



## ORIGINAL RESEARCH ARTICLE

# COMPARATIVE CLINICAL STUDY OF ARKA VATI 1 AND ARKA VATI 2 IN PATIENTS OF AGNIMANDYA (IMPAIRED DIGESTION)

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### Abstract:

**Background:** Various studies in the general population and primary health care have reported that most of the people are suffering from loss of appetite due to drastic changes in life style and also due to lack of physical work. It occurs due to inhibition of secretion of digestive enzymes.

**Aims and Objectives:** To compare the efficacy of arka vati No. 1 & arka vati No. 2 on agnimandya due to kapha dosha.

**Methods and Materials:** Forty students suffering from agnimandya due to kapha dosha & other causes were studied. Total duration for trial treatment was 40 day. The patients were administered with arka vati.

**Result:** It is observed that positive values are highly significant in all the symptoms of agnimandya except laziness hence it can be concluded that the administration of arka vati is effective in agnimandya. The results are encouraging and support the classical claim that arka vati is effective in reducing the symptoms of agnimandya and it can be used extensively in the treatment.

**Conclusion:** On the basis of the result observed it may be concluded that the arka vati is having significant effect in ameliorating the disease agnimandya.

**Keywords:** agnimandya, arka vati, mandagni, jatharagni

**Key Message:** Administration of arka vati improves mandagni.

### Introduction:

It has been reported from various studies in the general population that most of the people are suffering from agnimandya. Now days everybody is very much busy due to dramatic change in global environment. Life style has become such in which no one is doing physical work, irregularity in sleeping, change in food habits, taking diet with violating the proper sequence, taking oily and heavy food and

suppressing the natural appetite etc. are major causes responsible for agnimandya. Agnimandya<sup>1</sup> is a disorder which occurs as a result of mandagni. According to modern medical science, when secretion of digestive enzymes inhibits in alimentary canal. It may be called as mandagni<sup>2</sup>. This mandagni generally occurs due to increase in kapha dosha but tridosha are responsible for mandagni.

Mandagni is responsible for occurrence of ama and this ama dosha have adverse effect on Agni present in alimentary canal and this cycle repeats again producing agnimandya.

Agnimandya is a disorder of Gastrointestinal Tract in modern science in which the quality & quantity of digestive enzyme degrades<sup>3</sup>. According to Ayurveda, we may compare loss of digestive enzymes with mandagni (fire of low intensity) of alimentary canal also called as jatharagni. There are two types of Agni were described:

i) Samagni- Normal bio-fire

ii) Vikritagni<sup>4</sup>- pathological bio-fire

1. Acute Thermal element activity
2. Mild Thermal element activity
3. Irregular Thermal element activity.

Above three types of vikritagni combination produces grahani dosha which may be compared with chronic diarrhea in modern science. Vishamagni is mainly originates ama and ama combined with ama dosha<sup>5</sup> makes sama dosha. This sama dosha affect agni adversely separate nidhan is available in Ayurveda.

The symptoms of Agnimandya<sup>6</sup> are given below:

1. Loss of Appetite
2. Indigestion
3. Sweat taste in mouth
4. Salivation
5. Discomfort in Abdomen
6. Laziness
7. Debility

#### Complications of Agnimandya

1. Disorder of abdomen
2. Dynasty
3. Cholera
4. Piles
5. Diarrhea
6. Pain in Abdomen.

Male and female are equally affected and all age group are equally involved. Modern science treats with enzyme in safe and also prevents

reoccurrence. Acharya Charaka and Vagbhata describe the treatment of agnimandya.

The main components of arka vati are given below-

1. Sauvarchal Lavan<sup>7</sup> (Black Salt) (*Unaqua Sodium chloride*)
2. Navsadar<sup>8</sup> (*Ammonium chloride*) ( $\text{NH}_4\text{Cl}$ )
3. arka<sup>9</sup> (*Calotropis gigantea*)
4. Marich<sup>10</sup> (*Piper nigrum*)

#### Preparation of arka vati No. 1<sup>11</sup>:

It was prepared in the pharmacy. All ingredients in equal quantity were made powder and filtered with the help of fine cloth each independently & then mixed. After mixing fresh arka Puspa Lavangika<sup>12</sup> mardan Karma was done properly and then arka vati No.1 was prepared with weight of 250mg each.

#### Preparation of arka vati No.2<sup>13</sup>:

It was prepared in the pharmacy. All ingredients in equal quantity were made powder and filtered with the help of fine cloth each independently & then mixed. After mixing fresh arka pushpa triturating was done properly and then arka vati No.1 was prepared with weight of 250mg each.

In Ayurvedic Literature the internal uses of arka is given which are-

1. Agnimandya
2. Liver disorders
3. Abdominal disorder
4. Constipation
5. Abdominal Worms
6. Indigestion.

#### Aims & Objectives:

To evaluate the efficacy of arka vati No. 1 & No. 2 in agnimandya due to different reasons.

#### MATERIAL AND METHODS

##### Selection of Patients:

Patients and volunteers suffering from agnimandya in which most patients were male, belonging to age 20-35 yrs. Most belongs to schedule cast and most are the students

irrespective of religion and socio economic strata were selected.

### **Study Population:-**

From O.P.D. & I.P.D. National Institute of Ayurveda, Jaipur.

### **Sampling:**

Simple random sampling technique using lottery method.

Sample Size: 40

### **Study Setting:**

The study was carried out at hospital of National Institute of Ayurveda, Jaipur.

Ethical Consideration:

Clearance was obtained from institutional committee of EC No. 010/1999 dt. 12.04.1999

### **Inclusion Criteria:**

1. Patients & Volunteers of agnimandya disease having symptoms, loss of appetite, indigestion, Salivation, Headache, abdominal discomfort etc.
2. Patients aged 20-35 years irrespective of sex, cast, religion, socioeconomic strata.

### **Exclusion Criteria:**

1. The Subjects which are having serious disease such as tuberculosis, heart disease, cancer, colitis, alcoholism, diabetes.
2. Below the age 20 and above 35
3. Patients with psychic disorder
4. Patients not ready to sign consent and non-cooperative.

### **Withdrawal Criteria:**

### **Results:**

Group	SD	SE	T	P
A	1.87	0.42	15	>0.001
B	1.93	0.44	12.8	>0.001

**Table 1:** Total Effect of therapy

In Group A, 49.51% relief and in Group B, 48.83% relief was observed. Significant 't' value shows that arka vati 1 & arka vati 2 have

Patients meeting any of the following criteria were to be withdrawn from study.

- Patients consume any other medicine used for agnimandya.
- Intervention:  
Drug – arka vati No. 1 & arka vati No. 2  
Dose: 500 mg B.D  
Duration: 40 days  
Follow-up: after 40 days

**Procedure:** After recruitment, patients & volunteers were put on 40 days on base line visit (day first) medical history and physical examination were performed an inclusion criteria was assessed and the trial treatment was explained. Patients and volunteers were administered in both the groups that is group A and group B.

Grouping:

Group A: In the group arka vati No.1 (prepared by push-lavangika) was given to subjects 500 mg B.D. to twenty patients for 40 days.

Group B: In this arka vati No. 2 (prepared by push of arka) was given to second twenty patients 500 mg B.D. for 40 days.

### **Assessment Criteria:**

Symptoms- Loss of Appetite, indigestion, salivation, uncomfot in abdomen, lazyness etc.

**Data Analysis:** - Statistical Evaluation of the data obtained was done using means, standard deviation, percentage, mean difference. Data analysis was done to find out the significance before study treatment & after study treatment.

positive effect on all the patients at the level of > 0.001.

Symptoms	Before Treatment	After Treatment	B.T. - A.T.	S.D. ±	SE ±	t	P
Loss of Appetite	49	23	26	0.57	.130	10	>.001
Indigestion	58	45	13	0.75	.169	5.62	>.001
Sweet taste in mouth	25	8	17	0.51	.114	3.95	>.001
Salivation	28	8	17	0.67	.150	4.33	>.001
Discomfort in abdomens	21	9	12	0.47	.105	6.66	>.001
Lazyness	26	10	16	0.36	0.082	1.83	<0.01
Headache	27	11	16	0.61	0.138	5.79	>.001
Debility	20	11	9	0.58	0.130	6.15	>.001

**Table 2:** Group A – Effect of therapy on symptoms

Group A: ‘t’ values is not significant in laziness at the level of <0.01 and highly significant in other all symptoms at the level of >0.001. It

means arka vati 1 have positive effect on symptoms of Group A.

Symptoms	Before Treatment	After Treatment	B.T. - A.T.	S.D. ±	SE ±	t	P
Loss of Appetite	52	26	26	0.57	0.130	10	>.001
Indigestion	52	33	19	0.49	0.109	5.9	>.001
Sweet taste in mouth	12	3	9	0.48	0.110	7.73	>.001
Salivation	29	16	13	0.67	0.150	5.66	>.001
Discomfort in abdomens	25	12	13	0.50	0.110	5.45	>.001
Lazyness	25	9	16	0.52	0.117	6.84	>.001
Headache	7	4	3	0.52	0.117	6.84	>.001
Debility	32	18	14	0.51	0.114	3.95	>.001

**Table 3:** Group B - Effect of therapy on symptoms

Group B:- ‘t’ values is highly significant in all symptom of Group B at the level of >0.001 shows that arka vati 2 have positive effect on all symptoms. Average 53.38% relief was found in the intensity of symptoms of group A by arka vati 1 and Average 51 % relief in the on the

basis of ‘t’ values the effect of arka vati 1 & 2 have been effect on symptom loss of appetite. intensity of symptoms of Group B by arka vati 2. So arka vati 1 & arka vati 2 may be used in treatment of Agnimandya safely.

**Discussion:** Comparative data analysis revealed that 't' value in all the symptoms (loss of appetite, indigestion, sweat taste in mouth, discomfort in abdomen, headache, salivation is highly significant in all symptoms. Hence it can be concluded that treatment of agnimandya by arka vati 1 & arka vati 2 is significant. The results are encouraging and support the claim that both arka vati are effective in reducing

### Conclusion:

According to Ayurveda, agnimandya is a disorder of Gastrointestinal Tract in which the quality & quantity of digestive enzyme degrades. We may compare this loss of digestive enzymes with mandagni (fire of low intensity) of alimentary canal. Here in this study Patients were divided in two groups A & B according to arka vati given that in arka vati 1 (with arkapushp lavangika) and arka vati 2 (with arka pushp). Patients were examined every 10 days

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symptoms of agnimandya and it can be used extensively in treatment. Probable mode of action of arka vati in agnimandya disease due to increase in kapha dosha. All types of agnimandya are due to vitiated tridosha. Hence one should treat the patients according to dominance of vitiated dosha. The vitiated dosha which is more dominant should be treated first.

interval on the basis of removal of symptoms. It was observed that 49.51% of total patients were relieved in Group A by arka vati 1 and 48.83 % of total patients were relieved in Group B by Ark vati 2. Average 53.38% relief was found in the intensity of symptoms of group A by arka vati 1 and Average 51 % relief in the intensity of symptoms of Group B by arka vati 2. So it can be concluded that both arka vati may be given safely in treatment of agnimandya.

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