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**Research Article** 

# EFFICACY OF *PRISHNAPARNI-BALA-VASA KWATHA* IN *GARBHAVASTHA JANYA SHOPHA* Shubha M<sup>1\*</sup>, Sunita Siddesh<sup>2</sup>

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# ABSTRACT

Many signs and symptoms produced during pregnancy are caused due to the anatomical and physiological changes in mother and maternal adaptation to these changes. One such symptom which appears physiologically during pregnancy is *"Garbhavastha Janya Pada Shopha"*. The incidence of oedema in normal healthy pregnant women is reported to be 50-80%. If *Pada shopha* is ignored and not treated then it acts as a precursor and predisposes to the development of deep-vein thrombosis. Hence emphasis is given for pedal oedema during pregnancy in this study. Early detection and appropriate treatment is the need of the hour to reduce the *Pada Shopha* and to overcome the complications underlying the *Pada Shopha. In Yoga Rathnakara* specific treatment for *Garbhavastha Janya Shopha* is advocated with *Prishna Parni-Bala-Vasa Kwatha*.

**Materials and Methods:** 30 patients registered and diagnosed as *Garbhavastha Janya Shopha* (non-pathological mild to moderated pedal oedema) were treated with *Prishnaparni-Bala-Vasa Kwatha* three times daily for 15 days. *Dose* -16 ml thrice daily orally. **Follow up:** On 22<sup>th</sup>and 29<sup>th</sup>day. **Results:** Statistically significant results was seen, for location t=11.0886 and p= <0.0001, circumference at forefoot in right & left leg was t= 8.8039 and p= <0.0001 & at ankle joint in right and left leg was t=6.0990 and p= <0.0001, on bilateral/unilateral oedema was t=8.9303 and p= <0.0001, on pitting at forefoot, ankle in right and left leg was t= 7.8831 and p=<0.0001, time of aggravation was t= 8.6509 and p= <0.0001. **Conclusion:** Hence it can be concluded that *Prishnaparni-Bala-Vasa Kwatha* is effective in treating non-pathological mild to moderate *Garbhavastha Janya Shopha*.

# INTRODUCTION

*Ayurveda* has stressed on '*Swasthasya Swashta Rakshana, aturasya vikara prashamanam cha*'<sup>[1]</sup> as the first and foremost objective, i.e., maintaining the health of a healthy and alleviating the disorders in the diseased. Even in modern medicine Harrison's quote's that "The task of Medicine is to preserve and restore health and to relieve sufferings" <sup>[2]</sup> and this is the prime objective and base for the present study.

Many signs and symptoms produced during pregnancy are caused due to the anatomical and physiological changes in mother and maternal adaptation to these changes. These symptoms though physiological can sometimes get aggravated causing diseases, or sometimes worsen a pre-existing disease. Hence, an effective formulation in *Ayurveda* which is devoid of adverse affect, to overcome these problems will be of immense help to the pregnant women and needless to say for preservation of the health of foetus.

One such symptom which appears physiologically during pregnancy is "*Garbhavastha Janya Shopha*". The incidence of oedema in normal healthy pregnant women is reported to be 50-80%.<sup>[3]</sup> If *Pada shopha* is ignored and not treated then it acts as a precursor and predisposes to the development of deepvein thrombosis<sup>[4]</sup>. Hence emphasis is given for oedema in legs in this study.

Early detection and appropriate treatment is the need of the hour to reduce the *Padashopha* and to

overcome the complications underlying the *Padashopha*.

In Yoga Rathnakara specific treatment for Garbhavastha Janya Shopha is advocated with Prishna Parni-Bala-Vasa Kwatha.<sup>[5]</sup>

So the present work "Efficacy of Prishnaparni-Bala-Vasa Kwatha in Garbhavastha Janya Shopha" was selected, which acts as Agni deepana, Hridya, Mutrala, Vedanastapana, Balya, Brihmana and Shothahara.

# **AIMS & OBJECTIVE**

- A Conceptual study on Garbhavastha Janya Shopha.
- To evaluate the efficacy of *Prishna Parni-Bala-Vasa Kwatha* in non-pathological mild to moderate *Garbhavastha Janya Shopha*.

# SOURCE OF DATA

30 patients were selected for study from inpatient department (IPD) & out-patient department (OPD) of SKAMCH & RC, Bangalore 104.

## METHOD OF COLLECTION OF THE DATA

- It is a single blind clinical study with pre-test and post-test design; where in 30 patients were selected.
- A case proforma was prepared considering all the points pertaining to the history taking, physical examination, laboratory investigations.
- The parameters of signs and symptoms were scored as mentioned in the proforma.
- Following statistical methods were employed for the analysis of the data collected, i.e. Descriptive statistics and Paired "t" test.

#### **INCLUSION CRITERIA**

- Pregnant women in 21st to 32nd week of Gestation with non-pathological mild to moderate pedal oedema.
- Patients between 18-35 years of age.

## **EXCLUSION CRITERIA**

- Any other type of oedema during pregnancy associated with pre-existing medical illness like Tuberculosis, Epilepsy, Hypertension, Diabetes, Heart disease and severe anemia.
- Grand multiparous.
- Pregnancy associated with any gynecological complications such as Fibroid uterus, ovarian cyst, and cervical carcinoma.
- Pregnancy associated with any Obstetric complications such as Ante-partum hemorrhage, Multiple Gestations, Partial Hydatidiform Mole, Pre-eclamptic Toxemia, Pregnancy Induced Hypertension, Malformations of pelvis, Rh-Incompatibility, Bad Obstetric History.

## **STUDY DESIGN**

30 patients diagnosed as *Garbhavastha Janya Shopha* were treated with *Prushni Parni-Bala-Vasa Kwatha* orally for 15 days.

# INTERVENTION

**Drug:** *Prushna Parni-Bala-Vasa Kwatha* orally for 15days was given to pregnant women between 21stto  $32^{nd}$  weeks of Gestation with non-pathological mild to moderated pedal oedema.

Dose:16 ml thrice daily orally.

**Preparation of medicine:** *Prishnaparni moola, Bala moola, Vasa patra* was taken in equal quantity and made into a course powder. *Kwatha* was prepared with 8 parts of water and reduced to 4 parts.

Duration of Study: 29 days.

Post Test: On 15th day.

Follow up: On 22<sup>th</sup> and 29<sup>th</sup> day.

# ASSESSMENT CRITERIA

The oedema was assessed on the basis of objective parameters as mild and moderate oedema as,

#### Mild Oedema

• Pitting oedema limited to Fore foot.

## Moderate Oedema

• Oedema found in the ankle up to medial malleolus and lower 1/3 of tibia.

Hence the mid-calf and mid-thigh was not considered for the present study. The following 6 criteria were taken for assessment, i.e.,

- 1) Location of Pedal oedema.(Right leg & Left leg)
  - Absent = 0

Fore Foot = 1

Ankle joint =2

2) Unilateral and Bilateral Oedema.

Absent =0

Unilateral (Right/left) =1

Bilateral=2

- 3) Circumference measurement with measuring tapes at -Foot, Ankle joint of both right and left leg.
- 4) Grading of oedema, was done as follows on Fore Foot, Ankle joint of both right and left leg.
  - 0 ---- Oedema Absent.

1+ ----slight pitting/ 2mm, disappears rapidly

2+ ----deep pit/ 4mm, disappears in 10-15secs

3+ ----deeper pit / 6mm, may last > 1 min

4+ ----deepest pit/ 8mm, lasts 2-5 min

Indentation was measured with a digital verneer caliper and the time was noted with a stop watch.

5) Time of aggravation- the duration of aggravation of oedema was assessed as

Absent =0 18 Hours = 3

6 Hours=1 24 Hours =4

12 Hours =2

6) Pitting / Non-pitting in right and left leg at fore foot and above ankle.

Since Non-pitting oedema was not exhibited in any of the patients, it was not considered for the study.

Absent =0

Mild Pitting up to 2mm =1

Moderate Pitting up to 4mm =2

Severe Pitting up to 6mm =3

#### INVESTIGATIONS

- Blood Hemoglobin, Total Count, Direct Count, Platelet count, serum creatinine, serum uric acid.
  - 1. Location of oedema

- Urine Albumin, Sugar, microscopic examination.
- Ultrasonography abdomen and pelvis
- Ultrasonography OBG.

## DISCUSSION

In this study of 30 patients, the results are analyzed as below.

Since this study is on non-pathological pedal oedema, the site of physiological oedema is confined up to medial malleolus and lower 1/3 of tibia, there is no oedema present in mid-calf and mid thigh.

Also in this study, it was found that the oedema was present on fore foot and ankle joint in all the patients, the oedema was absent in the mid-calf and mid-thigh. Hence the oedema of fore-foot and ankle joint was only considered in this study for better understating and statistical analysis.

Variables	BT	Mean		Ν	Mean diff	SD	SE	t	р	Sig
<b>Right Leg</b>	2.00	AT	0.43	30	1.57	0.77	0.14	11.0886	< 0.0001	HS
Right Leg	2.00	FU1	1.40	30	0.60	0.93	0.17	3.5254	0.0014	S
<b>Right Leg</b>	2.00	FU2	1.40	30	0.60	0.93	0.17	3.5254	0.0014	S
Left Leg	2.00	AT	0.43	30	1.57	0.77	0.14	11.0886	< 0.0001	HS
Left Leg	2.00	FU1	1.40	30	0.60	0.93	0.17	3.5254	0.0014	S
Left Leg	2.00	FU2	1.40	30	0.60	0.93	0.17	3.5254	0.0014	S

**Right leg:** When the values were analyzed in Right leg the difference was statistically highly significant at the level of t=11.0886 and p=<0.0001, between BT and AT, was significant at the level of t=3.5254 and p= 0.0014 between BT and FU1 & FU2.

**Left leg:** When the values were analyzed in Left leg the difference was statistically highly significant at the level of t=11.0886 and p= <0.0001, between BT and AT, was significant at the level of t=3.5254 and p= 0.0014 between BT and FU1 & FU2.

This shows that the treatment given was effective in reducing the oedema in both right and left

## 2. Circumference of Oedema

leg at fore-foot and ankle joint uniformly during the study period.

Pressure exerted by the gravid uterus on the veins is more on the right side due to dexto-rotation of the uterus. So, physiological oedema is present more on right leg during pregnancy.

Though the oedema was reduced significantly, it was uniform in nature and even in the follow up the slight re-appearance of oedema was also uniform and hence no relationship was established for the effect of treatment on the location of oedema.

Circumference	Mean-BT	Mean		Mean Diff	SD	SE	t	р	Sig
Fore Foot-	22.970	AT	22.620	0.350	1.059	0.193	8.8039	< 0.0001	HS
Right leg		FU1	22.823	0.147	1.083	0.198	3.9252	0.0005	HS
		FU2	22.823	0.147	1.083	0.198	3.9252	0.0005	HS
Fore Foot-	22.970	AT	22.620	0.350	1.059	0.193	8.8039	< 0.0001	HS
Left leg		FU1	22.823	0.147	1.083	0.198	3.9252	0.0005	HS
		FU2	22.823	0.147	1.083	0.198	3.9252	0.0005	HS
Ankle joint-	23.310	AT	23.020	0.29	1.093	0.200	6.0990	< 0.0001	HS
Right leg		FU1	23.213	0.09	1.166	0.213	2.3519	0.0257	S
		FU2	23.213	0.09	1.166	0.213	2.3519	0.0257	S
Ankle joint-	23.310	AT	23.020	0.29	1.093	0.200	6.0990	< 0.0001	HS
Left leg		FU1	23.213	0.09	1.166	0.213	2.3519	0.0257	S
		FU2	23.213	0.09	1.166	0.213	2.3519	0.0257	S

Table 2: Effect of treatment on circumference of oedema

**Right leg - Fore foot:** When the values were analyzed in Fore foot right leg the difference was statistically highly significant at the level of t= 8.8039 and p= <0.0001 between BT and AT, was statistically highly significant at the level of t=3.9252 and p= 0.0005between BT and FU1 & FU2.

**Left leg - Fore foot:** When the values were analyzed in Fore foot left leg the difference was statistically highly significant at the level of t= 8.8039 and p= <0.0001 between BT and AT, was statistically highly significant at the level of t=3.9252 and p=0.0005 between BT and FU1 & FU2.

**Right leg - Ankle joint:** When the values were analyzed in right leg- ankle joint the difference was statistically highly significant at the level of t=6.0990 and p= <0.0001 between BT and AT, was statistically significant at the level of t=2.3519 and p= 0.0257 between BT and FU1 & FU2.

**Left leg - Ankle joint:** When the values were analyzed in left leg- ankle joint the difference was statistically highly significant at the level of t=6.0990 and p= <0.0001 between BT and AT, was statistically significant at the level of t=2.3519 and p= 0.0257 between BT and FU1 & FU2.

The measurements of circumference showed significant decrease by the treatment because *Prishniparni* acts as *Vatashamaka* due to its *Madhura rasa, Madhura vipaka* and *Ushna virya, Bala* acts as *Vata Shamaka* because of *Madhura, Pichila, Snigdha gunas* and *Vasa* causes *Vatagna* and contraction of capillaries, hence helps in reducing the hemo-dilution. When the *Vatashamana* takes place the *Shopha* reduces in size.

Since no diet restriction was advocated to the *Garbhini*, further showed a slight increase during follow up, this can be because the cause of oedema i.e. use of *Vatakara Ahara* and *Vihara* by *Garbhini* resulting in *Dosha prakopa* and formation of *Pada shopha* during follow up period.

# 3. Unilateral and Bilateral oedema

Table 3: Effect of treatment on Unilateral and Bilateral oedema

BT	Mean		Ν	Mean diff	SD	SE	t	р	Sig
2.00	AT1	0.53	30	1.47	0.90	0.16	8.9303	< 0.0001	HS
2.00	FU1	1.40	30	0.60	0.93	0.17	3.5254	0.0014	S
2.00	FU2	1.40	30	0.60	0.93	0.17	3.5254	0.0014	S

When the values were analyzed the difference was statistically highly significant at the level of t=8.9303 and p= <0.0001 between BT and AT, statistically significant at the level of t=3.5254 and p= 0.0014, between BT and FU1 & FU2.

In this study of 30 patients, *Shopha* was present bilaterally in all the patients, by affecting both the right and left legs simultaneously. Thought the physiological oedema is usually confined to one leg, more on right side due to occupation of the rectosigmoid in the left posterior quadrant (dextrorotation), its absence in the left side is not excluded.

This shows that the treatment given was effective in reducing the bilateral oedema, uniformly in both right and left leg in fore-foot and ankle joint during the study period. In the follow up there was slight recurrence of oedema bilaterally.

# 4. Grades of oedema

Grades	Mean BT	Mean		Mean Diff	SD	SE	t	Р	Sig
Fore Foot-	1.33	AT	0.33	1.00	0.61	0.11	7.8831	< 0.0001	HS
Right leg		FU1	0.97	0.37	0.76	0.14	3.6117	0.0011	HS
		FU2	0.97	0.37	0.76	0.14	3.6117	0.0011	HS
Fore Foot-	1.33	AT	0.33	1.00	0.61	0.11	7.8831	< 0.0001	HS
Left leg		FU1	0.97	0.37	0.76	0.14	3.6117	0.0011	HS
		FU2	0.97	0.37	0.76	0.14	3.6117	0.0011	HS
Ankle joint-	1.33	AT	0.33	1.00	0.61	0.11	7.8831	< 0.0001	HS
<b>Right leg</b>		FU1	0.97	0.37	0.76	0.14	3.6117	0.0011	HS
		FU2	0.97	0.37	0.76	0.14	3.6117	0.0011	HS
Ankle joint-	1.33	AT	0.33	1.00	0.61	0.11	7.8831	< 0.0001	HS
Left leg		FU1	0.97	0.37	0.76	0.14	3.6117	0.0011	HS
		FU2	0.97	0.37	0.76	0.14	3.6117	0.0011	HS

Table 4: Effect of treatment on Grades of Oedema

In this study, Grade 3 and Grade 4 oedema was not found, though the 4 point scale grading was taken for assessment of the grading, the physiological oedema is found only in Grade 1 and Grade 2.

**Right leg -Fore foot:** When the values were analyzed the difference was statistically highly significant at the

level of t= 7.8831 and p=<0.0001 between BT and AT, statistically highly significant at the level of t= 3.6117 and p=<0.0011, between BT and FU1& FU2.

**Left leg - Fore foot:** When the values were analyzed the difference was statistically highly significant at the level of t= 7.8831 and p=<0.0001 between BT and AT,

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statistically highly significant at the level of t= 3.6117 and p=<0.0011, between BT and FU1& FU2.

**Right leg - Ankle joint:** When the values were analyzed the difference was statistically highly significant at the level of t= 7.8831 and p=<0.0001 between BT and AT, statistically highly significant at the level of t= 3.6117 and p=0.0011, between BT and FU1 & FU2.

**Left leg -Ankle joint:** When the values were analyzed the difference was statistically highly significant at the level of t= 7.8831 and p=<0.0001 between BT and AT, statistically highly significant at the level of t= 3.6117 and p=0.0011, between BT and FU1& FU2.

This shows that the treatment given was effective in reducing the Grade 1 and Grade 2 oedema in both right and left leg at fore-foot and ankle joint. The treatment given helps in reducing the oedema by their properties such as *Prishniparni* consists of flavonoid, which acts as *Shophahara* due to their free radical scavenging ability. *Bala* acts as *Shophahara*, for its action in preventing cell proliferation. *Vasa* consist of quinolizone, pyrroquinazolin it reduces the retention of fluid in the capillaries.

During follow up in the absence of the treatment and its *Karma* as *Shophahara*, there was slight re-appearance of *Shopha*.

5.	Pitting/	<b>Non-pitting</b>	oedema
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Table 5: Effect of treatment on Pitting of Oedema											
Grades	Mean BT	Mean		Mean Diff	SD	SE	t	Р	Sig		
Fore Foot-	1.33	AT	0.33	1.00	0.61	0.11	7.8831	< 0.0001	HS		
Right leg		FU1	0.97	0.37	0.76	0.14	3.6117	0.0011	HS		
		FU2	0.97	0.37	0.76	0.14	3.6117	0.0011	HS		
Fore Foot-	1.33	AT	0.33	1.00	0.61	0.11	7.8831	< 0.0001	HS		
Left leg		FU1	0.97	0.37	0.76	0.14	3.6117	0.0011	HS		
		FU2	0.97	0.37	0.76	0.14	3.6117	0.0011	HS		
Ankle joint-	1.33	AT	0.33	1.00	0.61	0.11	7.8831	< 0.0001	HS		
Right leg		FU1	0.97	0.37	0.76	0.14	3.6117	0.0011	HS		
		FU2	0.97	0.37	0.76	0.14	3.6117	0.0011	HS		
Ankle joint-	1.33	AT	0.33	1.00	0.61	0.11	7.8831	< 0.0001	HS		
Left leg		FU1	0.97	0.37	0.76	0.14	3.6117	0.0011	HS		
		FU2	0.97	0.37	0.76	0.14	3.6117	0.0011	HS		

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In this study, it was found that the *Shopha* was Pitting in nature among all the patients.

Pitting oedema is produced due to free fluid in the interstitial space between cells. Non-pitting oedema is produced in pathological conditions such as myxoedema, elephantiasis which is not taken into consideration in the present study. In pregnancy there is physiological retention of free fluid in the subcutaneous tissue, hence momentary pressure produces pitting in all the patients of this study.

**Right leg - Fore foot:** When the values were analyzed the difference was statistically highly significant at the level of t= 7.8831 and p=<0.0001 between BT and AT, statistically highly significant at the level of t= 3.6117 and p=<0.0011, between BT and FU1 & FU2.

**Left leg - Fore foot:** When the values were analyzed the difference was statistically highly significant at the level of t= 7.8831 and p=<0.0001 between BT and AT, statistically highly significant at the level of t= 3.6117 and p=<0.0011, between BT and FU1& FU2.

**Right leg - Ankle joint:** When the values were analyzed the difference was statistically highly significant at the level of t= 7.8831 and p=<0.0001 between BT and AT, statistically highly significant at the level of t= 3.6117 and p=0.0011, between BT and FU1& FU2.

**Left leg -Ankle joint:** When the values were analyzed the difference was statistically highly significant at the level of t= 7.8831 and p=<0.0001 between BT and AT, statistically highly significant at the level of t= 3.6117 and p=0.0011, between BT and FU1 & FU2.

This shows that the treatment given was effective in reducing the pitting oedema at both right and left leg in fore-foot and ankle joint during the study period. The pitting is reduced as the drugs acts as *Murtrala*, there will be reduced retention of fluid in the capillaries resulting in *Shopha hara*. In the follow up there was slight recurrence of pitting oedema due to absence of the treatment.

# 6. Time of Aggravation

Table 6: Effect of treatment on	Time of aggravation of Oedema
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Mean BT	Mean		Ν	Mean diff	SD	SE	t	р	Sig
1.70	AT	0.37	30	1.33	0.72	0.13	8.6509	< 0.0001	HS
1.70	FU1	1.17	30	0.53	0.87	0.16	0.0041	0.0041	HS
1.70	FU2	1.17	30	0.53	0.87	0.16	0.0041	0.0041	HS

The aggravation of oedema is due to accumulation of fluids in the extracellular space, during activity in the day time and pressure exerted on veins by gravid uterus, in turn increased by the effect of the gravity, which characteristically reduces by going to bed.

When the values were analyzed the difference was statistically highly significant at the level of t= 8.6509 and p= <0.0001, between BT and AT, was statistically significant at the level of t=0.0041 and p= 0.0041, between BT and FU1 & FU2.

This shows that the treatment given was effective in reducing the duration of oedema during the study period. Due to *Vatahara* property of the treatment, the duration of accumulation of the fluid was delayed and also results in reduction in the amount of fluid retention. In the follow up there was slight recurrence of oedema, due to absence of *Doshagnata* and increase in fluid retention.

# CONCLUSION

In this present study of 30 patients who were diagnosed as non-pathological mild to moderate *Garbhavastha Janya Shopha* in *Pada* at 21<sup>st</sup> to 32<sup>nd</sup> week of Gestation between the age group of 18-35 years were selected and registered. All selected patients were given *Prishnaparni-Bala-Vasa Kwatha*, 16 ml thrice daily for the duration of 15 days.

The results obtained were as follows:

• Statistically significant effect of the drug was observed. Oedema was significantly reduced till the 15<sup>th</sup> day of treatment and then during the follow up period i.e. on day 22<sup>nd</sup> and 29<sup>th</sup> day mild recurrence of oedema was observed.

So it can be concluded that *Prishnaparni-Bala-Vasa Kwatha* is effective in treating non-pathological mild to moderate *Garbhavastha Janya Shopha* in *Pada.* 

In this study the treatment showed no adverse effect on the Mother and the fetus.

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#### REFERENCES

- 1. Agnivesa, Charaka Samhita, Ayurveda deepika tika of Chakrapanidutta, Reprint edition 2011. Choukhambh Orientalia, Varanasi. 2011. Pp-738, pg-187.
- Braunwasld, Fauci, Kasper, Hauser, Longo, Jameson. Harrison's, principals of internal medicine. 16<sup>th</sup> edition. USA: McGraw-Hill Medical Publishing division. 2005, volume 1.Pp-2607, pg-71.
- 3. Lyndall Mollart., RN. RM. Ma Mid. Dip. Reflexology. Pregnancy oedema, emotions and reflexology., The journal of the Reflexology Association of Australia. Vol: 10, No: 4: Pages 18- 20.
- 4. F Gary Cunningham et al, Williams obstetrics, 22nd edi., Mc Graw Hill companies, Medical Publishing Division Inc., Pp-1668, Pg-184.
- 5. Yoga Rathnakara with Vidyothini Hindi Commentary by Vaidya Lakshmipati Sastri, Uttarardha. Edition Reprint 2012, Chaukambha Prakashana, Varanasi. Strigarbha rogachikithsa, Pp - 504, Pg-421.

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