

ROLE OF GARBHINI PARICHARYA IN THE PREVENTION ASPECT OF GDM

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ABSTRACT

Gestational Diabetes Mellitus is an important public health problem, given its high prevalence and its association with adverse maternal and fetal outcomes. Recent evidence has confirmed that risk of adverse outcomes is a continuum, women with GDM are a high risk group for the future development of diabetes, metabolic syndrome, and cardiovascular disease. GDM affects roughly 7% of pregnancies with an incidence of more than 20,000 case per year. The prevalence, however varies from 1-14%, depending on population the diagnostic criteria that have been used. Women with GDM have a 40-60% chance of developing diabetes mellitus over the 5-10 years after pregnancy. Through Ayurveda GDM can be efficiently managed with our medications without interfering in the gestational health of the woman in the present case the diagnosed GDM patient has been managed with the Tab *Nishaamalaki* and modification in her *Ahara sevana* the outcome of the patient has been recorded accordingly.

KEYWORDS: GDM, Diagnostic criteria, Metabolic syndrome.

INTRODUCTION

Diabetes mellitus is a chronic metabolic disorder due to either insulin deficiency (relative or absolute) or due to peripheral tissue resistance. Women diagnosed to have GDM are at increased risk of developing type 2 diabetes mellitus. About 1-14 % of all pregnancies are complicated by DM and 90% of them are GDM. Nearly 50% of women with GDM will become overt diabetes (Type-II) over a period of 5 to 20 years. Pregnancy is characterized as a diabetogenic state in which insulin resistance occurs. In order to maintain glucose homeostasis, the pancreatic beta cells need to secrete more insulin.

WHO projects that Diabetes will be the 7th leading cause of death in 2030. Although diabetes during pregnancy is often asymptomatic, the consequences are substantial. Metabolic derangements may be present at the time of conception. The availability of insulin, beginning in 1922, restored fertility and virtually abolished maternal mortality. Ayurveda considers food to be the best source of nourishment as well as medication for the pregnant women. The nine monthly diet is singularly unique to Ayurveda. It changes in accordance with the growth of the fetus in the womb and at the same time ensures health of the mother.

Prevention of GDM should start intra-uterine and continue throughout pregnancy & postpartum. Classification of Diabetes in pregnancy are:

1. **Overt Diabetes:**^[1] Women known to be diabetic before the onset of pregnancy.
2. **Gestational Diabetes:**^[2] This diagnosis is made when diabetes is detected in the course of the pregnancy and is defined as carbohydrate intolerance of variable severity first diagnosed during pregnancy.

Nidana^[3]

आहारज - *Kaphakara Ahara - Guru, Snigdha, Sandra, Picchila, Sheeta, Madhura Ahara Atisevana, Navannapana & Dushita Jala, Ikshu, Guda, Dadhi Atisevana, Viruddha Bhojana.*

विहारज - *Divaswapna, Alasya.*

मानसिक - *Chinta, Shoka, bhaya.*

रोगज - *Ajeerna, Agnimandya, Shotha, Visham Jwara*

अन्यज - *Beeja Bhaga Avayava Dushti, Abhigataja.*

Purvarupa^[4]

Mutram tandula, Sweda, Anga Gandha, Shithilangata, Shayyasana Ratri, Ghana Angata, Sheeta Priyata, Gala, Talu Shosha, Madhura Aasya, Kara Pada and Daha.

LakshanasEffect of *Varjya Ahara & Vihara Sevana* on *Garbhini***In Garbhavastha: (Prenatal)***Garbha Ativridhi, Garbhodaka Ativridhi, Mutra Ati Pravritti, Yoni Kandu, Yoni Srava.***In Prasavaavastha: (Intranatal)***Mudhagarbha, Purvakalik prasava, Kalatit prasava.***Samprapti Ghataka^[5]***Dosha: Shleshma Pradhana Tridosha***Effects of DM in Pregnancy^[6]**

Complications of diabetes in pregnancy		
Maternal	Fetal	Neonatal
Pre-eclampsia Pyelonephritis Polyhydramnios Preterm Labor	Macrosomia Sudden IUD Shoulder dystocia	Metabolic disturbance : Hypoglycemia Hypomagnesia Hypocalcemia Hyperbilirubinemia Birth asphyxia Birth injuries Transient tachypnea

Dietics and mode of life

मधुरनित्या प्रमेहिणमं मूकमतिस्थूलं वा ।

स्वप्ननित्या तन्द्रालुमबुधमल्पाग्निं वा ॥^[7]

By following dietetics and mode of life like *Nitya Madhura Aahara* and *Vihaara* like excessive sleep, the fetus or child will suffer from *Prameha, Atisthula, Tandraalu, Agyani, Murkha* and *alpaagni* child.

Acharya Kashyapa has mentioned clinical features indicating intrauterine death of fetus and abortion.

बहु भुङ्क्ते तु याऽत्यर्थं बहुशो बहुमूर्च्छिता ।

भवेत्तस्याः पतेद्गर्भो गर्भिण्यास्तु न संशयः ॥^[8]

A pregnant woman who eats frequently in large quantity and becomes repeatedly unconscious have chances of abortion.

Ayurvedic line of management

Ayurveda helps in limiting the maternal and fetal complications. Herbs are helpful as a supportive treatment along with contemporary line of treatment.

1) **Pre-conceptional care** mentioned by Acharyas seems to be give a great contribution in getting the healthy progeny. Acharyas have mentioned *Snehana, Swedana, Vamana, Virechana & Basti karma* for purification of body. By proper purification and *Samskaras*, unvitiated *Yoni, Garbhasaya, Manas* and *Beeja* are ensured leading to healthy pregnancy. The woman should follow the *Ritumati Paricharya*. *Acharya Vagbhata* has advised *Phala Ghrita, Mahakalyanaka Ghrita* and *Acharya Kashyapa* has advised *Lasunaksheera Paka* for the

*Dushya: Rasa, Rakta, Mamsa, Meda, Majja, Shukra, Kleda, Lasika & Ojas.**Srotas: Mootravaha, Medovaha.**Sroto dushti prakara: Sanga**Agni: Jatharangi Mandya & Dhatwagnimandya**Adhishtana: Basti,**Vyaktasthana: Sarva Sharira**Vyadhi Swabhava: Achirakari (in garbhini)**Sadhyasadyatha: Kricchra Sadhya*

women. The women should have positive thoughts, Happiness and peaceful mind.

2.) Garbhini Paricharya

- *Acharya Charaka* says that woman desirous of producing a child should give up non-congenial diet and mode of life.^[9]
- *Acharya Sushruta* advised the woman from very first day of pregnancy to remain in high spirit, pious, wear clean white garments and worship.^[10]
- *Acharya Vagbhata I* has said the pregnant woman is fit for the use of *Brumhana* therapy.^[11]
- *Acharya Vagbhata II* has advised use of *Jivaniya Gana Dravyas* for internal use.^[12]
- *Acharya Kashyapa* says that the *Ahara Sevana* by the pregnant woman will become *Satmya* to the fetus. Thus the *Aahara* should be taken considering *Desha, Kala* and digestive capacity. She should use hot water, milk and meat.^[13]
- *Acharya Yogaratnakara* has enlisted following articles beneficial for pregnant woman-*Shali, Sastika Dhanya, Mudga, Godhuma, Lajja, Saktu, Navaneet, Ghrita*, fruit of *Amalaki, Draksha*.^[14]
- *Basti Karma* has been advised by Acharyas during 8 & 9 months of pregnancy.^[15,16]
- *Yoga & Pranayama* like *Siddhasana, Shavasana, Ujjayi Pranayama, Bhramri Pranayama, Anuloma-Viloma* are helpful.

Ahara

Purusha (human) is born and grows from *Ahara Rasa*. So *Ahara Rasa* should be maintained healthy. The food and behavior should be such that the *Ahara Rasa* is protected at all cost. As the *Garbha* (foetus) is a small

form of *Purusha*, the birth and growth of the child depends upon the food and actions of the mother.

The food taken by a pregnant woman:

- Nourishes the mother's own body.
- Nourishes and helps the growth of the foetus.
- Nourishes the breasts by which the breast milk formed maintains newborn baby.

So, the *Garbhini* should follow a careful regimen of food and behavior during pregnancy. This Regimen is known as "*Garbhini Paricharya*".

Garbha Poshana

According to *Ayurveda* Initially in first three months of Pregnancy Nutrition to the *Garbha* is by *Upasneha* and *Upakleda*. From fourth month of pregnancy nutrition to *garbha* by *Garbhanadi*. That means *garbha* gets own nutrition from the mother as mother eat that's effect will be on *garbha*. Starting 3 month *garbha* gets nutrition indirect way i.e. Through *Upsneha* and *Upkleda*, After that formation of placenta its gets nutrition through direct Placenta i.e. *nabhinadi*.^[17]

3.) Ayurvedic approach when diagnosed as *Garbhini Madhumeha*

1. *Nidaana Parivarjana*
2. Following *garbhini paricharya*

Deepana Pachana Yogas are

Pippali Ksheera Paka, *Dipyakadi Dhooma*, *Jeeraka Kashaya*, *Yavagu*,
Peya processed with *Deepaniya* drugs.

Supportive line of treatment

- *Garbha Raksha Kashaya*
- *Garbha Pala Rasa*
- *Khadiradi Kashaya*
- *Phala Sarpi*
- *Chandraprabha Vati*,
- *Vasanta Kusumakar Rasa*
- *Kataka Khadiradi Kashaya*,
- *Maha Tiktaka Kashaya*
- *Chandanasava*.

Sthanika Chikitsa

- *Yoni Prakshalana* with *Panchavalkala Qwatha* or *Triphala Qwatha*
- *Yoni Pichu*

DISCUSSION

- The person with gestational diabetes should adopt healthy and appropriate food before pregnancy which may reduce the risk of having it in future pregnancies or developing type 2 diabetes.
- For some women with GDM, regular physical activity can include walking and amount of physical activity; whereas for other women only slow walking can be advised to assure a healthy pregnancy.

- In order to understand the disease Modality in today's era, one has to consider the changes in life style to pick new etiological factors and to improve management.
- Under the *Garbhakara Bhavas Matrij bhava*, *Pitrija bhavas* can be improved before conception By *Shodhana karma*. From the *Ayurveda* Perspective for a disease of *Sahaja* nature, where in *Dhatukshaya* or *Ojakhaya* are seen, the classical approach is applied i.e. the use of *Shodhana karma* followed by *Pramehahara*, *Ojovardhaka chikitsa* and *Rasayana chikitsa*.

CONCLUSION

Gestational diabetes is a common problem in India. Risk stratification and screening is essential in all pregnant women. Strict glycemic targets are required for optimal maternal and fetal outcome. Patient education is essential to meet these targets. Long term follow up of the mother and baby is essential. According to *Ayurveda* efforts of having healthy baby commences with pre-conception care and management. But in India most of the females visit clinics after having pregnancy, so role of preconception care and management is very limited. *Garbhini parichrya* by monthly regimen described by various *acharyas* is highly effective for this purpose. If pregnant woman strictly follows *Garbhini parichrya* and *Ritumati charya* before conception, diseases of *garbhini* and *garbha* can be avoided. There are broad explanation regarding treatment of *Madhumeha*, but application of same medication in *garbhini* needs more research.

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