

**EFFICACY OF KSHEERABASTI IN THE MANAGEMENT OF GARBHAKSHAYA W.S.R. TO INTRAUTERINE GROWTH RETARDATION - A CASE REPORT****Susheela choudhary<sup>1</sup>, Sonu<sup>2</sup>, K. Bharathi<sup>3</sup>, Vipin Tanwar<sup>4</sup>**<sup>1</sup>PhD Scholar, PTSR Dept. National Institute of Ayurveda, Jaipur (Deemed to be university)<sup>2</sup>Lecture, PTSR Dept. National Institute of Ayurveda, Jaipur (Deemed to be university)<sup>3</sup>Head of department, PTSR Dept. National Institute of Ayurveda, Jaipur (Deemed to be university)<sup>4</sup>Panchkarma Vaidya, Dept. of Panchkarma, National Institute of Ayurveda, Jaipur (Deemed to be university)**Corresponding Author:** [sroyaljat007@yahoo.com](mailto:sroyaljat007@yahoo.com)<https://doi.org/10.46607/iamj4309042021>**(Published Online: April 2021)****Open Access**

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**Article Received:** 02/04/2021 - **Peer Reviewed:** 13/04/2021 - **Accepted for Publication:** 15/04/2021**ABSTRACT**

Intrauterine growth restriction is quite common condition now a days and needs intensive fetal surveillance and proper antepartum and intra-partum care. IUGR may result in significant fetal morbidity and mortality if not properly diagnosed and treated. The condition is most commonly caused by inadequate maternal-fetal circulation, resulting in decrease in fetal growth. In Ayurveda, IUGR can be considered under *Garbhakshaya*. In *Garbhakshaya* according to *Acharya Sushruta*, *Garbhaaspadana* and *Anunatkukshitta* mentioned which is mainly due to the inadequate nutrition to fetus. *Acharya Sushruta* has mentioned the usage of *Ksheerabasti* from 8th month onwards to nourish the fetus in *Garbhakshaya*. In present case study, A 29-year-old pregnant woman with period of gestation 37 weeks 1 day was came to OPD of PTSR dept. National institute of Ayurveda (Deemed to be university). On examination her fundal height was found less than period of amenorrhoea. USG report showed single live intrauterine pregnancy of 35 weeks 3 days with IUGR and extensive calcification in placenta, was treated with *Ksheerabasti*, administered for 10 days once in the morning in the dose of 450 ml per day. After

10 days of above said treatment USG report was repeated and marked improvement was observed with no calcification and a healthy baby was delivered with normal Apgar score. So here *Shatavari*, *Vidarikanda* and *Yashtimadhu sadhita Ksheerabasti* is very effective treatment modality to improve IUGR and for good nourishment of fetus.

**Keywords:** *Garbhakshaya*, IUGR, *Ksheerabasti*, *Shatavari*, *Vidarikanda*, *Yashtimadhu* etc.

## INTRODUCTION

Intrauterine growth restriction (IUGR) is described as babies with birth weight below the tenth percentile for a given gestational age for a given population as a result of pathological restriction in their ability to grow. IUGR may result in significant fetal morbidity and mortality if not properly diagnosed. The condition is most commonly caused by inadequate maternal-fetal circulation, with a resultant decrease in fetal growth. It can be classified as-

**Moderate:** - Birth weight in the 3 to 10 percentiles

**Severe:** - Birth weight less than 3 percentile

Poor socioeconomic condition, medical and obstetric disorders complicating pregnancy contribute to a significant proportion of IUGR in developing countries. Of late genetic factors affecting the mother, placental and fetus are increasingly reported. IUGR infants face multiple problems from birth to adolescence. They are more prone to immediate mortality and morbidities, apart from experiencing the long-term growth deficits and abnormal neurodevelopment. They are also more likely to have poor school performance and childhood behavioural problems.

In Ayurvedic classics *lakshanas* of *Garbhakshaya*, *Garbhasosha*, *Vatabhipanna Garbha* are near to signs and symptoms of IUGR.

According to *Acharya Sushruta* absence of quickening and fundal height less than period of amenorrhoea are the clinical features of *Garbhakshaya*<sup>1</sup>. While describing specific management of *Garbhakshaya*, *Sushruta* suggested use of *Ksheerabasti* and *medhyanna*<sup>2</sup>. *Acharya Sushruta* has also stated *garbhashosh* as *vatabhipanna garbha*<sup>3</sup>, it can be described as underdevelopment or under nourishment of the fetus in utero. *Acharya Dalhana* elaborating the Etiology and says that due to effect of *vayu*, there is

absence of 'oja' in *garbha*. Further quoting *Vridhha Kashyap* writes that the *Rasa* either flows slowly or does not flow in the *Rasavahanadi* of *Garbha*, it develops very slowly.

*Acharya Charaka* while describing *garbhavyapadas* like *Nagodar*, *Upavishtak*, *Leengarbha*, in *sharir sthana Jatisutriyaadhyaya*, also explained *Garbhashosh*, its etiopathology and treatment. According to *Charaka*, due to non-availability of proper diet to the *Garbha* or vaginal bleeding after conception, the *Garbha* suffers from *Sosha*<sup>4</sup>.

### Case Report

A 29-year-old female, gravida third with married life of 4 years, visited the Prasuti Tantra & Stree roga, NIA Jaipur on 03/01/2019 with amenorrhoea since 9 months. USG report on 01/01/2019 showed single live intrauterine pregnancy of 35 weeks 3 days with IUGR and normal flow pattern.

L.M.P.-18/04/2018

E.D.D.-25/01/2019

P.O.G.-37 weeks + 1 day

**Obstetrics History-** G3P0L0A2

G1- Induced abortion of 2 months, 2 years back

G2- Induced abortion of 45 days, 1 year back

G3- Present Pregnancy

**Past Medical History-** Not significant

**Past Surgical History-** Not significant

**Family History-** Not significant

**On Examination-** G.C.- Fair

Height- 150 cm

Weight- 43kg

Pallor- Mild

Pedal Oedema- absent

Icterus- absent

P.R. - 78/min

B.P. - 110/80mmhg

R.R. - 18/min  
Temp. - 98.2 F

**Per abdomen examination: -**

Fundal height- ~34 weeks (less than period of amenorrhea)

Lie- Longitudinal with cephalic presentation

Fetal heart rate- 132 BPM

Uterus feels soft, No contractions, No tenderness, No pain

**Table 1:** Investigation

| Routine Haematological Investigations   | Urine Routine and Microscopic  | Ultrasonography  |
|---|--|--|
| Haemoglobin-12.4g/dl<br>Total Leucocyte count-25.6 micro L<br>Platelet count-192 lakhs/cu mm<br>LFT-WNL<br>RFT-WNL<br>Prothrombin time-12.4secs | Sugar-Nil<br>Albumin-Nil<br>Epithelial cells- 6-8<br>Pus cells – 3-4 | Single live intrauterine pregnancy of 35 weeks 3 days with IUGR<br>Cephalic presentation<br>F.H.R.- 144/min at rest, 162/min after movements<br>Amniotic fluid- Adequate (AFI-12.8cm)<br>Placenta- Posterior, Grade-3 with extensive calcification<br>EFW- 2084gms |

**Treatment Protocol:** - Patient was advised *Shatavari*, *Vidarikanda* and *Yashtimadhu sadhita Ksheerabasti* once a day for 10 days. *Basti* (enema) was prepared

daily in the required quantity and administered slowly to the patient in *Nubjaavastha* (Knee chest position).

The posology details are given below in Table No. 2-

**Table 2:** *Ksheerabasti*

| Content  | Route            | Dose  | Duration   |
|--|------------------|-------|--|
| <i>Shatavari</i> - 10gm<br><i>Vidarikanda</i> - 10gm<br><i>Yashtimadhu</i> - 10gm<br>+<br><i>Go ksheera</i> - 450 ml<br>+<br>Water- 450 ml | <i>Gudamarga</i> | 450ml | 10 consecutive days in the morning after light breakfast |

Procedure of preparation of *Ksheerabasti*:- *Ksheerabasti* given in this case have three ingredients as shown in Table no. 3. For *Ksheerabasti* preparation, coarse powder of ingredients was taken 1 part (30 g) and boiled with 15 parts of water (450 ml) and 15 parts of milk (450 ml) in slow and uniform

heat until only the milk part remains<sup>5</sup>. This *Ksheerapaka* (medicated milk) was allowed to cool up to room temperature, filtered and then administered through the rectal route in amount of 450 ml with the constant speed without shaking hand.

**Table 3:** Contents of *Ksheerabasti* in present study

| S.N. | Contents           | Latin Name                      | Family    | Part used     |
|------|--------------------|---------------------------------|-----------|---------------|
| 1.   | <i>Shatavari</i>   | <i>Asparagus recemosus</i>      | Liliaceae | Root          |
| 2.   | <i>Vidarikanda</i> | <i>Pueraria tuberosa</i>        | Fabaceae  | Tuberous root |
| 3.   | <i>Yashtimadhu</i> | <i>Glycyrrhiza glabra Linn.</i> | Fabaceae  | Root          |

The properties of the drugs, its pharmacological actions are described in Table no.4.

**Table 4:** Pharmacological actions of contents of Ksheerabasti

| S.N. | Drug        | Pharmacological actions   |
|------|-------------|---|
| 1.   | Shatavari   | Balya, Hridya, Medhya, Rasayana, Vatahara<br>Useful in Kshaya, Stanyakshaya, stanyaroga                                   |
| 2.   | Vidarikanda | Balya, Rasayana, Vatahara, Jivaniya, Brihmniya<br>Useful in Dourbalya and Sosha   |
| 3.   | Yashtimadhu | Medhya, Vatanulomana, Jeevaneeya, Sandhaneeya, Rasayana, Balya<br>Useful in Yakshma, Dourbalya, Garbhashosha <sup>6</sup> |

**Result:** After 10 consecutive Ksheerabasti USG was repeated. USG report on 16/01/2019 showed single intrauterine pregnancy of 36 weeks 4 days with EFW 2336gms, no calcification and after 7 days, A full term score.

male baby was delivered as FTND as vertex presentation on 23/01/2019 at 3.54pm with weight of 2.25kg and normal APGAR

**Table 5:** Showed USG improvements after 10 consecutive Ksheerabasti.

| S.N. | Points                      | Before treatment                                | After treatment    |
|------|-----------------------------|---|--------------------|
| 1.   | Amniotic fluid index(cms)   | 12.8cms   | 13.8cms            |
| 2.   | Biparietal Diameter(mm)     | 89.7mm  | 92.1mm             |
| 3.   | Head circumference(mm)      | 315.3mm   | 321.7mm            |
| 4.   | Abdominal circumference(mm) | 269.5mm   | 279.6mm            |
| 5.   | Femur length(mm)            | 65.9mm  | 69.0mm             |
| 6.   | Effective fetal weight(gms) | 2084gms   | 2336gms            |
| 7.   | Gestational age(weeks)      | 35weeks 3days                                   | 36weeks 4days      |
| 8.   | Placenta                    | Posterior, grade 3 with extensive calcification | Posterior, grade 3 |

## DISCUSSION

Shatavari, Vidarikanda and Yashtimadhu siddha Ksheerabasti having predominance of Madhura Rasa, which is indicated in Garbhini paricharya<sup>7</sup>.

Ksheera used for basti is much needed during pregnancy as it is having Rasayana, Vrishya, Balya, Jivaniya, Stanyakara, Shramhara properties.<sup>8</sup> Shatavari has Balya, Hridya, Medhya, Rasayana, Vatahara and garbhaposhaka guna.<sup>9</sup> Vidarikanda has Balya, Rasayana, Vatahara, Jivaniya, Brihmniya properties.<sup>10</sup> Yashtimadhu has Medhya, Vatanulomana, Jeevaneeya, Sandhaneeya, Rasayana, Balya properties.<sup>11</sup>

Contents of this Ksheerabasti predominantly have Madhura rasa, Snigdha, Sheeta and Guru guna, Sheeta Veerya, Madhura Vipaka, Pruthvi-Aap mahabhutadhikya, Vata shaman and Vata-anuloman and Garbhavidhikar properties.<sup>12</sup>

So, this treatment modality helped in proper Rasa Dhatu Nirmiti, Rasa-Rakta Dhatu prasadana results in prakrita garbhaposhkansh nirmiti and garbhavidhhi in IUGR.

Medicated Ksheera introduced by anal route having more systemic and local effects like great absorptive capacity. Vatanulomaka, Brihmana pushtidayaka and Balya properties are responsible for proper growth of fetus in utero by giving proper nutrition to fetus. This therapy helped in fulfilling the dietary demands as well as it is preventing the common discomforts observed during pregnancy.

According to modern concept, Ksheerabasti is a retention enema. It is absorbed by rectal mucosa and carried in systemic circulation.

Ksheera and drugs of Madhura group have been advised for entire pregnancy period. Ksheera is a whole diet and good source of calcium. The drug of Madhura group are anabolic, thus use of these will

help in maintenance of proper health of mother and growth and development of foetus.

## CONCLUSION

This is a required effort to form the ladder towards *Ksheerabasti Chikitsa* in *Garbhakshaya*, which was not frequently practiced before. *Ksheerabasti* can be given in a pregnant woman after completion of 8 months of gestation. Cost is effective as compared to modern management of IUGR and it is safe with no adverse effects. In present study *Shatavari*, *Vidarikanda* and *Yashtimadhu sadhita Ksheerabasti* is very effective treatment modality to increase the baby weight and for good nourishment of fetus. Thus, it prevents maternal and fetal morbidity and mortality rare.

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