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To assess the Garbha Poshan by Upsneha and Upsweda Nyayas in Ayurveda and to assess the Role of Incubators in Post Natal Care

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ABSTRACT

Ayurveda, commonly known as "The Science of Life" originated in India 5000 years back. It places great emphasis on a holistic approach that not only addresses the root cause of diseases but also helps in prevention of disease by including the way of living healthy. *Ayurveda*, the indigenous system of medicine, narrates about the genetic principles, *Garbhavakranti* (embryology), *Garbhini Paricharya* (Ante Natal Care), Port partum care, and a newborn care in stepwise and systematic manner in *Brihattrayi's*. The ultimate aim of Antenatal Care is to achieve healthy mother and a healthy baby. The concept of *Suprajajanana* is the prime concern of *Ayurveda* since a long time. Nutrition during pregnancy has a profound effect on development of the foetus. Before formation of placenta, nourishment of foetus occurs through *Upasneha Nyaya* afterwards it is nourished by *Upasweda Nyaya* and by a placental circulation. The improper foetal nutrition may end in *Akal Prasav* (preterm labour) or *Garbhavyapadas* like *Upavishtak* (IUGR) or any other foetal is complications. It is evident that *Ayurveda* offers holistic natural formulations in the management of *Garbhavyapadas*. In modern medical science infants with or without LBW or IUGR are managed by keeping them in Incubators under observation, as they achieves a very little time to grow and gain weight in the mother's womb.

Key words: Ayurveda, Garbha Poshan, Upsneha, Upsweda, Incubators.

INTRODUCTION

Ayurveda, the System of Indian medicine and a "Science of life" deals with the well-being of mankind. Pregnancy is a very important milestone in every woman's life and as a concept of *Suprajanana* (healthy

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Published by Maharshi Charaka Ayurveda Organization, Vijayapur, Karnataka (Regd) under the license CC-by-NC-SA progeny) is a prime concern of *Ayurveda*, it gives importance to the nutrition during pregnancy. Health and wellbeing of a foetus depends upon the health and nutrition of mother.

A union of *Shukra* (sperm), *Shonit* (ovum) and *Atma* (Soul) in the *Garbhasahaya* (uterus) is termed as *Garbha* by *Acharya Charaka*.^[1] Ayurveda has recognized the importance of diet and nutrition in health and disease and it has been advocated that both health and diseases are products of nutrition.^[2]

Nourishment of body gets established just after conception which causes the gradual development of foetus. Influence of diet on a pregnant woman is well known today. Everything that affects the mother has impact on the foetus. Nutrients play a vital role for expected lady.

Acharya Sushrut states that, a co-ordination of the four factors such as *Ritu* (menstrual cycle), *Kshetra* (*Garbhashaya*/healthy womb), *Ambu* (*Ahar Rasa* / nutrients), *Beeja* (healthy ovum and semen) and the proper observance of the rules is necessary for the conception and development of a healthy foetus.^[3]

As the health and wellbeing of the foetus depends upon the health and nutrition of the mother, so she is both the seed as well soil where the foetus is nurtured for entire period of pregnancy. The nutrient rich soil of the mother's body ensures the germinating seed will obtain optimal nourishment to develop into a strong and stable progeny. So, the condition of intrauterine environment during pregnancy has influence over the growth and development of foetus.

Garbha Poshan

Acharya Sushrut states that properly digested food forms Rasa and Rasa Dhatu is responsible for proper nutrition of Purush (person). Rasa is Drava and Saumya in nature and is responsible for further Dhatu formation. So, one should protect this Rasa Dhatu by using all majors.

When food taken by pregnant woman is digested by *Agni* (digestive juices), a *Rasa Dhatu* will be formed.^[5] It is taken up by heart and circulated in the body by *Dashadhamani* and by *Vyana Vayu*. In pregnant woman *Rasadhatu* and is divided into three parts^[6]

- 1. Nourishes and helps the growth of a foetus,
- 2. Nourishes the mother's own body,
- 3. Nourishes the breasts to facilitate the proper lactation

So, if any dysfunction occurs in formation and circulation of *Rasa Dhatu*,

It can cause harmful effect on foetal growth.

Placenta - Apara & Garbhanabhi Nadi

In the uterus, where the foetus implants there is obstruction to *Raja* and to the *Rasa Raktawaha strotas*.^[7] This obstructed *Raja* accumulates in the Uterus to form placenta. Umbilical cord is formed from *Rasadhatu*. Placenta and umbilical cord becomes

functioning after 4th month and thus after 4th month, foetus is nourished by placenta through umbilical cord.

In Ayurvedic classics, nourishment of the foetus is explained in two parts. Acharya Charak states that, the foetus is free from thirst and hunger. [8] So, foetus is totally dependent on the mother for hunger, thirst, oxygenation and all other nutrients (Paratantra Vrutti).[9] So, mother is whole and sole responsible for foetal activities. Before the foetal organs are not manifested it gets nourishment by Upasnehana (perfusion). The Rasa from Sukshmastrotas of mother by *Upasnehan* accumulates near foetus and foetus gets its nourishment through this Rasa. Acharya Sushrut also states that nourishment of the foetus is exactly similar to the nourishment of the trees on the bank of water filled pond, [10] as from the time of conception till the foetal organs are not manifested, it gets nourishment by Upasnehan (perfusion) i.e., through vessels obliquely running into all body organs.

After the foetal organs are manifested, a part of nutrition is received by *Upaswedan* (warmth of the mother) i.e., by permeation through the pores of skin situated in the *Loam Koop* (hair follicles) and a part of nutrition is received through umbilical Cord. The foetal umbilicus is attached to the umbilical cord and the umbilical cord to the placenta. The placenta is in turn connected with the heart (circulatory system) of the mother. The placenta gets huge blood supply and nourishment by the heart of the mother through *Rasavaha Nadi* (Blood Vessels).

Acharya Charak states that the warmth of mother's womb is also necessary for growth, as it provides appropriate temperature for growth and development of foetus (*Upasweda Nyaya*).^[11] Foetal skin being permeable and small pores over the of foetus permits the nourishment in some extent.^[12] Acharya also States that the foetus develops in the womb due to the excellence of the Procreative factors such as maternal etc, excellence of mother's conduct proper mechanism of *Upasneha* and *Upasweda*, passage of time (*Kaal*)and natural phenomena (*Swabhav*). Another reference states that, from umbilical cord the *Rasa* (Nutrient) reaches *Pakvashaya* (digestive system) of foetus, there

with its own *Kayagni* (digestive fire) it gets metabolized as *rasa* oozes out through the hair follicles (*Roma Koop*) to form the fluid outside the foetus and this *Rasa* nutrition provides *Bala* (strength) and *Varna* (complexion) to foetus as it contains all essential factors.

Garbhini Paricharya

Ayurveda described many dietary (Ahar) and daily regimens (Vihar) along with herbal medications which support the health of foetus.

The guidelines described in *Ayurvedic* texts for preconceptional care emphasizes the importance of nutrition and daily regimen in pregnancy. These specific guidelines (*Garbhini Paricharya*) to be followed, changes in accordance with the growth of the foetus inside the womb and also at the same time it ensures excellent health of the mother. Thus, the pregnant woman desirous of virtuous child should indulge in prescribed diet and regimen termed as '*Garbhini Paricharya*'.

Foetal Complications

If a pregnant woman, fails to follow these guidelines she may land up into many pregnancies related complications, which are broadly categorized as *Garbhavyapada* and *Garbhaupdrav*. *Acharyas* have described that during pregnancy due to *Mithya Ahar-Vihar* during pregnancy, over exertion, stress, malnutrition, effects of other diseases like anaemia, digestive ailments and hormonal imbalances can lead to several (foetal complications) *Garbhavyapadas* like *Upavishtak* (IUGR), oligohydramnios, Low Birth Weight.

Upavishtak Garbhavyapa is associated with nourishment of foetus for which it depends upon mother. The signs and symptoms of *Upavishtak* and IUGR are almost similar. Foetal growth restriction is said to be present in those babies whose birth weight is below 10th percentile. So, the babies who have not been able to grow to their fullest growth potential in utero have IUGR. The causes can be too many but most importantly it involves poor maternal nutrition or lack of adequate oxygen supply to the foetus. IUGR

increases the risk of pregnancy and new born complications depending upon the cause. Also, infant's birth weight is one of the most important factors affecting neonatal morbidity and mortality.

Management

According to Ayurveda, use of conservative treatment like use of Jeevaniya, Brihaniya, Madhur, Snigdha, Vatahar Dravyas with Ghrita, Dugdha and Aamagarbha will help her to come out of this condition. Even though due to these Causes or any placental problems or infections, if delivery is felt to be indicated prematurely, foetus gains very little time to grow and gain weight in the womb.

Incubators

Foetus whose growth is restricted his C-section often becomes more stressed during labour and C-section delivery can be felt to be indicated prematurely. Premature babies do not get immunoglobulins from their mothers and are therefore prone to infections. It is therefore important that such babies are taken care of during first two weeks to a month of their birth.

Growth restricted infants have a low amount of fat on their bodies and may have difficulties in staying warm. When babies are born less than 32 weeks they need to be cared for "almost like they are in the womb" so that they grow "as expected" and for this they need an "artificial womb" which is nothing but an 'INCUBATOR'. The advancements in medical technology have made it possible for premature babies to survive the first few days, weeks or months of life until they are strong enough to make it on their own. Hospitals have equipped themselves with NICU, where infants are cared for 'Incubators or Open Warmers'. [13]

Incubators are self-contained units roughly the size of a crib equipped with a plastic dome. Because premature babies lack body fat, they are less able to regulate body temperature. To this end the incubator ensures the ideal environmental conditions by either allowing the temperature to be adjusted manually or providing auto adjustment based on changes in the baby's temperature. This reduces the energy neonates have to use to stay warm. Moist air is also used to help

them maintain body temperature and avoid fluid loss. Growth restricted/ premature infants will often stay in the NICU. They are watched closely to make sure that they are getting the right balance of fluids and nutrition. It is well equipped with a protective environment, which is home for a limited period of time for these infants.

DISCUSSION

From the above concept of *Upasnehana* and *Upswedana Nyaya* we have seen that *Ayurveda* has its own way to understand *Garbhavakranti*, *Garbha Poshan* and *Garbhini Paricharya*. It is summarized that *Ayurveda* has given a depth of scientific impact on diet and nutrition on healthy progeny. *Matruparatantra* of *Garbha Poshan* is explained here with the help of *Upasneha* and *Upsweda Nyaya*. A well-fed mother will be competent to provide her foetus all its requirements while accumulating reserves for abundant breast milk. Even several thousand years ago, Ayurveda had given importance to safe motherhood.

Role of Chaturvidha Samagri, Shadvidha Bhavas is explained along with Garbha Poshon by Upsneha and Upsweda Nyaya, stated by Acharyas. The impact of improper nutrition which causes Garbhavyapadas like Upavishtak (IUGR), LBW is described. Conservative treatment for Upavishtak according to Ayurveda is also given. Complications of premature deliveries of infants with IUGR and LBW is explained and also, its management through modern medical devices such as incubators is described.

CONCLUSION

While explaining *Garbha Poshan* by *Upasneha* and *Upsweda Nyaya*, *Acharya Chakrapani* has given an example of process of incubation by a bird, where birds have to sit on their eggs to keep them warm. The warmth from parent bird makes sure that the chicks inside develop properly^[14] and this process is known as 'Incubation'. Similarly, post-natal care of premature babies with IUGR or LBW is managed by modern medical devices such as 'Incubators' to keep these babies warm. So, here it can be concluded that *Garbha*

Poshan explained by Acharyas through Upasnehan and Upswedan Nyaya shows resemblance with post-natal care of premature infants with Incubators or Radiant Warmers. Here, the attempt is made to corelate the concept of Garbha Poshan by Upasneha and Upsweda Nyaya in Ayurveda and post-natal care of premature infants caused by improper foetal nutrition by incubators because as for Ayurveda to be appreciated by western medical researchers, this traditional system of medicine needs to be understood in terms of modern science.

REFERENCES

- Acharya Charak, Charak Samhita, Sharir Sthana, 4th chapter, Shlok No 6, Ayurved Dipika, commentary of Shri Chakrapanidutta, edited by Vaidya Yadavaji Trikamji Acharya, Varanasi, Chaukhamba Surbharti Prakashana, edition 2017.
- Acharya Charak, Charak Samhita, Sutra Sthana, 28th chapter, Shlok No 45, Ayurved Dipika, commentary of Shri Chakrapanidutta, edited by Vaidya Yadavaji Trikamji Acharya, Varanasi, Chaukhamba Surbharti Prakashana, edition 2017.
- Acharya Sushrut, Sushrut Samhita, Nibandha Sangraha commentary by Shri Dalhanacharya, edited by Vaidya Yadavaji Trikamji Acahrya, Sharir Sthana 2/33, Chaukhamba Orientalia, Varanasi.
- Acharya Sushrut, Sushrut Samhita, Nibandha sangraha commentary by Shri Dalhanacharya, edited by Vaidya Yadavaji Trikamji Acahrya, Sharir Sthana 14/12, Chaukhamba Orientalia, Varanasi.
- Acharya Sushrut, Sushrut Samhita, Nibandha sangraha commentary by Shri Dalhanacharya, edited by Vaidya Yadavaji Trikamji Acahrya, Sharir Sthana3/ 31,32, Chaukhamba Orientalia, Varanasi.
- Acharya Charak, Charak Samhita, Sharir Sthana, 6th chapter, Shlok No 23, Ayurved Dipika, commentary of Shri Chakrapanidutta, edited by Vaidya Yadavaji Trikamji Acharya, Varanasi, Chaukhamba Surbharti Prakashana, edition 2017.
- Acharya Sushrut, Sushrut Samhita, Nibandha sangraha commentary by Shri Dalhanacharya, edited by Vaidya Yadavaji Trikamji Acahrya, Sharir Sthana 3/31,32, Chaukhamba Orientalia, Varanasi.

- 8. Acharya Charak, Charak Samhita, Sharir Sthana, 6th chapter, Shlok No 23, Ayurved Dipika, commentary of Shri Chakrapanidutta, edited by Vaidya Yadavaji Trikamji Acharya, Varanasi, Chaukhamba Surbharti Prakashana, edition 2017.
- Acharya Sushrut, Sushrut Samhita, Nibandha sangraha commentary by Shri Dalhanacharya, edited by Vaidya Yadavaji Trikamji Acahrya, Sharir Sthana3/ 31, Chaukhamba Orientalia, Varanasi.
- Acharya Sushrut, Sushrut Samhita, Nibandha sangraha commentary by Shri Dalhanacharya, edited by Vaidya Yadavaji Trikamji Acahrya, Sharir Sthana3/ 31, Chaukhamba Orientalia, Varanasi.
- Acharya Charak, Charak Samhita, Sharir Sthana, 4th chapter, Shlok No 21, Ayurved Dipika, commentary of Shri Chakrapanidutta, edited by Vaidya Yadavaji Trikamji Acharya, Varanasi, Chaukhamba Surbharti Prakashana, edition 2017.
- 12. Acharya Charak, Charak Samhita, Sharir Sthana, 6th chapter, Shlok No 23, Ayurved Dipika, commentary of

- Shri Chakrapanidutta, edited by Vaidya Yadavaji Trikamji Acharya, Varanasi, Chaukhamba Surbharti Prakashana, edition 2017.
- 13. Bell EF. Infant incubators and radiant warmers. Early Hum Dev. 1983 Oct;8(3-4):351- 75. doi: 10.1016/0378-3782(83)90018-x. PMID: 6641579.
- 14. Acharya Charak, Charak Samhita, Sharir Sthana, 4th chapter, Shlok No 27, Ayurved Dipika, commentary of Shri Chakrapanidutta, edited by Vaidya Yadavaji Trikamji Acharya, Varanasi, Chaukhamba Surbharti Prakashana, edition 2017

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