortions.

Ambu is nothing but the nourishment to the foetus which happens through the process of Upasneha and Upasweda. Upasneha happens by the essence Rasa Dhatu of the pregnant lady through Garbhanabhi Nadi. As Rasa is Soma Guna Yukta, the Upasneha can also be considered as the Soma Guna Yukta. Upasweda happens by the Ushma of the pregnant lady. It helps to absorb the essence of Rasa Dhatu which comes from the Garbhanabhi Nadi. Upasneha is responsible for providing the nutrition to the foetus from the pregnant lady whereas Upasweda helps in proper absorption of this nutrition and is responsible for the overall growth of the foetus. When the Rasa Dhatu from the pregnant woman is vitiated and the Ushma from the pregnant lady is not sufficient then the growth of the foetus will...
be hampered. Upasneha is responsible for imbiring proper functionality and strength in the respective parts of the foetus and Upasweda is responsible for the overall growth of the foetus.

Also, the word Upasneha is formed form the two words ‘Upa’ and ‘Sneha’ where ‘Upa’ has several meanings but here it can be taken as ‘Heena’ meaningless and ‘Sneha’ which is unctuous. The functions of Sneha are it reduces Vaata, softens the body and clears the Mala from the Srotas. Thus, Upasneha carries out these functions in the foetus through Rasa Dhatu of pregnant lady in ‘Heena Matra’ that is in less quantity due to which proper Gati of Vaata is maintained, softness of the foetal body is seen and there will be no accumulation of any Malas in the Srotas. Similarly, by Upasweda it helps the Rasa Dhaatu from pregnant lady to nourish foetus uninterruptedly as Sweda has the property of Stambhaguna, Gauravaghna and Sheetaghna.

Beeja of both male and female should have ideal qualities in order to attain healthy and wealthy progeny. Shukra should be liquid in nature, unctuous, sweet, smell like honey, be viscous like oil and honey, be thick and slimy, whereas Aartava should appear every month, be non-sticky, and the colour should be like Gunja seed, red lotus flower, shellac, and will not stain the cloth. If the Beeja of either of the parent is vitiated then it will lead to the deformity based on which part of the Beeja has been vitiated. In order to prevent this Shodhana of Shukra and Aartava must be done before planning for conception.

Probable reason how Daurhruda will affect the growth and development of the foetus:

As the Garbha is in Garbhaashaya and is not able to express its desires, these desires are expressed through the mother. These desires are to be fulfilled in order to maintain the better health of the Garbhini as well as Garbha. If not fulfilled it may lead to Janmbala Pravrutta Vyaadhi. The diseases included are Pangu, Jaatyandha, Baadhirya, Mooka, Minmina, Vaamana, etc. The particular type Daurhruda experience by the Garbhini is due to the Purvajanma Karma of the Garbha. If desires of foetus expressed by the mother are suppressed then due to direct association of these desires to with very delicate foetus, its Vaayu gets vitiated and injuries it. However, if mother’s own desires are suppressed then vitiated Vaayu of mother reaches the foetus, because desire of the both is same, and this aggravated Vaayu influencing Manas of the foetus produces various abnormalities. At certain times due to slight difference in desire of both, the abnormalities of mother like hunger etc. do not affect the foetus. This congenial and affectionate treatment should be extended even to non-pregnant whom during Rutukaalai.

Svabhaava as the ultimate factor for the growth and development of foetus

The development of the Anga-Pratyanga happens due to Svabhaava. If there is and deformity seen in Anga-Pratyanga even after following Aahaara and Aachara as per Shaastra then here it should be understood that it is due to the Poorvajanma Kruta Karma which is playing the role in formation of Anga-Pratyanga. As Aatma is Nitya and Vibhu, it just changes old Shaareera to new Shaareera just like one replaces old clothes by new clothes. Hence, based on the Karmaphala of the Aatma it takes Aashraya in that particular Yoni at the time of union of Shukra and Aartava. This is again dependent on the Dharma-Adharmaadi Bhaava. The Dharma-Adharma of the Saamidshidhika Bhaava (Purva-Janma Kruta) is responsible for the development of the Anga-Pratyanga in the Garbha. If the Dharma Bhaavas of the Garbha are strong then the Anga-Pratyanga will be well formed whereas if Adharma Bhaavas of the Garbha are strong then the Anga-Pratyanga will not be properly formed.

CONCLUSION

For the conception of the healthy progeny Garbha Saamagri should be taken care of, the conception should happen in RutuKaala, the Garbhaashaya of the female should be healthy and fit for giving support to the foetus, the Aahara of the Garbhini should be proper by which the proper nourishment of the foetus will happen and the Beeja (Shukra and Aartava) should have ideal qualities in them. Upasneha and Upasweda are the modes by which the nourishment of the foetus
ISSN: 2456-3110

Prabhu Rohit Ramesh et al. Development of Foetal Body Parts as per Garbhaavakraanti Shaareera

happens. Upasneha is responsible for imbibing proper functionality and strength in the respective parts of the foetus also it maintains proper Gati of Vaata in foetus, softness of the foetal body is seen and there will be no accumulation of any Malas in the Srotas and Upasweda is responsible for the overall growth of the foetus and the Rasa Dhaatu from pregnant lady to nourish foetus uninterrupted by the property of Stambhaguna, Gauravaghna and Shetaghna. When a female does not follow proper regimen during her bleeding phase it will affect her Beeja, Beejabhaga and Beejabhagavayava and will cause respective deformity in the foetus which will be born in future. When Vimaanana of Daunhruda of a particular Indryaartha of Garbhiini is done to the Garbhiini then due to the Vaata Prakopa the respective Indriya will be affected in the foetus. After fulfilling all the factors, if the foetus has done any Papakarma in its previous birth then by Svabhava there will deformity seen in the respective part/s of the body.

REFERENCES


