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**STUDY OF GARBHINI SHAREERIKA BHAVAS IN 4th, 5th AND 6th MONTH WITH
SPECIAL REFERENCES TO CHARAKA SAMHITA - AN OBSERVATIONAL STUDY**

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ABSTRACT

The monthly development of the foetus is thoroughly detailed in depth in Ayurvedic writings. Because the principles of Ayurveda are unique, the month-by-month development of the foetus according to contemporary embryology can be correlated with the Ayurvedic view to some extent. The development of a foetus occurs in a slow and steady manner, taking about 9 months to finish. The entire process is known as Garbha Utpatti or Garbhavkranti, which refers to the development and maturation of the foetus. Garbhini undergoes physical and psychological changes in tandem with Garbha's development, as Acharya charaka pointed out, particularly during her second trimester. In this study patient was assessed with modern parameters for Gurugatrat, Karshata and Bala and Varna hani criteria. This resulted in a significant shift in all of them.

Keywords: Garbhini, Gurugatrata, Karshata, Bala, Varna

INTRODUCTION

In universe human is the best production of Nature. It is a supernatural occurrence and marvel of the nature which

have appropriate shape, size and weight of human body. Pregnancy is characterised by a transition phase that includes both physical

and emotional changes [1]. Obtaining a child is a lifetime long for each female in the general public. A twisted alive embryo is one of the most horrendously awful parts of pregnancy. During pregnancy, the expectant woman undergoes significant physiological and anatomical changes in order to accommodate and nurture the developing baby. This transformation begins soon after conception and affects every organ and system in the pregnant woman's body [2]. Ayurveda gives exact depiction of Garbha Vriddhi and Vikas Kram [3], however there were no advanced imaging methods like sonography, MRI and so on Various Texts of Ayurveda gives different perspectives in regards to Garbha Utpatti and Garbha Vriddhi. Though charakacharya plainly underscores on changes of shareerika bhavas during second trimester of incubation, so in this setting he clarifies garbini achieves Gurugatrata [4] in the fourth month, Karshata [5] in the fifth month and Bala hani [6] and Varna hani [7] in sixth month. This study is an endeavor to expand and think about both antiquated and present day ideas will go inseparably during second trimester of pregnancy and its clinical importance.

AIMS AND OBJECTIVES

1. To assess the changes in Garbini, during Chaturth, Panchama and

Shastam masa garbha vriddi as per Acharya charaka.

MATERIALS AND METHODS:

Information is gathered from the OPD and IPD of SVM Ayurvedic Medical College and Hospital ILKAL. For appraisal an exceptional case proforma was ready with parameters, in 12th week of gestation we will take her weight and interrogates questioners for gurugatrata and that will be contrasted with 16th week gestations readings, mean while in 16th week for karshata right mid arm and mid thigh circumference will estimated and compared the same with 20th week readings and in the same time bala by serum protein level and questioners will be measured and varna by Fitzpatrick scale and lastly the same will be compared with readings of 24th week.

OBSERVATION STUDY:

A female aged 25 years, hailing from ILKAL working in private school as teacher, Hindu by religion, Presented on 20/01/2021, a registered ANC patient of SVM Ayurvedic Medical College and Hospital ILKAL. & with LMP 16/11/2020 and EDD – 26/07/2021, her Rajovruttanta was regular, menarche attained at 14 years of age and her married life of 7 years

Past Medical history: No History of Diabetes

Mellitus/Hypertension/Thyroid/Asthma/Operative procedures.

Family history: No history of systemic disorders

Table 1: Personal History

Aahara	Vegetarian diet
vihar	avyayama
Bowels	Regular ,normal in consistency
Micturation	Normal, 3-4 times/day.
Sleep	sound
Habits	Excessive intake of tea 7-8 times

Table 2: Physical examination

Appearance	Normal built
Nourishment	Well nourished
Pallor	Absent
Icterus	Absent
Cyanosis	Absent
Clubbing	Absent
Edema	Absent
Lymphadenopathy	Absent

Table 3: Systemic examination

Cardio Vascular System(CVS)	S1, S2 heard
Respiratory System(RS)	AEBE
Central Nervous System(CNS)	Well oriented
Per Abdomen(P/A)	Soft, uterus just palpable

Table 4: Dashavidha Rogi Pareeksha

Prakriti Dwandwaja,	Vata Kapha	
Vikrita Dosha	--	
Dushya	--	
Sara	Meda sara	
Samhanana	Madhyama	
Satva	Madhyama	
Aahara Shakti	Abhyavahara	Madyama
	Jaranasakthi	Madyama
Vyayama Shakti	Madhyama	
Vaya	Madhyama	
Satmya	Madhyama	
Pramana	Pravara	

Table 5: Astha sthana pareeksha

Nadi	Prakruta
Mala	Niraama mala, prakrita
Mootra	Prakrita
Jihva	Aliptata
Sabda	Prakrita
Sparsha	Anushna Sheeta
Drik	Prakrita
Aakruti	Prakrita

Table 6: Laboratory Investigations:

Investigations	Results
Hb	12gm%
Blood group	AB positive
BT	2 minutes 35 seconds
CT	4 minutes 30 seconds
RBS	92 mg/dl
HIV	Negative
HBsAG	Negative
VDRL	Non reactive
Urine routine and microscopic examination report	Normal

Ultra Sonography Abdomen

- Single gestational sac in with an embryo with CRL of 28mm which corresponds to 12weeks, 3 days of Gestational age.
- Cardiac activity is seen with heart rate of 176 /min

- There is a well defined yolk sac is noted
- Os is closed with normal cervical status

OBSERVATIONS:

1st observation for Gurugatrata at 12th week and 16th week by weight

	12 th week	16 th week
Gurugatrata by Weight	55 kgs	56.5kgs

Gurugatrata at 12th week and 16th week by questioners

Changes	Grade	12 th week	16 th week
No heaviness	0		
Not affecting her daily work	1	✓	
Affecting her daily work	2		✓
Decreasing her activities	3		

2nd observation for Karshata by anthropometry

	16 th week	20 th week
Right Mid arm circumference	29 cms	29.4 cms
Right Mid thigh circumference	41 cms	42.2 cms

3rd observation for Bala by serum Protein level

	20 th week	24 th week
serum Protein level	6.4g/dL	6.0 g/dL

3rd observation for Bala by psychological grading

Changes	Grade	20 th week	24 th week
No tiredness	0		
Feeling of tiredness on heavy work	1	✓	
Feeling of tiredness on moderate work	2		✓
Feeling of tiredness on mild work	3		
Feeling of tiredness in sedentary state	4		

4th observation for Varna by Fitzpatrick scale

	20 th week	24 th week
Fitzpatrick scale reading	4	4

RESULTS:

1. **Gurugatrata-** Initial dated 20/01/2021 patient presented with the weight of 55kgs at the 12th week of gestation which increased to 56.5 kgs, with significant change had seen.
2. **Karshata-** mid arm circumference changes from 29 cms to 29.4 cms, while for mid thigh circumference increased to 41cms to 42.2cms shows significant increase of thigh circumference from 16th to 20th week with no significant change had seen.
3. **Bala hani-** serum protein level decreased from 6.4g/dL to 6.0 g/dL and questioners grading increased from 1 to 2 with significant change had seen.
4. **Varna hani** - it remains same in 20th week and 24th week so there will be no varna hani.

DISCUSSION:

During pregnancy, a pregnant woman goes through a variety of physical and mental changes in order to nourish the baby in the womb and make milk to nurse the infant after birth. These alterations affect pregnant women differently than the general

population, and they frequently alter the physiological systems and behaviors of women. [8]

Gurugatrata – During pregnancy, total weight change might range from a loss to a gain of more than 30 kg (66 lb). Several physiologic and environmental factors appear to be responsible for the considerable range in weight gain among healthy pregnant women. The total weight gain during the course of a singleton pregnancy for healthy women averages 11 kg(24 lb) [9]Changes in maternal hormone secretion and other physiologic changes connected with pregnancy, for example, surely alter the use of energy sources and, as a result, the amount of weight gained. It's also possible that certain mother traits and health practices play a role. [10]. Women put on more weight in the second trimester of pregnancy than they do in the initial months. This isn't simply because of the heaviness of the developing child. A large part of the weight acquired is additional liquid (water) in the body. This is required for things like the child's dissemination, the placenta and the amniotic liquid [11], that what we have observed in this study the marked improvement of weight

of pregnant lady from 12th week to 16th week. Which shows significant increase of weight and even in questioners also the psychological feeling of pregnant lady shows increased grading indicates gurugatrata can be seen in pregnant lady as per Charakacharya even Achary Kasyapa opines same [12]

Karshata – Arbitrary cut-off points of BMI more than or equal to 25 kg/m² and more than or equal to 30 kg/m² are considered as overweight and obese respectively, obesity lead to development of type -2 diabetes, dyslipidemia and hypertension[13]. women with a "healthy" BMI prior to pregnancy, gain 10 pounds by 20 weeks, and as pregnancy advances due to blockage of major veins of lower limb, fluid collection (edema) occurs in lower limbs and intervention of drugs for maintenance pregnancy as prescribed during routine ANC may leads to increase of mid arm and mid thigh circumference so we cannot see the karshata during this study

Bala - During pregnancy, weariness and a lack of energy are frequent complaints. Fatigue was the most prevalent symptom reported by pregnant women, according to a prospective research. [14] Some women may feel exhausted throughout their pregnancy, while some may hardly feel tired at all.

Although experience with fatigue tends to vary, most women will feel more tired than usual during their pregnancy in this observational case as per parameter serum protein level and questioners grading decreased indicates bala hani of Garbini

Varna - Hormonal changes taking place in pregnancy will make As cutaneous changes in pregnancy lead to chloasma gravidarum, deep pigmentation of areola, linea nigra, striae gravidarum[15]. As per Fitzpatrick's scale we observed here remarked changes in complexion is not observed in this case but it is appreciated by the patient regarding her changes in complexion so we can declare the varna hani of garbhini

CONCLUSION:

Ayurvedic Masanumasik Garbhavruddhi concept is scientific concept and based on experience and observations of ancient Acharyas. In context of masanu masika garbha vridhi Acharya Charak while explaining garbhavridhi of fourth, fifth and sixth month development of garbha along with garbha vridhi in Garbhini feels changes in shareerika bhavas.

As per him Stiratva of Garbha in the fourth month Garbhini feels gurugatrata, in fifth month mamsa and shonita upachaya of Garbha leads to karshata of Garbhini and

Bala and varna upachaya of Gabha leads to Bala and Varna hani of garbhini.

In the present study as per modern parameters we have observed Garbhini will positively attain Gurugatrata, and Bala,Varna hani.but the result for present study shows decline in karshata. Hence the same should be again observed with large scale subjects.

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