

Study the Effectiveness of *Vaitarana Basti* in *Amavata*: A Clinical Trial

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Abstract

Background - *Amavata* is *madhyammargashrit* (pertaining to bones, joints and vital point) disease. Aggravated *Vata* and *Ama* are the core factors taking part in the pathogenesis of *Amavata*. *Basti* (therapeutic medicated enema) is important treatment for *Vatadosha* and *Vaitarana Basti* (VB) is indicated in *Amavata*. Thus it was chosen for the study. In this study, a total 21 patients of *Amavata* were registered and all patients completed the treatment.

Method - As *Vaitarana* is a *Kshar-basti*, *Basti* treatment was started first with *Matrabasti* (oil enema of 60ml dose) of sesame oil to gain *pakvashayasnigdhat* (oleation of bowels). After that one *MatraBasti* was followed after every two VB. Total seven Bastis were given to every patient. *Basti* was instilled as explained in texts (pre *Basti* management, *Basti* procedure, post-*Basti* management).

Results—Pain assessment was done with Oxford Pain Chart and results were analyzed statistically, using students‘t’ test. Calculated p-value was $p < 0.001$. Hence VB provided significant pain relief in *Amavata*. It was observed that there was 50% relief in bodyache and all other symptoms of *Amavata* on fourth day of VB while up to seventh day total relief was obtained for these symptoms. Total recovery was achieved in 38.1% patients followed by good relief in 57.14% patients.

Conclusion—VB proved highly significant in *Amavata*.

Keywords

Vaitarana Basti, Amavata



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INTRODUCTION

'Vijayrakshit', in his *Madhukosh Vyakhyan* on *Madhavnidan*, has touched on *Amavata*. No disease named as *Amavata* is described in prime compendia of *Ayurveda* viz, *Charak, Sushruta and Ashtang –Hriday*. Aggravated *Vata* and *Ama* are the core factors taking part in the pathogenesis of *Amavata*. In its *pravruddhavastha* (severe form) all joints get affected. Pain related to *Amavata* is so dreadful that it is compared with pain of scorpion bite¹. Even though swelling along with pain is there, major concern for patient of *Amavata* is pain relief. As it is *madhyammargashrit* disease, it is very difficult to cure it completely. *Shodhanachikitsa* for it comprises of '*Basti*' (medicated therapeutic enema)², which is important treatment for *Vatadosha*. *VaitaranaBasti* (VB) is indicated in *Shool* (Pain) as well as in *Amavata*³. Thus this clinical trial aims to assess its effectiveness in *Amavata* essentially in pain relief.

Aim- To study the effectiveness of VB in *Amavata*

Objectives –

1. To assess the pain relieving effect of VB in *Amavata*.
2. To assess the effect of VB in *Amavata*

MATERIALS AND METHODS

The method used to evaluate the efficacy of VB in *Amavata* was clinical study.

Clinical trial was conducted on 21 patients of *Amavata* fulfilling criteria for inclusion.

The study was carried out at Seth Tarachand Ramnath Hospital, Pune, in I.P.D. and O.P.D. of Kayachikitsa Dept.

Patients of both male and female sex, belonging to all socio economic groups were selected according to the inclusion criteria for trial.

Study Design

Inclusion criteria - patients presented with textual signs and symptoms of *Amavata*.⁴

Exclusion criteria- a) Joint pain regarding '*NirupstambhitaAvastha*' of disease.

b) *Anasthapyaa* and *Ananuvasya* (patients contraindicated for therapeutic enema of oil and decoction)^{5,6}.

c) Age below 15 and above 70 years.

Duration of *Basti* :-7 days

As *Vaitarana* is a *Kshar-basti*, *Basti* treatment was started with first *Matrabasti* (oil enema of 60ml dose) of sesame oil to gain *pakvashayasnigdhatā* (oleation of bowels). After that one *Matra Basti* was followed on completion of every two VB. Total seven *Bastis* were given to every patient.

Matra (doses) – Variation in the doses of VB, especially of *Gomutra* (cow's urine)

was done according to age, *vyadhibala* (severity of disease), *rugnabala* (mental and physical strength of patient), *kala* (seasons). One kudava (160ml) is the dose of cow's urine in VB. It was reduced up to 80ml in some patients.

Rugnaparikshan (Examination of patient):-

After selection of patient, complete case was recorded in special case paper format along with detail history of present and past illness. Written informed consent was taken from every patient.

Method of preparation of VB

- 1) 40gm of ripped tamarind was taken in a container
- 2) 220 ml of hot water was added to it.
- 3) Allowed it to cool.
- 4) Rubbed it well and removed the fibrous part from it.
- 5) Filtered it properly to get thick tamarind pulp.
- 6) 20 gm of jiggery was added to the tamarind pulp and mixed it well.
- 7) 80 gm of honey and 10 gm of rock salt was taken in another container.
- 8) It was properly mixed with hand.
- 9) 40 ml of sesame oil was mixed in mixture of honey and rock salt.
- 10) Again it was mixed well to become a homogenous mixture.

11) Mixture of tamarind and jiggery was poured to this container.

12) Lastly 160 ml of cow's urine was added to the formed mixture.

13) Stirred it well to get homogenous mixture of VB.

14) Made it lukewarm by keeping it in hot water before administration.

Basti was instilled as explained in texts (*prebasti* management, *basti* procedure, *post- basti* management)⁷.

Pathogenesis of *Amavata*¹

Formation of *Ama* and vitiation of *Vata*



Embellishment of *Vata*, especially to *shleshmasthana* due to *gunasamanya*



Margavarodha and *abhishyanda* in *srotasas*



Undue stickiness in *srotasas*



Enters in *Triksandhi* and produce stiffness



Amavata

How VB brake pathogenesis of *Amavata*?

One of the treatment of *Amavata* according to *Yogaratanakar* is *Basti*.² Owing to the

diversity of combination of drugs used in the *Basti*, it can perform diverse functions like *shodhana* (cleansing), *shaman* (pacifying), *sangrahana* (checking) ⁸. In *Amavata*, as disease progresses, *margavarodha*

(obstructive pathology) increases, so it requires cleansing therapy which can cleanse the closed channels and restore its normal function. VB has very potent cleansing action.

Table 1 Action of VB

<i>Dravya</i>	<i>Rasa</i>	<i>Veerya</i>	<i>Vipaka</i>	<i>Guna</i>	<i>Action</i>
<i>PakvaAmlika</i> ⁹ (ripened tamarind)	<i>Amla, Madhur</i>	<i>Ushna</i>	<i>Amla</i>	<i>Laghu, Ushna, Ruksha</i>	<i>Vatakaphasham ak, Pittavardhak</i>
<i>Guda</i> ¹⁰ (jiggery)	<i>Madhur, Lavana</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Guru, Snigdha</i>	<i>Vatapittaghna, Kaphavardhak</i>
<i>Saindhav</i> ¹¹ (rock salt)	<i>Lavana, Madhur</i>	<i>Sheeta</i>	<i>Madhur</i>	<i>Laghu Snigdha, Sukshma, Agnideepana, Deepana, Pachana</i>	<i>Tridoshaghna</i>
<i>Gomutra</i> ¹² (Cow's urine)	<i>Katu, Lavana, Tikta</i>			<i>Ushna, Tikshna, Laghu, Ruksha, Bhedi.</i>	<i>Kaphavataghna , pittakara</i>
<i>Tila tail</i> ¹³ (Sesame oil)	<i>Madhur, Kashay, Tikta</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Vyavai, Vikasi, Sara, Vishad, Snigdha, Sukshma, Lekhan</i>	<i>Vatakaphshama k, Raktapittakrut</i>

As a cumulative effect, VB is

Rasa- Madhur, amla, lavana, katu, tikta, kashay. Veerya- Ushna

Vipak- Madhur

Properties- *Ushna, teekshna, laghu, ruksha, vyavayi, vikasi*

Other functions- *Chedan, bhedan, lekhan*

Doshagnata- *Kapha-Vataghna, Pittakara*

The properties and potency of the *Basti* will be responsible for its action.

Amavata is *madhyammargashrit* disease.

These *Doshas* if brought into the *Koshtha*, can be expelled out by nearest root.

Owing to the potency, VB fetch the *Doshas* in *Koshtha* by creating substantial increase,

liquefaction in *Dosha* and by digesting *Ama* thereby opening the blocked channels keeping *Vata* in control. These vitiated *Doshas* are then expelled out from anal root by *Basti*.

Assessment criteria

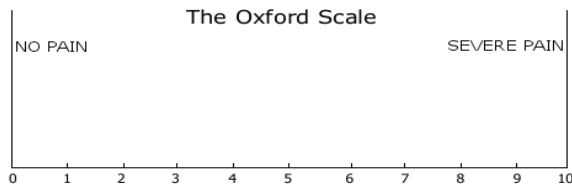
Overall relief in symptoms –

Complete – 4, Good – 3, Moderate – 2, Slight- 1, No relief – 0

Pain assessment was done with Oxford Pain Chart

The oxford scale is a pain level scale, zero is no pain, one is a very small amount of discomfort, and two is perhaps a score level of discomfort. The scale goes up to the

count of ten. Level five of the Oxford scale is the half way mark.



The relief in the intensity of pain according to oxford pain chart was calculated using following formula

$$\% \text{ of pain relief} = \frac{IP_0 - IPL}{IP_0} \times 100$$

Where IP₀ is intensity of pain on 0th day of trial i.e. before treatment IPL is intensity of pain on last day of treatment

OBSERVATIONS AND RESULTS

Table 2 Division according to severity before treatment

Gradation of Severity	No of patients	%
0	0	0
1	1	4.76
2	19	90.48
3	1	4.76
4	0	0

Chart 1 Division according to severity before Treatment

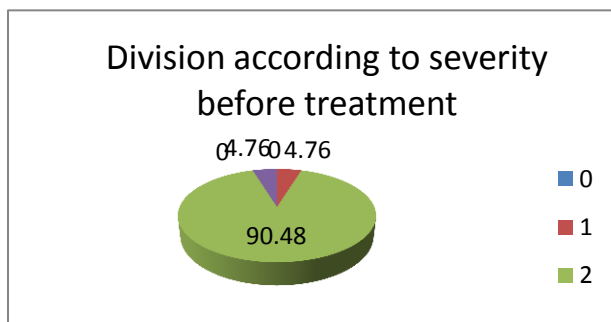


Table 3 Division according to severity after treatment

Gradation of Severity	No of patients	%
0	8	38.1
1	12	57.14
2	1	4.76
3	0	0
4	0	0

Chart 2 Division according to severity after treatment

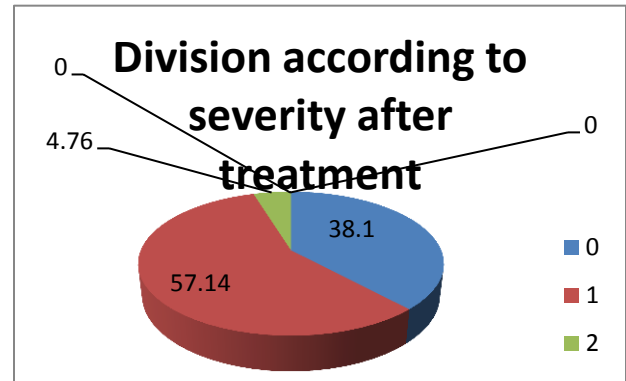


Table 4 Percentage of relief on fourth day of treatment according to Oxford Pain Chart

% of relief on fourth day of treatment	No of patients	%
1-10	8	38.1
11--20		
21-30		
31-40	1	4.76
41-50	12	57.14
51-60		
61-70		
71-80		
81-90		
91-100		

Chart 3 % of relief according to oxford pain chart on 4th day of treatment

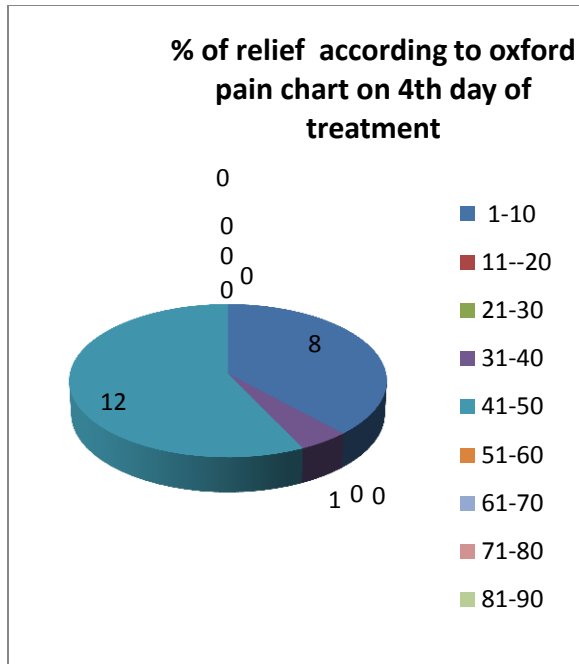


Table 5 Percentage of relief on seventh day of treatment according to Oxford Pain Chart

% of relief on seventh day of treatment	No of patients	%
1-10		
11--20		
21-30		
31-40	1	4.76
41-50	16	76.49
51-60		
61-70		
71-80		
81-90		
91-100	4	19.05

Chart 4 % of relief according to Oxford Pain Chart on seventh day of treatment

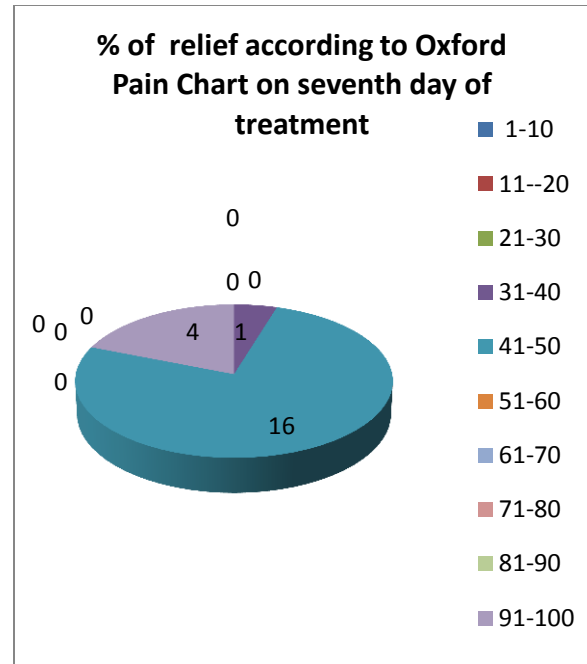


Table 6 Statistical Analysis

Pain n	Mean difference	Standard deviation	t-value	p-value
	36.11	29.49	5.19	p<0.001

DISCUSSION

In this study, total 21 patients of *Amavata* were registered and completed the treatment. Each patient was observed everyday for each sign and symptom. The signs and symptoms of *Amavata* were the main criteria for diagnosis and assessment. Oxford pain chart was used for pain assessment.

The assessment was also carried out before and after treatment to evaluate the total effect of treatment. Results were analyzed statistically by using student's 't' test.

There were 95.23% female patients indicating high prevalence of the disease in females. Moderate severity of symptoms was present in 90.48% patients. As far as pain is concerned, according to Oxford pain chart, on fourth day of VB, 8(38.1%) patients got 1-10% relief, 1 (4.76%) patient got 31-40% relief and 12 (57.14%) patients got 41-50% relief. On last day i.e. seventh day of VB, 1(4.76%) got 31-40% relief, 16 (76.49%) patients got 41-50% relief while 4(19.05%) got 91-100% relief. Also it was observed that there was 50% relief in body ache and all other symptoms of Amavata on fourth day of VB while up to seventh day total relief in these symptoms. Total recovery was achieved in 38.09% patients followed by good relief in 57.15% patients.. Some contraindications of VB are found during this clinical trial.

Contraindications of VB –

Pitta Prakruti

Alpasatva, alpabalarugna

JeernaAmavata

Alpadoshavastha

Dhatukshyavastha

CONCLUSION

VB is very useful in pravrdhastha, navavastha of Amavata. It should not be used in pitta prakruti and ushnarutu.

Further scope of the study – As *Amavata* is correlated with Rheumatoid Arthritis (RA), Investigations related to RA before and after the treatment would provide objective assessment by carrying out randomized clinical trials.

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