

**A COMPARATIVE CLINICAL STUDY IN THE MANAGEMENT OF PRAVAHIKA
(INTESTINAL AMEBIASIS) THROUGH VASTI AND KUTAJ PARPATI****Dr. R. P. Parauha***

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ABSTRACT

The disease *Pravahika* is a swatantra vyadhi as well as an upadrava of *Atisara*. *Vagbhata* has also explained about *Bimbishi*, which is a synonym of *Pravahika*. In developing countries, the unhealthy environment or environmental hazards, unhealthy food habits and occupation plays an important role in creating life throbbing problems. Amoebiasis results due to the infection by *Entamoeba histolytica*. It is estimated that 45-55 million people carry the infection in their intestinal tract and approximately 1/10th of infected people suffer from invasive Amoebiasis. It is probable that invasive Amoebiasis accounted for about 7500 – 130000 death in world every year. A comparative clinical study comprising of 30 subjects of either sex attending OPD presenting with clinical manifestation of *Pravahika* were selected randomly and divided into two groups with 15 subjects in each group. Both Groups received Aampachan with Haritakyadi kashaya till niram lakshana seen. Group A received *Sangrahi Vasti* in *Kalavasti* schedule for 16 days. *Shamana chikitsa* with *Kutaja Parpati* and *Takra anupana* for 32 days. Group B received *Takra Vasti* in *Kalavasti* schedule for 16 days. *Shamana chikitsa* with *Kutaja Parpati* and *Takra anupana* for 32 days. *Sangrahi Vasti* is an effective therapy showing highly significant results on clinical parameters. *Takra Vasti* is also effective therapy in management of *Pravahika*, which shows a highly significant result. *Kutaja Parpati yoga* has good anti-amoebic property.

KEYWORDS: Pravahika, Intestinal Amoebiasis, Amapachana, Sangrahi Vasti, Takra Vasti, Kala Vasti, Kutaja Parpati.**INTRODUCTION**

Ayurveda is one of the medical systems that is truly an Indian origin. This system by definition implies the knowledge of life (or) knowledge by which life may be prolonged. It consists of many principles, and one of them is – “Dosha dhatu mala mulam hi Shareeram” - The body constitutes dosha dhatu and mala. The major malas are purisha, mutra and sweda.

Intake of food, water and air are not alone needed to withstand life, but the expulsion of excreta is also an important factor. In all samhitas, the importance of pureesha is explained. Pureesha supports the body by indirectly augmenting pitta and vata, which continuously keep up the shareera dharana. The life not only depends upon the food, but also on the faecal matter passed out. In any kind of dushti of pureeshavaha srotas, pureesha atipravriti and pureesha apravriti would be manifested. Out of many diseases of gastro-intestinal tract, the important ones are Pravahika, Atisara and Grahani.

The disease Pravahika is a swatantra vyadhi as well as an upadrava of Atisara. Susruta,^[1] and Madhavakara,^[2] have first identified Pravahika as a distinctive disease and

Charaka,^[3] mentions it as a symptom in Kaphaja atisara and as a Vasti vyapat. Vagbhata,^[4,5] has also explained about Bimbishi, which is a synonym of Pravahika.

In Pravahika, due to Nidana sevana, vata gets vitiated resulting in discharge of stools frequently with Kapha. In Atisara, Nanavidha dhatusaranam is present but in Pravahika, Pravahana, Kaphamatra-sarana, Kunthana sheela mala pravriti will be present.

In developing countries, the unhealthy environment or environmental hazards, unhealthy food habits and occupation plays an important role in creating life throbbing problems. Among this, Amoebiasis is a common communicable infection of gastro-intestinal tract, which has a world wide distribution. Amoebiasis results due to the infection by *Entamoeba histolytica*. It is estimated that 45-55 million people carry the infection in their intestinal tract and approximately 1/10th of infected people suffer from invasive Amoebiasis. It is probable that invasive Amoebiasis accounted for about 7500 – 130000 death in world every year.^[6]

In poor healthy atmosphere of India, about 15% of the total Indian population is affected with Amoebiasis. The morbid condition, amoebiasis take place through warm humid climate, overcrowding, unhygienic living condition, contamination of drinking water, food and the use of human faeces as fertilizer.

It is being observed that Pravahika and Intestinal Amoebiasis have similar clinical features like tenesmus, minimal defaecation and expulsion of blood and mucus with the stool.

Vasti⁷ is said to be the best and most effective procedure among all the Shodhana karma. The drugs, which have the property of Pureesha sangrahana and Takra are used as vasti dravya in this clinical study. So in the present study subjects suffering from Pravahika (Intestinal amoebiasis) are administered vasti karma. The efficacy of Pureesha sangrahi vasti will be compared with Takra vasti. An effort is made in this study to find an effective and safe procedure in the management of Pravahika (Intestinal Amoebiasis) through Vasti as Shodhan and Kutaja parpati as Shamanoushadhi.

The subjects suffering from Pravahika (Intestinal Amoebiasis) fulfill the criteria of selection of present study were selected for the trial. The subjects were subjected for detail clinical examination and investigation as per the specially designed proforma. The present clinical study contains sample size of 30 subjects. They were divided into two groups as group A and group B, each having 15 subjects, all the 30 subjects were given Amapachana with Haritakyadi Choorna, and group A subjects were subjected to Sangrahi vasti and group B subjects were treated by Takra vasti in Kalavasti schedule. Both the subjects of the groups were received Kutajaparpati as Shamanoushadhi for a period of 32 days with Takra anupana. Follow-up period is 3 months.

AIMS AND OBJECTIVES

1. To study Pravahika Vis-a-vis Intestinal Amoebiasis in detail.
2. To assess the efficacy of Sangrahi Vasti and Kutaja Parpati in the management of Pravahika (Intestinal Amoebiasis).
3. To assess the efficacy of Takra vasti and Kutaja Parpati in the management of Pravahika (Intestinal Amoebiasis).
4. To assess the role of Sangrahi Vasti with Kutaja Parpati in group A and Takra Vasti with Kutaja Parpati in group B and to compare and analyse the results between group A and B.

MATERIALS AND METHODS

The following materials were used in the Clinical Trial.

- Hareetakydi Choorna.^[8]
- Madhu.^[9]
- Saindhava Lavana.^[10]
- Sunishannaka Changeri Ghrita.^[11]

- Poota yavani kalka.^[12]
- Pureesha sangrahana varga dravya along with Dashamoola.^[13,14,15]
- Takra.^[16]
- Kutaja Parpati.^[17]
- Ksheera bala Thaila.^[18]

Source of Data

Subjects attended the OPD in Jai Clinic, Rewa, M.P. were taken as per the assessment criteria.

Inclusion Criteria

1. Subjects with clinical features of Pravahika (Intestinal Amoebiasis).
2. Duration of 6 months to 5 years.
3. Subjects of both sexes between age group of 20 – 60 years.

Exclusion Criteria

1. Subjects with other infectious disorders with structural abnormalities and metabolic disorders.
2. Amoebic hepatitis, amoebic lesions of lungs.
3. Irritable bowel syndrome, diverticulitis, ulcerative colitis, crohn's disease
4. Severe anaemia, pile mass (arshas).
5. Subjects not fit for vasti karma.

Withdrawal Criteria

1. If the patients having clinical feature would aggravated into secondary infection.
2. If the patient is irregular in the decided course of treatment.

Study Design

Study Design: Randomized comparative Clinical Trial
The present study was a Clinical trial to access the efficacy of Sangrahi vasti with Kutaja Parpati in group A and Takra vasti with Kutaja Parpati in group B in management of Pravahika (Intestinal Amoebiasis) and to compare it. Each group had 15 subjects.

Group A

- Amapachana with Hareetakyadi Choorna till nirama lakshana is attained.
- Sangrahi Vasti in Kalavasti schedule for 16 days.
- Shamana chikitsa with Kutaja Parpati with Takra anupana for 32 days.
- **Duration:** 48 days.
- **Followup:** 3 months.

Group B

- Amapachana with Hareetakyadi Choorna till nirama lakshana attained
- Takra Vasti in Kalavasti schedule for 16 days
- Shamana chikitsa with Kutaja Parpati with Takra anupana for 32 days.
- **Duration:** 48days.
- **Followup:** 3months.

Assessment Criteria

Subjective parameters

- Abdominal pain
- Frequent stools
- Tenesmus
- Presence of Mucous, Blood in stools

These were graded as follows and were assessed before and after treatment.

• **Abdominal pain**

- Grade 0 – No pain
- Grade 1 – Mild pain
- Grade 2 – Moderate pain
- Grade 3 – Severe pain

• **Frequency of Stools**

- Grade 0 – Once a day
- Grade 1 – 2-3 times per day
- Grade 2 – 4-5 times per day
- Grade 3 – More than 6 times per day

• **Tenesmus**

- Grade 0 – No Tenesmus
- Grade 1 – Mild Tenesmus
- Grade 2 – Moderate Tenesmus
- Grade 3 – Severe Tenesmus

• **Presence of Mucous, Blood in stool**

- Grade 0 – Absent
- Grade 1 – Present

Objective parameters

1. Presence of Amoebic Cyst
2. Changes in reaction in stool
3. Presence of R.B.C.
4. Presence of Epithelial cell, Pus cell, mucosal cell content in Stool

Statistical Analysis

Statistical analysis showing the significant results of Individual Parameters

Group A:

Parameters	BT Mean	AT Mean	% Of relief	S.D.	S.E.	't'	P	Remarks
Abdominal pain	2.12	0.62	70.5	0.51	0.18	9.02	P<0.001	Highly Significant
Frequency of stool	2.13	0.46	78.40	0.62	0.16	10	P<0.001	Highly Significant
Tenesmus	1.8	0.58	67.77	0.45	0.13	9.6	P<0.001	Highly Significant

- Presence of Amoebic Cyst.
Present /Absent

- Changes in reaction in stool.
Acidic / Alkaline

- Presence of R.B.C.
Present/Absent

- Presence of Epithelial cell, Pus cell, mucosal cell content in Stool.
Present /Absent

Investigations

- Stool - Microscopic and other examinations of stool.
- Colonoscopy, Sigmoidoscopy, USG - Abdomen if necessary.
- Blood - Common Hematological investigations like:
 - Hb%
 - TC
 - DC
 - E.S.R
 - R.B.S

Statistical Tests^[148,149]

The analysis of the effects of therapy was based on “t-test” applications. The efficacy of Sangrahi vasti and Takra vasti will be compared. The significance is discussed on the basis of Mean Scores, Percentages, SD, SE, t and p-values.

Depiction of Overall Effects of Therapy (Both Subjective and Objective)

- 0–25%: Mild improvement
- 26-50%: Moderate improvement
- 51-75%: Marked improvement
- > 76%: Good improvement

NON- PARAMETRIC	BT - SCORE	AT-SCORE	% OF RELIEF
Presence of mucous in stool	14	1	92.82%
Presence of blood stain in stool	8	1	87.5%
Presence of amoebic cyst	15	0	100%
Presence of R.B.C	13	4	69.2%
Changes of reaction in stool	8	4	50.0%
Presence of epithelial cell content in stool	7	2	71.4%
Presence of puscell content in stool	12	4	66.6%
Presence of mucosal content in stool	13	2	84.6%

Group B:

Parameters	BT Mean	AT Mean	% Of relief	S.D.	S.E.	't'	P	Remarks
Abdominal pain	2.2	0.6	72.72	0.53	0.176	7.6	P<0.001	Highly Significant
Frequency of stool	2.06	0.6	70.87	0.52	0.13	11.2	P<0.001	Highly Significant
Tenesmus	1.6	.46	71.25	0.5	0.13	10.6	P<0.001	Highly Significant

Non- Parametric	BT - Score	AT-Score	% of Relief
Presence of mucous in stool	13	2	84.6%
Presence of blood stain in stool	11	3	72.7%
Presence of amoebic cyst	15	0	100%
Presence of R.B.C	12	5	58.2%
Changes of reaction in stool	11	4	63.6%
Presence of epithelial cell content in stool	9	2	77.7%
Presence of puscell content in stool	14	4	71.42%
Presence of mucosal content in stool	11	3	72.7%

Total Effect of Therapy In 30 Subjects Of Pravahika

Parameters	No of subjects	%	No of Subjects	%	No of Subjects	%
> 76%: Good improvement	8	53.3%	7	46.6%	15	50%
51-75%: Marked improvement	4	26.6%	7	46.6%	11	36.6%
26-50%: Moderate improvement	3	20%	1	6.6%	4	13.4%
0-25%: Mild improvement	0	0	0	0	0	0

The overall response of the therapy in both the groups (Group A & Group B), after analysing before treatment and after treatment findings showed that 15 subjects out of 30 (50%) showed good improvement, 11 (36.6%) subjects showed marked improvement and 4 (13.4%) subjects showed moderate improvement.

DISCUSSION

Discussion on Probable Mode of action of Vasti: 150, 151, 152.

A. Effect of Sangrahi Vasti

Sangrahi vasti provided a statistically highly significant Effect on both subjective and objective parameters.

It is given in our classics that niruha should be administered after the complete digestion of previous meal. So in the empty stomach, vata is more predominant and niruha vasti can tackle vata very well and eliminate the malas properly. It is presumed that when the stomach is full, the peristalsis will be stimulated and the intestinal content will be pushed to the terminal portion. The drugs that are selected for the Sangrahi Vasti had the property of Pureesha Sangrahana. The Pravarthana Kapha dosha will be more in Pravahika and even the possibility of Rakta Srava is also a presentation in Pravahika, hence the Pureesha Sangrahaneeya gana dravya told by Acharya Charaka containing Kaphagna, Rakta Stambaka and Deepana character is ideally chosen as an ingredient of Niruha Vasti. The drugs like Priyangu, Katvanga, Samanga, Dhataki, Lodra, Priyangu, Amrasthi,

Padmakesara, Padmaka, and Mocha rasa are basically Rakta Stambaka Kaphagna, Deepana in nature.

The formulation selected for sneha vasti that is Sunishannaka Changeri Ghrita is mainly containing Deepana, Pachana drugs and the drugs are even Kaphagna and Vata hara.

Alternatively Sangrahi Vasti in Niruha vidhana followed by Sneha Vasti by taking Sunishannaka Changeri Ghrita was given in Kala Vasti schedule.

B. Effect of Takra Vasti

Takra vasti also provided a statically highly significant Effect on both subjective and objective parameters.

One famous saying goes thus: what "*Amrita*" is to the gods, Takra is to human beings. Takra is low in calories. It has the same amount of protein and vitamins as the milk it is made from and is an excellent source of calcium. Chemical composition is the key the chemical composition of churned Takra holds the key to its desirable baking characteristics. It is an excellent source of potassium, vitamin B12, calcium and riboflavin and good source of phosphorous. It also contains zinc, magnesium, nitrogen, vitamin and lactic acid. Takra regulates the intestinal flora with its Alkaloid property.

Takra is Ruksha, Deepana, Grahi, improves appetite, Grahani dosha hara, Kaphagna and relieves Arochaka. Takra is an important Pathya Kalpana and Aushada

Kalpna in disorders of the Mahasrotas like Arshas, Atisara, and Grahani roga. In the Pravahika roga, a variant of Atisara, Agnimandya, Samarasotpathi, Sakapha malapravruthi are the characteristic phenomenon taking place pathologically. Takra due to its action on Agni, and due to the deepana, pachana qualities, helps in reversing the Samprapti. The virukshana nature of takra is aimed at alleviating kapha dosha. The aushada siddha takra doesn't aggravate vata dosha on the contrary that becomes vatahara and even pitagna. In takra vasti, sangrahi gana siddha takra is used. The pureesha sangrahaneeeya gana dravya told by Acharya Charaka containing *Kaphagna, Rakta Stambaka and Deepana* character is ideally chosen as an ingredient of niruha vasti. The drugs like like Priyangu, Katvanga, Samanga, Dhataki, Lodra, Priyangu, Amrasthi, Padmakesara, Padmaka, and Mocha rasa are basically Rakta Stambaka Kaphagna, Deepana in nature.

Alternatively Takra Vasti in Niruha vidhana followed by Sneha Vasti by taking Avakpushpiyadi Ghrita (Sunishannaka Changeri Ghrita) was given in Kala Vasti schedule.

C. Effect of selected Shamanoushadhi

Kutaja parpati is the combination of Kutaja and Rasa parpati. In Intestinal Amoebiasis, lack of Absorption through intestinal flora is observed; the Rasa parpati helps in regulation of absorption through the intestinal flora. Gandhaka and Parada have got anti-bacterial property, they are the ideal anti microbial agents. In Kutaja Parpati, the Gandhaka and Parada act as catalyst to Kutaja. It is noticed that the stools of subjects suffering from Amoebiasis are markedly acidic in reaction. Kutaja contains Alkaloids in bulk amount that can neutralise acidic nature of the stool in subjects of Amoebiasis.

In Pravahika, Sarana of Dhatu Rupi Kapha, production of Ama Dosha is essentially noticed. Parpati kalpana is basically Grahani Dosha hara, mainly acting on the Kshudantra and Bruhadantra; equally Parpati is an ideal Agni Uttejaka, Ama Pachaka and Balya formulation. The drug Kutaja is a popular Stambana Dravya, it serves the stagnation of Ap tatva (water principle), Rakta Dhatu and Bahu Pravarthana of Kapha. When given along with Takra as Anupana, its action is multifolded.

Discussion on Comparative Effects between two groups

It was observed that both the Group A and Group B showed highly significant result in Subjects of Pravahika (Intestinal Amoebiasis). But in overall assessment, in both objective and subjective parameters, it was observed that in group A, the percentage of relief was 78.98% and in group B it was 74.16%. And also in the total effect of therapy in 30 subjects of Pravahika in Group A 53.3% subjects got good improvement while in group B it was 46.6%, 26.6% subjects got marked improvement in group A while in group B it was 46.6%,

20% subjects got moderate improvement in group A and 6.6% subjects got moderate improvement in group B.

After a keen observation on results, it can be concluded that group A (Sangrahi vasti) is more effective than group B (Takra vasti) in the management of Pravahika.

CONCLUSION

The following conclusions can be drawn on the basis of literature and observations made in this study.

- Pravahika is one of the important diseases of gastrointestinal tract in the present era due to lifestyle and food habits.
- Pravahika is the condition, which almost resembles with the disease Intestinal Amoebiasis.
- Etiological factors for Pravahika and Intestinal Amoebiasis are same for certain extent.
- Ahitshana is the main Causative factor in Pravahika.
- Pravahika is a Kapha Pradhana Tridoshaja Vyadhi.
- In Pravahika roga, due to the Ahitasya Vatala Ahara Sevana, results into Vata Prakopa which in turn combining with Kupita Kapha, causes Pachaka Agni mandya causing production of Apachita Ahara Rasa, gets mixed up in Koshta and getting discharged through the anus frequently.
- Atisara nanavidha dravadhatu saranam; pravahikayam thu kaphamatra saranam iti bedhaha||
- In the course of Samprapti, Karmataha vrudhi of **Samana Vata, Apana Vata** along with **Kledaka Kapha** and **Pachakagni Mandya** are attributed as the main factors leading to the manifestation of Pravahika.
- In the present Clinical Trial it is found that both Sangrahi Vasti and Takra Vasti are effective in Pravahika.
- Sangrahi Vasti along with Kutaja Parpati showed Highly Significant results in Group A.
- Takra Vasti along with Kutaja Parpati showed Highly Significant results in Group B.
- When the Group A and Group B were compared, it was found that, subjects receiving Sangrahi Vasti along with Kutaja Parpati (Group A) showed comparatively more response towards the therapy.

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