A COMPREHENSIVE STUDY OF GARBHA SHARIR AS DESCRIBED IN BRIHATTRAYEES

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INTRODUCTION
In Ayurveda, it is undoubtedly told that Swastha Sharir is needed for attainment of the Purusharatha Chatushtaya i.e. Dharma, Artha, Kaam, Moksha. Maintenance and safety of Swastha Sharir is the main aim of Ayurvedic science.¹ According Acharya Caraka “the physician, who understands the Sharir (Body) exclusively and at all times taken, knows fullness of the science of life, which provides delight to the world.”² The knowledge of ‘Sharir’ begins with the knowledge of Garbha. It is in this context that the study of Garbha gains importance. The knowledge of Garbha helps to generate conditions for better management of pregnancy leading to the creation of a healthy new generation and thus helping the overall development of the society as a whole. Understanding and managing the normalcy and abnormality of foetus forms the essential part of obstetric care.

Garbha- Maharshi Charaka says that the Samyoga of Shukra, Shonita and Jeeva (Atma) inside the Kukshi is named as Garbha.³ The definition of ‘Garbha’ has been also precisely propounded by Sushruta conveying the more or less meaning to that of Charaka. Illustrating the location and component, he states that 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’.⁴ In Kashyap Samhita, in addition to components of ‘Garbha’ as described by Charaka and Sushruta, there is more emphasis on philosophical background playing role behind ‘Garbha’ has been stated as resulting from an entrance of ‘Beeja’ (sperm), when it gets entered inside the ‘Rakta’ (ovum).

Key words: Garbha Sharir, Garbhaadhana, Brihatrayeves

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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.  

**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.

**Raja/Artava**- The menstrual blood in women is produced by Rasa (Dhatu), and Rakta named as Raja is formed. Rakta reaching Yoni (uterus) and coming out for three days in every month is called Artava. The blood collected for whole month by both the Dhamanis assuming slight black colour and specific colour or odour is brought downwards to Yoni-Mukha (vaginal orifice) for excretion. According to Chakrapani Shonita term similar to Artava.  

**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.  

**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.

**Garbhadhan Yogya**- Garbhadhan Yogya age in the sense of man, after attaining the age of twenty five years, should have copulation with his wife, who has attained sixteen years of age, for the purpose of begetting male offspring. Only at those ages, both of them will have attained full vigour and will be capable of producing of valour. Copulation before twenty five years of age for man and sixteen years for woman will only produce a child which dies in the womb itself, or if born, will have short life, poor strength, ill health or abnormal body parts. Same thing happens with copulation, during the first three days of Ritu and with impurities of Shukra and Artava.  

**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.

**Ritu**--Ritu means a state of normal female menstrual cycle which indicates the proper time for conception.

**Ambu**–This is third factor to support the active process of fertilization and development. The term Ambu represents Ahara Rasa (nutritional element).

**Beeja**- It means the main cause of Utpatti Beejam (seed), which has the capacity to induce new growth / generation.

**Kshetra**- Kshetra term indicates the Garbhashaya.  

**Garbhashaya**- The word Garbhashaya is composed of two words i.e. Garbha and Ashaya. Ashaya means the place to rest. Thus the Garbhashaya means the space or the place where Garbha lies and develops.

**GARBHAVAKRANTI**

The correct definitions of ‘Garbhavakranti’, given by different commentators, though differ in their way of presentation but carry more or less the same meaning. According to Chakrapani – denoting the descent of a Garbha.

**Dalhana** – the commentator of Sushruta Samhita defines it as an ‘Upagamanam’ or ‘Avataranam’, which means descent of anything. This also indicates the descent of...
an embodied life principle resulting from union of Shukra and Shonita in the form of Garbha. 17 According to Arunadatta, ‘Garbhavakranti’ has been defined as a state of ‘Agarbha’ attaining the state of ‘Garbha’. Here the definition clearly differentiates the two distinct states i.e. the state of Garbha following the state of Agarbha. The parental units and their concerned accessory factors may be considered to be in a state of Agarbha and these very factors governed by certain mechanical, environmental and time, bring the state of Garbha. 18 Indu takes it as a state of formation or attainment of a shape. This also signifies a process by which the causative factors playing role behind the Garbha and which were dormant in the beginning, when attain a definite size and shape following the process of growth and development. It means Ritu, Kshetra, Ambu and Beeja contribute in the formation of Garbha but afterwards different organs develop in the Garbha with the help of different Bhavas. 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. In Ayurveda, along with the Shukra and Shonita as main factor, the accessory factors have been minutely observed and elaborately dealt. Maharshi Charaka says that the following factors help in the growth of the Garbha in the Kukshi of the mother-
I. Satbhava sampat
II. Upasneha and Upasweda
III. Ahara, Vihara of mother
IV. Kala parinama
V. Svabhava

**GARBHA LINGA NIRDHARAN**

According to Ayurveda Garbha lingam or sex is the contribution of Shukra Dhatu and Artava. It is the predominance of ‘Shukra’ and ‘Artava’ particularly at the time of ‘Shukra Artava Samyoga’ (time of fertilization), which determines the sexuality according to Indian thoughts.

**PUMSAVANA KARMA**

Pumsavana Karma in the sense of procedure that changes the sex of the Garbha before its manifestation is now being described. These methods, if adapted, in association with the excellence of locality and time produce the desired effects invariably. If there is any variation in these, the results become otherwise.

**GARBHA VRIDHI**

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

**GARBHA VARNOTPATTI**

Factors responsible for the complexion of the progeny these are Agni Mahabhuta when associated with Jala and Akasa Mahabhuta also produce Avdat Varna. Associated with Prithvi and Vayu it products Krishna Varna and with all the Mahabhuta in equal proportion, it products Shyam Varna.

**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 foetus derives its nourishment by Upsneha way through the
Rasavaha Dhamni which are spread obliquely in all the arts of its body and survives.\textsuperscript{19}

**GARBHA VIKRITI:** Abnormality of foetus in intra uterine life due to defects of gene, the self, past deeds, uterus, time and mother’s food and behaviour; the vitiated Dosas produce various abnormalities in shape, complexion and sense organs.\textsuperscript{20}

**MASANUMASIK GARBHA VRIDHI**

<table>
<thead>
<tr>
<th>Month</th>
<th>Charaka</th>
<th>Sushruta</th>
<th>Vagbhata</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>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</td>
<td>First month product of conception is in the shape of Kalala</td>
<td>In the first month, during the first seven days, the embryo becomes a Kalala (Astaang Hridaya) \newline In the first month there will be formation of Kalala Astaang Sangraha</td>
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<td>2</td>
<td>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 Arbuda. The Pinda shaped Garbha leads to the production of a male child, the Peshi shaped to an enough one</td>
<td>Second month Tridosha and Panchamahabhta processed in Kalala the foetus was solid shape, the shape of foetus decide sex of progeny. If as Peshirupa (elongated muscles/spindle shape) then female, if Arbuda shape (tumour shape) then Napumsak will be born</td>
<td>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 Hridaya and Astaang Sangraha)</td>
</tr>
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<td>3</td>
<td>In the third month Sarva Indriya, Sarva Angavyaya manifests them simultaneously</td>
<td>In the third month, five buds develop, one each of the arms, legs and head; even the differentiation of major and minor manifests minutely</td>
<td>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</td>
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**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.\textsuperscript{21}
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. 

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<th>4</th>
<th>Garbha gets stabilised. Therefore, at that time, pregnant women specifically get excessive heaviness in her body</th>
<th>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 Vikritaksa. Hence, whatever she desire should be provided to her, if desires are fulfilled, she deliver powerful and long lived son.</th>
<th>In the fourth month, all the parts become manifest. During the fourth month, all the major and minor parts of the body become clearer and the foetus become stable. Astaang Sangraha</th>
</tr>
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<tr>
<td>5</td>
<td>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.</td>
<td>In the fifth month, mind becomes clearly manifest. Astaang Hridaya Mind becomes well active due to increased Maansa and Shonita during the fifth month. Astaang Sangraha</td>
<td></td>
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<tr>
<td>6</td>
<td>In comparison with other months, there is excessive increase in Bala, Varna of the</td>
<td>In the sixth the intellect. In the sixth month, the tendons, veins, hair, strength, colour, nails and skin (become manifest</td>
<td></td>
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<tr>
<td>Garbha during the sixth month of gestation. Therefore, at that time the pregnant women lose her Bala and Varna considerably</td>
<td>Astaang Hridaya</td>
<td>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</td>
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<td>7</td>
<td>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</td>
<td>Astaang Sangraha</td>
<td>In the seventh month, it (foetus) is developed in all its part and nourished well</td>
</tr>
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<td>8</td>
<td>In eight month of pregnancy is fatal period because Garbhaja Ojas which becomes unsteady.</td>
<td>Astaang Hridaya</td>
<td>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. Some other says that death of the foetus (born during eight month) is due to influence of Nirritti.</td>
</tr>
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<td>9</td>
<td>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 Birth may take place in any one of the ninth, tenth, eleventh or twelfth months. Birth taking place apart from these months is abnormal</td>
<td>Astaang Sangraha</td>
<td>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</td>
</tr>
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</table>
GARBHA PARTANTRATA: Garbha does not part in any activity of intra uterine life due to scantiness of excretions and little contact of Vayu with large intestine, the foetus, in uterus, does not pass flatus, urine and faeces. Garbha is completely depending on the mother for the vital function like Nishwas, Ucchwas, Sanksobha (movements), Svapna of Garbha to carry out by mother for Garbha.

GARBHA PRAKRITI: The Prakriti is defined as the aspect which is stable from birth to death and which is formed at the time of conception due to self aggressiveness of Shukra and Shonita.

GARBHINI PARICHARYA: The care of the pregnant woman is similar to that of the foetus. So the pregnant woman should be looked after carefully with all pleasant and suitable things, protecting her from all factors which cause abnormalities of the foetus. As the foetus goes on developing, there will be reduction in strength of the pregnant woman due to weight, non-intake of food and diversion of the essence of food.

DISCUSSION
Science is the result of curiosity of human being through which human being has studied, analyzed and come to the results of various natural processes occurring in body. Today practically and scientifically the existence of everything has been proved. Ayurveda, being a part of this science also needs a deep study and research for proving all the facts established by Acharyas in ancient time. In Ayurvedic treatise, the matter related to the concept of Garbha Sharir is scientifically described. Specific Sthana of the Samhitas where the whole growth, embryology and genetics is recognized as “Sharir Sthana”. It has well recognised that the parental units taking parts in development of Garbha more precisely. The terms employed for these embryonic components and their stages of developments appear to be more appropriate and scientific, if viewed in the light of present advances. The references related to Garbha Sharir are scattered throughout the various Samhitha. Which are to be compiled together for complete knowledge of Garbha Sharir and for further use in various studies. Garbha Sharir helps us to understand why some children are born with organs that are abnormal. Appreciation of the factors responsible for mal-development assists us in preventing, or treating such abnormalities. Ayurvedic texts have very systemic description of various facts responsible for better progeny like-prescribed dietetic regimen for both partners, mode of life and unvitiated qualities of Shukra, healthy Yoni, healthy Garbhashaya and unvitiated Shonita for conception thus ultimately a better offspring. Marriage with disease free and Atulyagotriya women will avoid various hereditary disorders which may affect the child as in these conditions recessive gene become dominant thus increases the probability of congenital deformities.

CONCLUSION
After this detailed discussion we can arrive at certain conclusions like detailed embryological discussion is given in our classical text right from the preparation of Garbhadhana till delivery like Garbha Sambhava Samgari, Sadhbhaav, Garbha Vridhikar Bhava, Garbhabhavkanti, Pumsavan Karma etc. This detailed description is far more advanced and
detailed than modern embryological description. Thus this advanced knowledge can be utilized to develop better progeny. Which will be free from various congenital deformality and thus the building blocks in development of healthy world. In this way the knowledge of embryology is essential for the study of Anatomy, Pathology, Surgery, Obstetrics and Paediatrics. Thus there is need to explore and analyze afore said factors to have greater understanding of the subject. In this light, this study would be able to further elaborated the knowledge of Garbha Sharir and make it Yutanuroopa i.e. as per need and utility in this era and thus will be a great help for future research works in the field of Garbha Sharir.

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