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Case Study

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# CASE REPORT OF KASHMARI YASHTI KALPA USE IN INTRAUTERINE GROWTH RESTRICTION

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### **ABSTRACT**

Garbhkshya intrauterine growth restriction is common diagnosis in prasutitantra and carries increased risk of perinatal mortality and morbidity the causes of garbhkshya can be maternal, fetal, placental according to ayurveda vata is the predominat causes. Aggrivation of vata in pregnancy is due to lifestyle changes also not following garbhini paricharya, apathya in garbhini awasta leads to compramised blood flow to the foetus. Now a days routine usg diagnosis in obstertrics is reduced uterine artery blood flow to the foetus either beacuse of hypertension, obesity, anaemia leading to intra uterine growth restriction fortunately ayurveda has its answer sushruta the god of surgery have allready written the treatment for iugr to evidance this presenting a case of 35 year elderly primigravida who was under regular antenatal chekup was detected with intra uterine growth restriction at 27 week she was given allopathik treatment initially but

the condotion was deteriorated patient prefferd to take ayurvedic treatment and treadted with ayurvedic medicines considering the case as garbhkshya she was administered kashmari yashti kalpa internallyal along with diatery advises she deliverd a healthy female baby weighing 3.1 kg at term.

KEYWORDS: Garbhkshya, Garbhini Paricharya, Iugr, Kashmari Yashti Kalpa.

#### INTRODUCTION

IUGR is defined as a rate of fetal growth that is less than normal for the expected growth potential of a specific infant. Fetuses with isolated single umbilical artery are at higher risk of prematurity, IUGR (Intra uterine growth restriction), and intrauterine death. Ayurveda provides a holistic approach towards garbhini paricharya (Antenatal care). Nabhinadi (Umbilical cord) nourishes the fetus, and abnormalities result in garbhashosha. This is a case report of IUGR associated with baby weight less than 20 th percentile and restricted uterine artery blood flow The obstetric scan revealed decreased abdominal circumference and falling growth parameters. Ayurvedic medicines with brimhana, balya, prajasthapana actions were given. The outcome was a full-term baby of birth weight 3.1 kg through vaginal delivery.

Intra-uterine growth restriction is a major scenario worldwide as individuals born as growth retarded babies are having various other co-morbidities during adulthood. It can be defined as the inability of the foetus to achieve genetic growth potential due to a negative environment in the uterus during pregnancy \*1+. 3% to 7% of all pregnancies may be affected by foetal growth restriction. When the birth weight of the foetus is below the 10th percentile of the average for the gestational age it can be considered as Intra Uterine Growth Retardation (IUGR)\*2+. It occurs due to restriction in the growth pattern of the foetus corresponding to gestational age which may result in adverse foetal outcomes. Such infants are at risk of neonatal mortality and cmorbidities. Poor maternal nutrition, social deprivation, foetal infections, chronic hypoxia, anaemia, utero-placental insufficiencies congenital anomalies etc., can be a cause of developing foetal growth retardation.

Maternal malnutrition before and during pregnancy is the most prevalent cause of growth retardation. Uterine fundal height, ultrasonic measurements and Doppler velocimetry are used to diagnose such conditions in-utero \*3+ The terms IUGR and small for gestational age (SGA) are used synonymously, but both are different. Estimated foetal weight (EFW) is calculated by gestational age to diagnose the presence of decreased growth potential in the foetus. EFW between the 3rd to 9th percentile is a moderate category and that less than the 3rd percentile is a severe category IUGR. Also, other parameters like AC, HC, FL, Doppler, etc. are used to diagnose IUGR or its probability of developing foetal growth retardation. All growth parameters are proportionally reduced in SYmetrical variety whereas asymmetric growth retardation can be seen in asymmetric IUGR (AC is reduced compared to others). Asymmetric IUGR constitutes 70%-80% of all cases \*4+.

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Foetal growth retardation is confirmed if any of the below parameters are present 32 weeks of gestation. It includes; An abdominal circumference <3rd percentile or an estimated foetal weight <3rd centileNo end-diastolic flow in the umbilical artery An abdominal circumference/estimated foetal weight ratio <10th centile combined with a pulsatility index (PI) >95th centile in the umbilical and/or uterine artery) \*5+The foetus with growth restriction has to make adjustments in their hormonal and metabolic requirements to tolerate the adverse uterine environment. In Ayurvedic classics, foetal growth restriction can be understood under various terms like Vatabhipanna garbha, Garbhasosha, Upavishtaka, Nagodara and Leenagarbha. Acharya Vagbhata and Acharya Susruta explained Garbhasosha, where vata vitiation causes rasakshaya which in turn results in foetal emaciation leading to growth retardation. Acharya Susruta explains that when the foetus is afflicted by vata, proper growth is arrested and is termed as Vatabhipanna garbha/garbhsosha\*6+. The line of treatment mentions the use of milk decoctions made of brimhaniya oushada, mamsarasa, grita and brimhaneeya.

#### **CASE REPORT**

Presenting complaints with history

A primigravida with 24 weeks gestation comes for a routine anc chek up found to have fundal height less than period of gestation.

#### **Diagnostic concrn**

Routine antenatal obstetric investigations were done were within normal limit. She was advised for routine anc chek up and obstetrics scanc. She was taking regular folic acid supplementation and started iron supplementation in second trimester. Taken 2 doses of TT vaccination. in the first trimester she had nausea and vomiting and had taken ayurvedic medication for that.

She visited for check up on 20/6/24 her fundal height was 2 weeks less than the actual period of gestation and medicine were prescribed accordingly. The patient was suggested to do an anomaly scan. In the scan foetal anatomical survey was found to be within normal limits. The amniotic fluid was found to be less (1 pocket= 5cm). An umbilical artery had the Pulsatility Index of 1.46 and a Resistance index of. 71 with an S/D of 5.18 suggestive of decreased diastolic flow velocity of blood through the umbilical artery. The Abdominal circumference: Head circumference ratio was 1.2 (just above the upper limit). Thus, parameters showing the probability of developing severe IUGR were diagnosed during that period.

# Ultra sound scan findings

15/1/2024

Single live iug of 8 week 4 days crl 21 mm and cardiac activity seen

10/04/2024

Single live intra uterine gestation with 21 weeks with mild oligohydramnios and decreased blood flow to uterine artery efw 320 gm and fhr 150 bpm iugr afi 7 cm

12/05/2024

Single live intrauterine gestation with elevated doppler just adequate liquor appropriate growth efw 1142 gm fhr 142/bpm afi 9.7

25/07/2024

Doppler parameters within normal limits sliuf with cephalic presentation bpp8/8 efw 2340 gm fhr 140/bpm afi 10.8

# Therapeutic intervention

10/4/24 yashti kashmari kala 20gm bd with milk for 30 days with dietary modification milk, makhana, singhada abd protein rich diet advised

12/05/2024 yashti kashmari kalpa continued for next 30 days clinical findings suggestive of approriate growth with adequate liquor

25/07/2024

Yashti kashmari kalpa with ghrit continued with iron and calcium suplimentation all the radiological parameters are normal resultafter the above said treatment the growth of foetus normal with doppler parameters within normal limit in obstetric scan datd on 25/07/2024 .the patient delivered healthy female baby of 3.1 kg an apgar score of 9 through lscs.

# **DISCUSSION**

Suboptimal IUGR affects 10% of all pregnancies and the outcome depends upon the severity of IUGR .in this case usg doppler indicate Suboptimal intrauterine growth retardation affects 10% of all pregnancies and the outcome depends upon the severity of IUGR. In this case, USG Doppler indicated decreased velocity of blood flow earlier in the 21st week of gestation onwards and management started from there on.

The condition was understood as garbhasosha described by Acharya Susruta in Garbhineevyakaranam adhyaya\*7+. In this patient, she had a history of nausea, vomiting and tiredness up to her 5th month of pregnancy. It affects the rasadhatuformation and along with it, vata vitiation hampered the proper flow of rasadhatu through garbhanadi leading to

decreased growth potential in the foetus. Garbhasosha also termed vatabhipanna garbha occurs here due to this reason. The treatment for it is the use of brimhaneeya aousdhadha accordingly. So, during the ayurvedic antenatal check-up, she was advised kashmari yashti kalpa with ksheer regularly from the 21st week of gestation onwards when a decreased velocity of blood flow was identified in USG. Due to that a chance of developing severe IUGR was prevented. And the scan was done on the 27th week of gestation again showing elevated Doppler with mild IUGR. So, the medicines was continued Along with ksheerapakas and ghritas, dietary advice like eggs, fleshy vegetables, fruits and milk in daily diet were advised as they are anabolic. Thus, this condition was reversed kashmari (gemeliana arborica) is brimhana, rasayana, garbhaposhana, balya, pushtiprada, and vataprasamana which supports growth potential in the foetus\*8+. yashti madhu (glycehiza glabra) is madhura in rasa and vipaka, laghu snigdha, and is brimhaneeya, prajasthapana, balyaand vatasamana\*9+ balya and brimhaneeya. Hence kashmari yashti kalpa and milk were given twice daily.

Anabolic and rejuvenating properties of these drugs increase the blood flow to the foetus, thereby reversing the chance of growth retardation in-utero. Phalasarpis promotes nourishment to the uterus as it is aayushyam, poushtikam and rasayanam.\*10+ Mahadhanwantaram gulikais also known as garbharakshini as it supports and protects the pregnancy. It is proven that lipophilic substances can cross the placental barrier and counteract the chance of growth restriction. Hence kashmari yashti granuels with milk and grita etc reaches the foetal circulation by crossing the placental barrier and improves the growth potential of the developing foetus. All the 3 sets of medications pacified the vata and promote appropriate growth of the foetus.

# **CONCLUSION**

From the above case study IUGR can be taken as garbhasosha resulting from improper functioning of rasadhatu and the planned management reversed the possibility of developing severe IUGR in pregnancy.

Regular obstetric examinations helped to diagnose this condition early and were successfully managed with specific ayurvedic treatment modalities. Hence other ayurvedic medicines mentioned in this context can be taken for further research studies related to IUGR.

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