PRASUTI TANTRA AND STREE ROGA
Management of UPAVISHTAK GARBHA (IUGR)

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IUGR

Introduction

- Intrauterine growth restriction (IUGR) is a common complication of pregnancy in developing countries and carries an increased risk of perinatal mortality & morbidity.
- National perinatal database of India reported the incidence of IUGR to be 9.65% among hospital born live birth infants.
- IUGR(Defination)- Intrauterine growth restriction is said to be present in those babies whose birth weight is below the 10^{th} percentile of the average for Gestational age.
- Disparity of >=2 weeks – Mild IUGR
- Disparity of >=4 weeks-Severe IUGR
- There is increased neonatal mortality & morbidity in babies born with IUGR.
- Timely diagnosis & management of IUGR foremost important treatment factor.

Upavishtak Garbha

Figure 2: Normal Neonate (R) and

Upavishtaka Garbha

- Upavishtak Garbha is one of the Garbhavyapada(Foetal Disorder).
- Up means –to sit, to stay in position for longer duration .
- Foetus stays in the womb for longer time.

- This condition is correlated as Intrauterine Growth restriction in Modern Science.

- Nutrition of Foetus takes place by Mother with Rasadhatu of Mother through Upsneha & Upsweda.

- Ahar Rasa taken by Mother nourishes 3 factors – 1.Garbha,2.Stanya Poshan,3. Garbhini.

- It is Garbha poshanjanya vikriti, Garbha doesn't get proper Ahar- rasa which contains Saptadhatuvardhak ahara.
- Improvement in Garbhini Ahara- vihar will improve Ahara rasa utpatti and nutrition of Foetus.

Upavishtaka Garbha

Causes- Excessive consumption of hot and pungent food by pregnant women

Samprapti- Due to etiological factors , bleeding from vagina or other types of vaginal discharges occur after the fetus has developed to certain extent & has attained sara i.e.after 4^{th} months , because of these discharges the foetus does not grow properly & stays for a very long time (Cha. Sha.8/26)

Pregnant women who consumes contraindicated articles after attaining sara of Garbha, Bleeding or other discharges may occur from vagina , due to this Vata aggravation takes place , and this Vata withholds Pitta & Kapha & compresses the Rasavaha nadi ,due to this obstruction ,threre is improper flow of Rasa , Due to this foetus does not develop properly and becomes Upavishtaka Garbha(Ash.S.Sha.4/11,12)

Specific etiology of Upavishtak Garbha-

Whenever ,there is scanty but continuous bleeding from vagina foetus doesn’t decrease in size but continuously quivering.

The Uterus does not increase increase in size .

Acharya Dalhana explained that , this condition occurs when foetus has become Balawana , strong as in 5^{th} or 6^{th} months of pregnancy.

Timing of Delivery of Upavishtaka Garbha

- Foetus develops slowly by fire of maternal diet
- In this process when foetuses develops properly or when get matured , they get delivered may be even after years
- The hairs & teeth of the fetus also grow before the birth due to it’s prolonged stay in the uterus.

Normal Foetal Growth

- Cellular hyperplasia (up to 16 weeks)
- Hyperplasia & Hypertrophy(16 to 32 weeks)
- Hypertrophy (After 32 weeks)
- Most of Foetal weight gain occurs beyond 24th week of Pregnanc

Etiological Fators – Maternal, Foetal & Placental causes

Constitutional, small women, Maternal genetic & racial background

Maternal nutrition before & during Pregnancy. Glucose,Amino acids & Oxygen are deficient, Poor nutrition

Smoking , Alcohol, Cocaine, Heroin

Maternal diseases – Anaemia,HTN,Thrombotic diseases, Heart diseases, Chronic renal diseases

Antiphospholipid Antibody syndrome

Structural Anomalies

Chromosomal abnormality

Disorders of bone & cartilage

Infections –TORCH, Malaria

Multiple Pregnancy

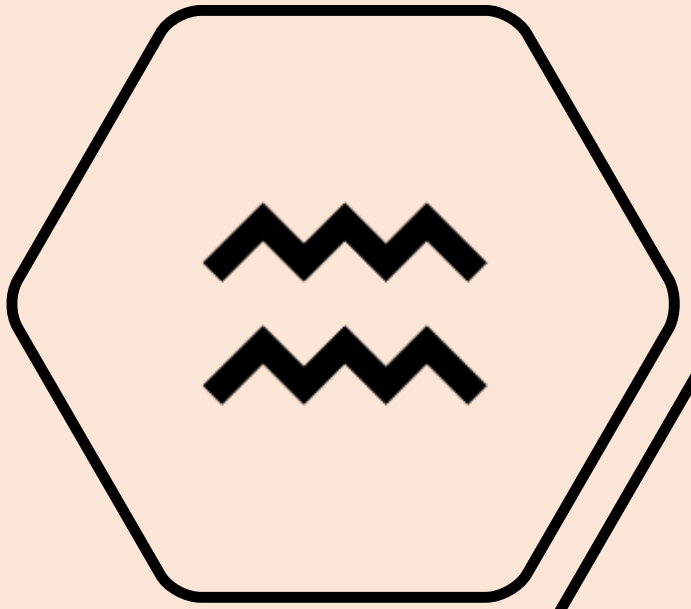
Chronic Hypoxia- High altitude, Maternal cyanotic heart disease

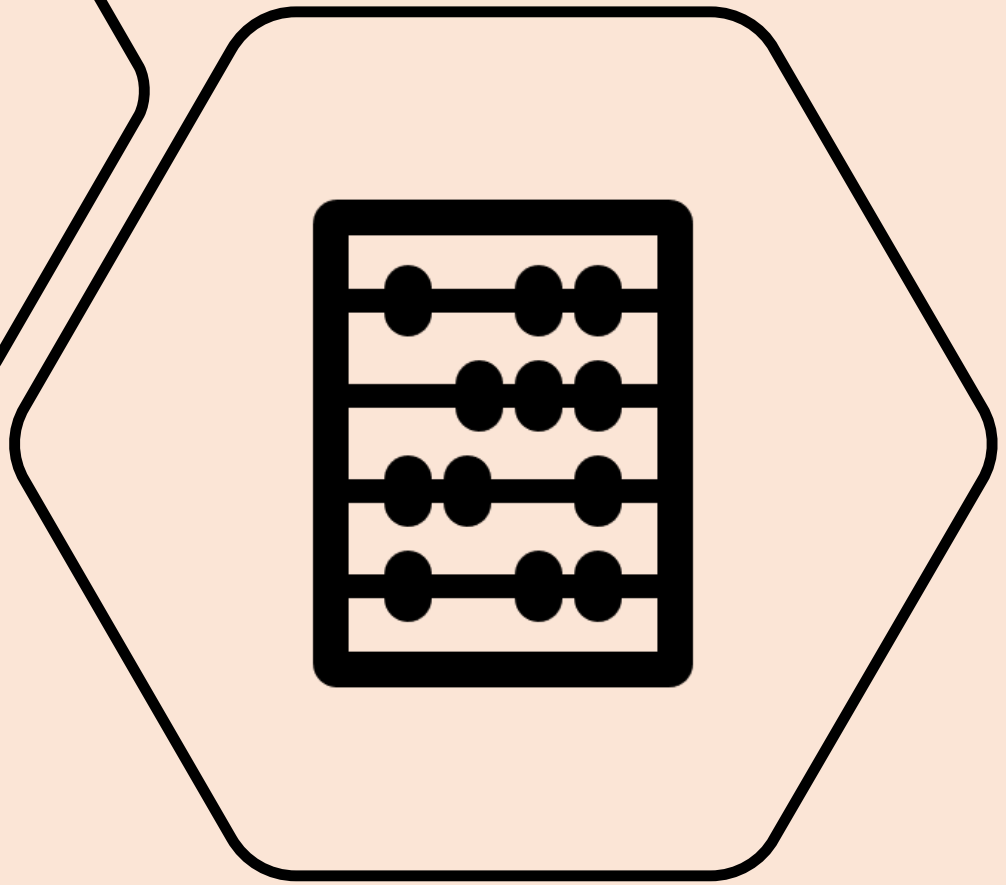
Placental –Poor blood flow to placental site, Placenta praevia, Abruption, infarction

IUGR Types

Symmetrical IUGR	Asymmetrical IUGR
Uniformally small	Head larger than abdomen
Ponderal Index- Normal	Ponderal Index- Elevated
HC:AC & FL:AC- Normal	HC:AC - Elevated
Etiology – Genetic disease or infection (Intrinsic to Foetus)	Chronic placental insufficiency (Extrinsic to Foetus)
Total cell No- Less Cell size - Normal	Total cell No.- Normal Cell Size - Smaller
Neonatal Course- Complicated with poor prognosis	Usually uncomplicated having good prognosis

Patho-physiology





Reduced availability of nutrients in Mother, Reduced transfer by placenta to foetus, Reduced utilization by Foetus

Brain size reduced in Asymmetric IUGR & cell no. is reduced in Symmetrical IUGR

Liver glycogen content is reduced

Renal & Pulmonary contribution to amniotic fluid are diminished due to reduced blood flow- OLIGOHYDRAMNIOS

Risk of intrauterine hypoxia & acidosis – death if severe

Physical features at birth

Weight deficit.

Length - unaffected

Head circumference – relatively larger than body in asymmetric IUGR

Alert , active, normal cry

Reflexes normal.

Dry & wrinkled skin b/o less subcutaneous fat , scaphoid abd, thin meconium stained vernix caseosa & thin umbilical cord= “Old man look”

Complications of IUGR- Fetal complications- Antenatal, Intranatal, After birth –Immediate, Late comploications

- Chronic fetal distress,
- Foetal death
- Intra natal- Hypoxia , acidosis
- After birth – Asphyxia, RDS
- Hypoglycemia, Hypothermia
- Meconium aspiration syndrome
- Hypothermia
- Polycythemia
- Metabolic syndrome in adult life
- Multiple Pregnancy
- Multi-organ failure
- Increased perinatal mortality & morbidity

Prevention of IUGR

- IUGR can occur even in a women who is perfectly healthy, still there are some measures to reduce risk of IUGR

- Care before pregnancy- Advocating healthy eating & physical activity to improve weight & cardiovascular status.
  Diagnosis & management of chronic diseases ,like HTN, Diabetes before pregnancy

- Care during Pregnancy- Encourage healthier eating habits & heathy lifestyle habits, Nutritious food , Avoidance of Tobacco, Smoking & alcohol intake, Enough rest with proper duration of sleep

- Care During Pregnancy- Delivery should be planned, in Health facilities having emergency obstetric & Neonatal care

Diagnosis

- Clinical –
  - -Palpation of Uterus
  - -Fundal height
  - -Liqure volume
  - -Foetal mass
- SFH-

  - Closely correlates with gestational age after 24 weeks

  - Lag of 4cm or more -IUGR

- **Serial measurement is important**
- **Maternal weight gain stationary or falling during second half of pregnancy**
- **Abdominal girth – Stationary or falling**

Investigations

❖ ANC Profile

- USG at (18-20 weeks) Anomaly Scan
- USG- to be repeated 2 to 3 weekly
- Diagnosis of IUGR & Type-
- HC/AC- ration >1 before 32 weeks,
  = 1, 32 -34weeks
  < 1 after 34 weeks

- HC/AC Ratio is elevated in Asymmetrical IUGR, Normal in Symmetrical IUGR
- AC is single most sensitive parameter
- Serial measurements of AC & EFW are more diagnostic
- Femur Length-Not affected in asymmetrical IUGR
  FL/AC= 22 from 21 weeks to term
  FL/AC> 23.5= IUGR
- Amniotic fluid volume- Vertical pocket of amniotic fluid < 1 CM suggests IUGR
  AFI 5 TO 25= Normal
  AFI < 5CM =Oligohydramnios

Investigations

❖ Ultrasound doppler parameters

- Doppler Velocimetry-

  Elevated Uterine artery S/D ratio (>2.6)

  Presence of Diastolic notch- suggests incomplete invasion of placental trophoblasts to uterine spiral arteries, also Predicts possible development of Pre-eclampsia, Normally Diastolic flow increases as pregnancy progresses

- Reduced / absent/reversed diastolic flow in umbilical artery indicates fetal jeopardy & poor perinatal outcome
- Middle celebral Artery-

  Increased diastolic velocity (Brain sparing effect) in compromised fetus.

- Cerebro- placental Doppler ration is decreased

  Normal ratio is >1

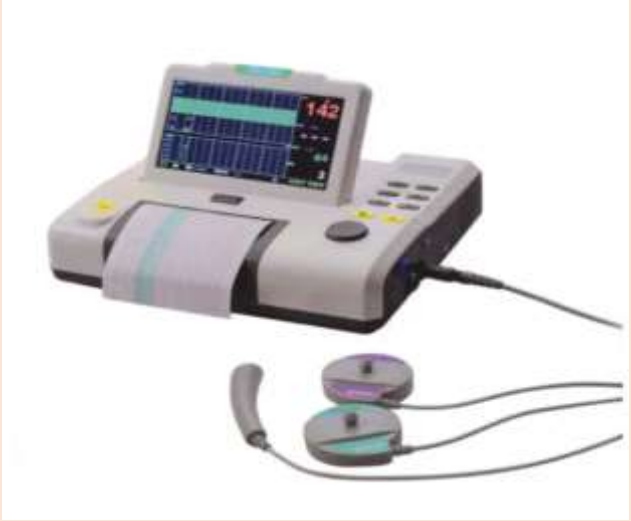
- PI < 10^{TH} Percentile – IUGR
- Reduction of foetal facial fat stores - IUGR

Investigations

❖ **Biochemical markers –**

Elevated levels of MSAFP & HCG level in second trimester are markers of abnormal placentation & risk of IUGR

Management of IUGR



- Confirm IUGR & Type
- Exclude Congenital malformation
- Treat specific cause, if found
- FOETAL SURVEILLANCE
- Daily fetal movement count
- Cardiotocography ,NST
- BPP, Doppler studies

General measures in Management of IUGR

1. Treatment of maternal disease
2. Good nutrition
3. Bed rest, in left lateral position
4. Preterm delivery is indicated if foetus shows E/O Abnormal function on BPP & abnormal Colour Doppler Reports
5. Antenatal administration of steroids in Preterm pregnancies & delivery at an Institution with Emergency obstretric & Neonatal care unit.
6. Foetus should be monitored continuously during labour.

Management of Mild IUGR case-

Pregnancy < 37 weeks

- Increase Rest,
- High protein diet
- Increase fluid intake
- General management.
- Foetal well being monitoring till 37 weeks, then Delivery.

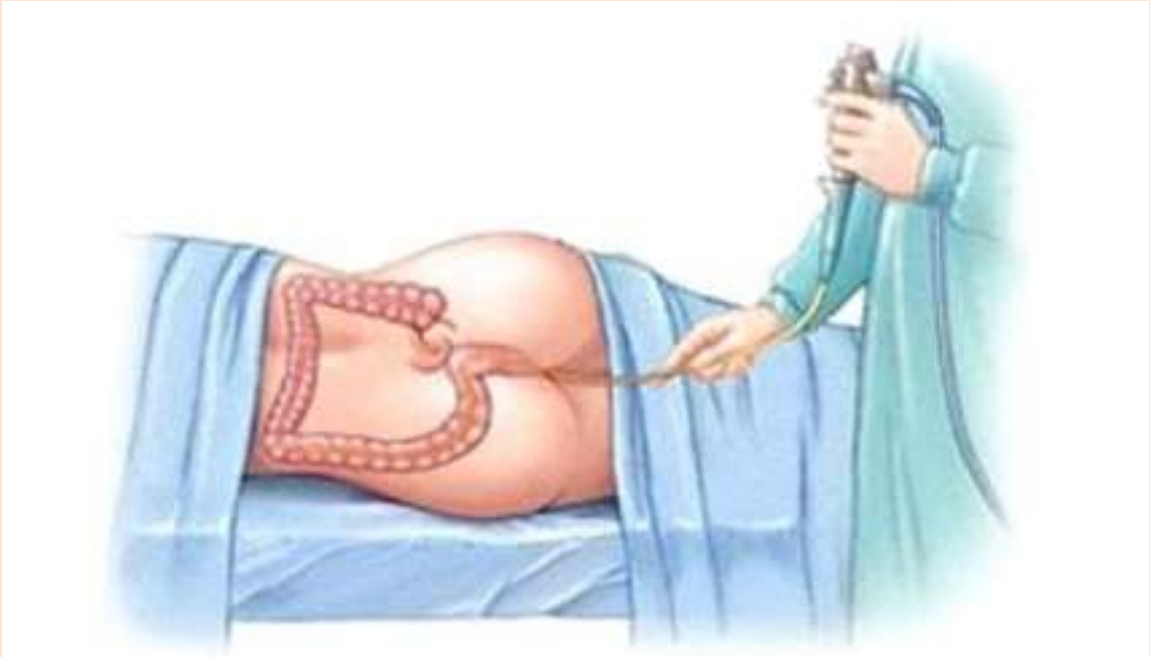
Management of Severe IUGR < 37 weeks

Delivery should be done in well equipped emergency obstetric care center having Neonatal care facility
If inadequate facilities in Utero transfer to a referral center
Foetal Surveillance- Reassuring fetal status- Repeat Doppler after 1 week,
Non reassuring fetal status- Assess lung maturity- If Not mature – Inj. Betamethasone – Then Delivery.

Management of IUGR > 37 weeks = Delivery of Foetus

Pregnancy > 37 weeks

UPAVISHTAK GARBHA MANAGEMENT BY AYURVEDA



Chikitsa siddhanta for Upavishtak Garbha

1. Use of Jeevaniya , Brinhaniya , Madhur , Snigdha, Vatahara dravya with Grita and milk
2. Use of Amagarbha
3. Garbhini should me made cheerful, This helps in proper development of Foetus.
4. Garbhini Ahar – Shali, Dugdha and Aamgarbha
5. Medicated Grita – Vacha ghrita ,Maha paishachika ghrita
6. Bruhaniya gana siddha Kshirbasti & Kshirpan

Herbal Drugs useful in management of Upavishtaka Garbha

Yashtimadhu(Gycyrrhiza Glabra)

- Rasayan
- Balya
- Garbhaposhak
- Jeevaniya
- Vatahara
- Antioxidant

Gambhari- Kashamri(Gmelina arboria)

- Tridoshshamak
- Balya
- Brihaniya
- Rasayan

Herbal Drugs useful in management of Upavishtaka Garbha

Shatavari (Asparagus racemosus)

- Rasayan
- Balya
- Snighdha
- Jeevaniya
- Antioxidant

Vidarikanda (Pueraria tuberosa)-

One of dravya mentioned in Bringhaniya gana,

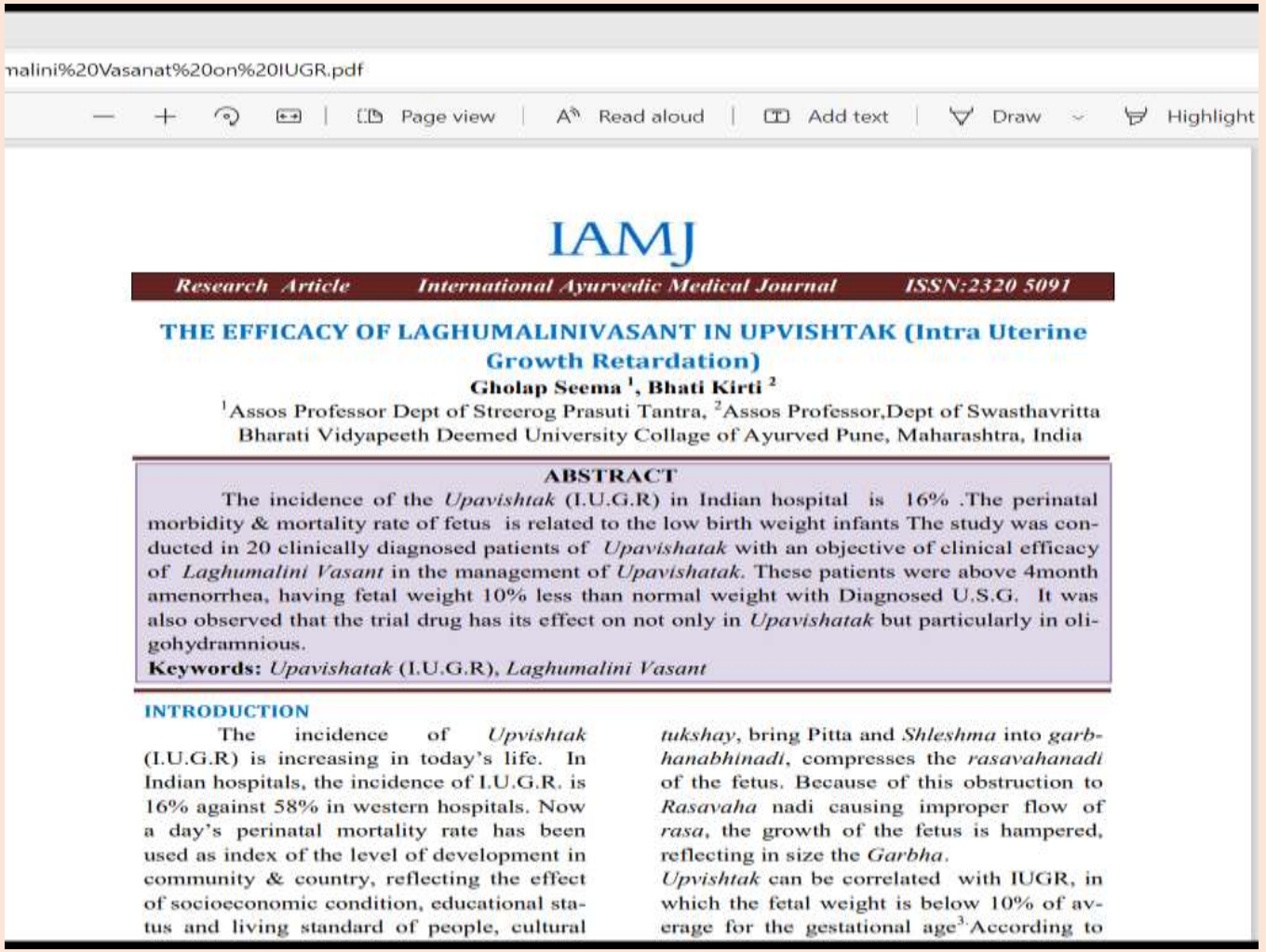
- Madhur Rasa, Madhur vipak, Vatashamaka property.

Formulations- Laghumalini vasant- Madhur, Balya, Garbhaposhaka & Garbhavridhikar (Bh.Pra.)

Laghumalini vasant rasa 250 mg BD for 1 month

- Acts on Rasavahini,
- Rassautpadan,
- Agnimandya

Patients suffering from PIH & severe oliogohydramnios showed improvement in AFI



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Research Article *International Ayurvedic Medical Journal* *ISSN:2320 5091*

THE EFFICACY OF LAGHUMALINIVASANT IN UPVISHTAK (Intra Uterine Growth Retardation)

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ABSTRACT

The incidence of the *Upavishtak* (I.U.G.R) in Indian hospital is 16% .The perinatal morbidity & mortality rate of fetus is related to the low birth weight infants The study was conducted in 20 clinically diagnosed patients of *Upavishatak* with an objective of clinical efficacy of *Laghumalini Vasant* in the management of *Upavishatak*. These patients were above 4month amenorrhea, having fetal weight 10% less than normal weight with Diagnosed U.S.G. It was also observed that the trial drug has its effect on not only in *Upavishatak* but particularly in oligohydramnious.

Keywords: *Upavishatak* (I.U.G.R), *Laghumalini Vasant*

INTRODUCTION

The incidence of *Upvishtak* (I.U.G.R) is increasing in today's life. In Indian hospitals, the incidence of I.U.G.R. is 16% against 58% in western hospitals. Now a day's perinatal mortality rate has been used as index of the level of development in community & country, reflecting the effect of socioeconomic condition, educational status and living standard of people, cultural

tukshay, bring Pitta and *Shleshma* into *garbhanabhinadi*, compresses the *rasavahanadi* of the fetus. Because of this obstruction to *Rasavaha* nadi causing improper flow of *rasa*, the growth of the fetus is hampered, reflecting in size the *Garbha*.

Upvishtak can be correlated with IUGR, in which the fetal weight is below 10% of average for the gestational age[3].According to

Yashtimadhu & Gokshur Sidha Kshrira basti

- Yashtimadhu & Gokshura both are having Vasodilatation property, reduces Hypertension,increases foetal blood flow.
- Ksheera is having Balya property, useful in foetal growth.

- Ksheerabasti with Yashtimadhu-Gokshura ksheerapaka 100ml daily for 8 days.
- Orally Yashtimadhu-Gokshura ksheerapaka 50ml BD

- Yashtimadhu-Gokshura ksheerapaka acts as Mutrala,Kledahara,Rasayana & Dhatuvardhana, Thus have definite action on fetal growth –related disorders, Improves Amniotic fluid ,foetal growth, relieves oliguria & oedema.

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AYURVEDIC MANAGEMENT OF *UPAVISHTAKA GARBHA* DUE TO PIH AN INTEGRATED APPROACH - A SINGLE CASE STUDY

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ABSTRACT

At present era it is observed that the incidence of normal pregnancy and delivery has been diminished. In childbirth weight is one of the most important factors affecting neonatal mortality and morbidity. Pregnancy induced hypertension is a global complication, approximately 10-17% of pregnancies are affected, and IUGR is one among the

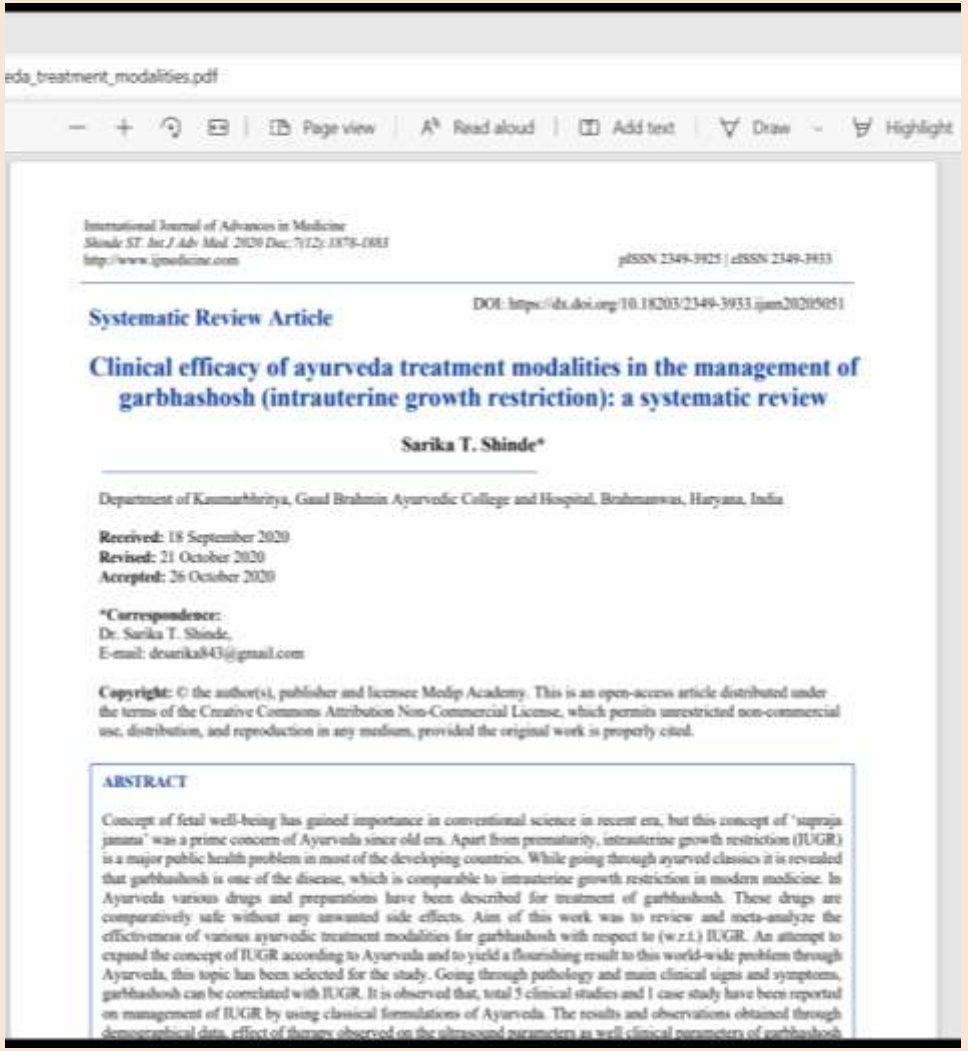
Effect of Bruhaniya gana siddha Kshirbasti & kshirpan-

Shatavari Kshrirbasti, Shatavaryadi kshirbasti, Yashtimadhu vidari siddha Kshirbasti, Shatavari ashwagandha Phalagruta kshirbasti- Ksheerbasti can be given in pregnant women after completion of 28th weeks of gestation ,It is safe with no side effects,Pratyagam kala is observed more than 4-6 hours.

- Bruhaniya gana siddha kshirbasti and kshirpan drug formulation having dominance of snigdha,sheeta,guru guna, sheeta virya Madhur ras, Madhur vipak ,Pruthi – Aap Mahabhutadhikya, vata shaman, anulomana, bruhaniya & garbhavruddhikar properties.

- Combination of kshirpan & kshirbasti given more benefial results.
  Treatment modality helped in proper Rsadhatu nirmiti, Rasadhatu prasadan, results in Prakrit Garbhaposhkansh nirmiti & Garbhavriddhi in IUGR

- Kshir – Rasayana, Vrishya,balya,jivaniya stanyakara & shramahara properties,
  Medicated Shira introduced by anal route having more systemic & local effects like great absorptive capacity and Vatanuloman.



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Systematic Review Article

Clinical efficacy of ayurveda treatment modalities in the management of garbhashosh (intrauterine growth restriction): a systematic review

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ABSTRACT

Concept of fetal well-being has gained importance in conventional science in recent era, but this concept of 'suprajajanana' was a prime concern of Ayurveda since old era. Apart from prematurity, intrauterine growth restriction (IUGR) is a major public health problem in most of the developing countries. While going through ayurved classics it is revealed that garbhashosh is one of the disease, which is comparable to intrauterine growth restriction in modern medicine. In Ayurveda various drugs and preparations have been described for treatment of garbhashosh. These drugs are comparatively safe without any unwanted side effects. Aim of this work was to review and meta-analyze the effectiveness of various ayurvedic treatment modalities for garbhashosh with respect to (w.r.t.) IUGR. An attempt to expand the concept of IUGR according to Ayurveda and to yield a flourishing result to this world-wide problem through Ayurveda, this topic has been selected for the study. Going through pathology and main clinical signs and symptoms, garbhashosh can be correlated with IUGR. It is observed that, total 5 clinical studies and 1 case study have been reported on management of IUGR by using classical formulations of Ayurveda. The results and observations obtained through demographical data, effect of therapy observed on the ultrasound parameters as well clinical parameters of garbhashosh

References-

1. DC Datta's ,Textbook of Obstetrics including Perinatology and Contraception, DC Datta, Edited by Hiralal Konar, Ninth Edition 2018, JAYPEE The Health Sciences Publisher, NewDelhi |Landon|Panama.
2.Vaidya Yadavji Trikamji Acharya, Charaka Samhita with Ayurved Deepika commentary by Chakrapanidatta, Munshiram Manoharlal puplisher Pvt.Ltd2011
3. Bhavprakasha of Bhavmishra commentary by K.C. Chunekar, edited by G.S. Pandey, Choukhambha Bharati Academy, Varanasi,2004.
4. Textbook of Obstetrics, Sheila Balakrishnan, Paras Medical Publisher, Hyderabad, New Delhi, Reprint 2010
5. Modern Obstetrics, Ajit Virkud, The National Book Depot, Mumbai, First Edition 2008,
6.SarikaT.Shinde, Clinical efficacy of ayurveda treatment modalities in the management of garbhashosh(intrauterine growth restyriction): a systematic review, International Journal of Advances in Medicine,2020,Dec;7(12);1878-1883,Pissn 2349-3925
7.Deepak Sharma, Sweta Shastri and Pradeep Sharma ,Intrauterine Growth Restriction : Antenatal and Postnatal Aspects,Libertas Academica
8. Gholap Seema , Bhati Kirti, The Efficacy of Laghumalinivasant in Upvishtak (Intra Uterine Growth Retardation), International Ayurvedic Medical Journal,ISSN:23205091
9.Pallavi Pnhale Lamture, Ayurveda and Modern view on Intrauterine growth restriction (IUGR):A Review,World Journal of Pharmaceutical and Medical Research, ISSN -2455-3301
10.Aswathi R.S, Sathish Jahilal,Ayurvedic management of Upavishtaka Garbha due to PIH an Integrated approach- A single case study, International Ayurvedic Medical Journal, ISSN:23205091
11.Bhushan Kale, Shobha Shirkande, Prasanant Dalvi, Atudy the efficacy of Vidari siddha grita in Upavishtaka with special reference to intrauterine growth restriction, Ayurlog:National Journal of Research in Ayurved Science, ISSN 2320-7329,special issue-16th Feb.2015


Thank you!

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