IAMJ

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 background & quality of medical care.

Upvishtak garbhavyapad is associated with nourishment of foetus for which it is totally depends on mother. .In Ayurved causes of Upvishtak are *Ushna & tikshna aahar.,Atishram,Divaswap, Pushpadarshan-yonigatraktastrav.Yonigat swetstrav.,Garbhopghatkar bhavs*[1,2] After attainment of *sanjatsartva* by the fetus, if woman uses *ahitkar aahar&vihar*, bleeding per vaginum or other vaginal discharge may starts. *Vata* get aggravated due to the *dhatukshay*, 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 Ayurved the management of *Upvishtak*, can be done with the use of the medicines which are belongs to *jeevaniy & bruhaniya ganas, madhur rasatmaka* and ghrut, milk medicated with *vatashamak dravyas*[4]. Also the use of *Aamgarbh* (egg). *Laghumalinivasant* is one of the *vasantkalpa* which is *madhur, balya garbhapohsak* & *garbhavridhikar*[5]. I.U.G.R babies have a low birth weights, the perinatal mortality & morbidity rate is related to the low birth weight infants.

Main causes seen in this study are,

a) Low nutritional diet, changed diet habits lids to anaemia in pregnancy.
b) Physical & mental stress.
c) Impaired the placental circulation, because of increased incidence of PIH Eclampsia, GDM.

Need has always been felt to develop certain Ayurvedic treatment modalities for the management of *Upvishtak (*I.U.G.R) which could be safe, effective, readily available, cost effective without any side effects. In comparison to the therapeutic procedures of different systems of medicine, Ayurveda has a potent approach towards the treatment of *Upvishtak* (I.U.G.R) by internal medications. With these backgrounds an effort is made to evaluate the efficacy of *Laghumalini vasant* in a series of patients suffering from *Upvishtak (*I.U.G.R) increase the fetal growth & development in womb.

AIM AND OBJECTIVES

- Conceptual and clinical studies on *Upavishatak* (IUGR) and its management with time tested Ayurvedic principles.
- To evaluate *Laghumalinivasant* in a series of patients suffering *Upavishatak* (IUGR) on various scientific parameters.
- To compare the efficacy of *Laghumalinivasant* on patients of *Upavishatak* (IUGR)

MATERIAL AND METHODS:

Selection of Cases

A single blind randomized study of 20 clinically diagnosed patients of selected from O.P.D. / I.P.D. unit of P.G. Department of Streeroga Prasuti Tantra, Bharati Medical Foundation's Ayurved Hospital.A regular record of the assessment of all patients was maintained according to performa prepared for the purpose. Following inclusion and exclusion criterias were used for registration of the patients for present clinical trial.

Inclusion Criteria

- Females with 16wks gestational period, diagnosed as *Upavishtak* (IUGR) were included for the present study.
- Primi & multigravida were selected randomly.

Exclusion Criteria

- Patients suffering from *garbhini hridrog* fetal anomalies having more than 8 months amenorrhea.

Selection of Drugs

Taking the symptoms and the *Samprapti* of *Upavishatak* (IUGR) into consideration, a proposed drug formulation namely "Laghumalinivasant " was selected. The drug selected for the study acts on mainly *rasvahini, rasdhatvagni, rasutpadan vikruti, agnimandya*, hence it is very effective in treatment of *Upavishtak*.

Dose and *Anupana*

Dose of *Laghumalini vasant* tab was 1 tab (each of 250gm) in the morning after breakfast and night after the dinner with water for 1 month.

Pre Treatment Observations

All the patients have been studied along with the registration by noting down their demographic profile including their age, address, occupation, education, socio economic status, marital status, life style, addictions, dietary habits etc. After preliminary registration, patients were subjected to detailed case history taking, physical, general and systemic examinations. In history and examination importance was given to mental status examination. During this all other relevant informations like *Ashtavidha Pariksha* and *Dashavidha pariksha* including assessment

of *Sharirika Prakriti* and *Manasika Prakriti* (based on the features described in classical texts) etc. were noted.

Administration of Drug & Treatment Schedule

Total 20 registered, clinically diagnosed and confirmed patients of *Upvishtak* as a study of single blind randomized who completed 16 wks but not 32wks & have fetal wt 10%. Less than standard weight .parameter.(Ref. Shephards chart) were selected for the present clinical trial.

All the patients were advised to undergo following laboratory investigations before starting the trial to rule out any other illness if present and to exclude them from the trial.

- Maternal weight gain after every 15 days was noted.
- Fundal height.
- Abdominal girth.
- USG.after one month.
- Fetal weight in U.S.G. – Those pt.who completed 16 wks but not 32wks & have fetal wt 10%. less than standard weight .parameter.(Ref. Shephard's chart)

Routine ANC Investigations

- Blood - Hb%, BSL (R) HIV,VDRL ,HBsAg
- Urine - Routine and Microscopic examination
- USG - SOS
- Fetal weight in U.S.G.

Patients were followed up after 15th day and 1st month and changes, improvements, deterioration and any other effects produced after the therapy were noted down.

Criteria of Assessment

Both subjective and clinical improvements were employed for assessment of the impact of the therapy. Subjective criteria of evaluation included the observations of both patients and assessment of the physician.

Subjective Improvement

All the patients registered for the trial were specially asked for any changes or improvement in their growing feeling of well being if any and either physical or mental fitness produced by the therapy during the trial.

Clinical Improvement

All symptoms taken for the assessment of clinical improvements were thoroughly examined and the severity of each symptom was rated before and after the trial for clinical assessment. Efforts were made to give numerical values to all symptoms depending upon their severity before and after the treatment. Maternal weight gain, Fundal height, Abdominal girth and USG were assessed before and after the therapy

OBSERVATION AND RESULT:

Subjective improvement: After the completion of therapeutic trial there was marked improvement in the feeling of well being, physical and mental

Clinical Improvement:

Both the symptoms taken for the assessment of clinical improvements were thoroughly examined and the severity of each symptom and points were rated before and after the trial for clinical assessment. Efforts were made to give numerical values to all symptoms depending upon their severity before and after the treatment.

DISCUSSION

The clinical study of 20 patients carried out in the present series revealed that majority of these cases was of age between 21-25 years 45% pts. were multipara. 5%

were elderly primigravida. This incidence shows that the complaints of Upa*dkistak* due to *hetu* related to *aahar &vihar*. Patients suffering from PIH & having severe oligohydramnios had satisfactory improvement in AFI after treatment. In this period, Low nutritional diet, changed diet habits lids to anaemia in pregnancy. Physical & mental stress impaired the placental circulation, because of increased incidence of PIH, Eclampsia, and GDM.

After completion of clinical trial it was observed that there was considerable improvement in the feeling of well being in all the patients.

Regarding overall improvement in clinical features of *Upavistak* (IUGR) the results were highly significant in symptoms like Maternal weight ($p<0.001$), Fundal height ($p<0.001$), Abdominal girth ($p<0.001$), Fetal weight ($p<0.001$) by USG, Amniotic fluid index ($p<0.001$) showed highly significant results. Patients suffering from PIH & having severe oligohydramnios showed satisfactory improvement in AFI after treatment.

All the above findings strongly suggest that *Laghumalinivasant* have potent effect on the management of *Upavistak*(IUGR) . Various scientific parameters in the current study confirmed this observation which showed significant and highly significant improvement respectively.

Probable mode of action of *Laghumalinivasant*

Laghumalinivasant is one of the *vasant kalpa* which is *madhur, balya garbhapohsak* & garbhavridhikar[5]. The drug *Laghumalini vasant* contains *shudha Kharpar, Marich* with butter. *Kharpar*,which acts on mainly *rasvahini, rasdhatvagni, rasutpadan vikruti*. It also work on agnimandya, hence it is very effective in treatment of *Upavishtak.Sothat*,in present study *Laghumalini vasant* had used in treatment of *upvishtak*.

CONCLUSION

On the basis of the clinical manifestations and the symptoms produced, *Upavstak*.may be correlated with IUGR. *Upvishtak garbhavyapad* is associated with nourishment of foetus.which is dependent on mother, In pregnancy. *Patients showed improvement in all symptoms in Upavshtak(IUGR).there was good response with Laghumalinivasant* in *Upavsta*. a proposed herbal formulation is safe, without any adverse effects, economical and effective remedy for the management of *Upvishtak (*IUGR).

Therefore it can be concluded that *Laghumalinivasant* is very safe and effective treatment modalities and can be used effectively in the management of *Upvishtak (*IUGR).

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Source of support: Nil
Conflict of interest: None Declared