

Clinical Evaluation of Shunthi (*Zingiber officinale*) in the Treatment of *Urdhwag Amlapitta*

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Abstract

Amlapitta manifests when a person, in whom *pitta* has been vitiated-uses food and drink that are incompatible, spoiled, very sour and that are capable of causing vitiation of *pitta* and increases *drava* and *amlaguna* of *pitta*. Another basic cause of *amlapitta* according to *charakacharya* is *ajirna* (indigestion). The increasing rate of *amlapitta* presents a constant challenge to the research workers of *Ayurveda*. In this clinical study, *Shunthi (Zingiber Officinale) churna* has been used in 33 patients having symptoms of *urdhawagamlapitta* viz., *amlodgar*, *tiktodgar*, *utklesh*, *chhardi*, *udarshool*. According to Ayurvedic text, *Shunthi* is *aampachan* and *dipan* helps in improving *ajirna*. *Madhurvipak* and *grahiguna* of *Shunthi* reduces *amla* and *dravaguna* of vitiated *pitta*. This study has revealed a highly significant effect of *Shunthi churna* (P <0.001) in the management of *urdhawagamlapitta*.

Keywords *Amlapitta*, *shunthi churna*, *urdhawagamlapitta*, hyperacidity



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INTRODUCTION

Amlapitta is a life-style-related disease prevalent all over the world. As the life is becoming very fast and the rate of urbanisation is growing, the degree of psycho somatic ailments is rapidly increasing throughout the world. *Amlapitta* is a disorder caused by habitual, irregular diet schedule and activities, but also as a result of psychological and physiological aberrations.

Amlapitta has been mentioned as a separate entity in *Madhava Nidana*^{1, 2}. The similar conditions have been mentioned in text like *Charaka*³, *Susrutha*⁴ and *Vagbhata*⁵ while describing the *Grahani roga* and *vidagdhajirna*. The symptoms described as *vidagdhajirna* may be compared to *amlapitta*. *Acharya Sushrut* has described the *amla rasa* of *pitta* appearing to be in *vidagdhastate*⁶. *Acharya Dalhanna* in his commentary '*nibandhasangraha*' while describing the *amla rasa* of *pitta* has mentioned that it appears in a clinical condition of *vidagdhajirna* and a few *acharyas* have also described it as *amlapitta*⁷. *Acharya Charak* has considered *amlapitta* as a result of *ajirna* after being

associated with *pittadosha*⁸. *Acharya Chakarpani* in his commentary '*Ayurved Dipika*' while quoting the symptoms of *Amlapitta* as mentioned by other *acharyas* has written *amlapitta* as vitiation of *amlaguna* in *pitta*⁹. Vitiation in *pitta dosha* causes increase in *drava* and *amlaguna* of *pitta* and leads to *amlapitta*. The symptoms of this disease are indigestion, exhaustion without any exertion, nausea, eructation with bitter or sour taste, and feeling of heaviness of the body, burning sensation in the chest and throat and loss of appetite. In the modern medicine the *amlapitta* may be compared to the condition of hyperacidity which has been regarded as a symptom of various other diseases but not entirely an independent disease. In this the secretion of hydrochloric acid increases in the stomach causing burning sensation in chest and stomach, *amlodgara* (acid eructation), giddiness and heaviness of abdomen and other gastro-intestinal symptoms. The burning sensation in upper abdomen/chest, acid eructation, nausea, vomiting and constipation characterize it.

The treatment of this disease in modern medicine depends mainly upon antacids and tranquilizers. The management of the

disease in *Ayurveda* is based on *Sodhana* and *Samana Chikitsa*. A number of herbal and herbo- mineral drugs are mentioned for its management.

In view of the pathogenesis of *amlapitta*, the most satisfactory regimen revolves around the neutralization of excessive acid (*pitta*) present in the stomach with absorption of *dravaguna* and reduction of *amla rasa*. With a view to mitigate the unpleasant effects of *amlapitta* by the easily affordable household remedies without much expenditure, an effort has been made by trying *shunthi* on *amlapitta*. A clinical trial of commonly available drug *sunthi* (*Zingiber officinale*) has been put to trial on a series of 33 patients. The results of which are observed to be very much encouraging and enthusiastic in the preliminary studies.

The effect of the treatment has been obvious within a short period. *Shunthi* has been recommended extensively for the treatment

of various gastrointestinal disorders as an ingredient of many formulations and also as a single drug.

AIMS AND OBJECTIVES

To study the effect of *shunthi churna* in *Urdhwag amlapitta*

MATERIALS AND METHODS

Study design: Clinical observational study
Simple random sampling techniques.

Approval No.: GAC/ IEC/ 225/ 2015

Place of the Study: OPD of GAC, Nanded.

Selection of drug: *Shunthi* (dried tubers of *Ziagiberofficinale*) was prescribed in the form of powder.

Drug dose: 3gms of *shunthi churna* thrice daily for period of one month.

Study duration: 30 days

Follow up: 15 days.

Drug Review:

Drug	Botanical name	Rasa	Virya	Vipak	Guna	Prabhav
Shunthi	<i>Ziagiberofficinale</i>	Katu	Ushana	Madhur	Laghu, Snighda	Tridoshaghana

Probable mode of action of *shunthi*: As per classical text *shunthi* is *triptighana*, *dipana*, *aamapachan*. *Shunthi* has *grahi* action which helps in absorption of *dravaguna* of *pitta*. *Madhuravipak* of *Shunthi* decreases *amla rasa* of *pitta*.

Criteria for exclusion:

1. Age below 20 years and above 60 years
2. Colic pain in abdomen pertaining to any organic lesion
3. Malignancy in any part of body

4. Chronic hypertrophy gastritis
5. Patient suffering from any chronic systemic diseases and diseases of liver and kidneys.
6. Duration of disease below 3 months and above 5 years.

Criteria for inclusion of study:

1. Age between 20-60 years
2. Acid eructation (*amlodgar*)
3. Bitter eructation (*tiktodgar*)
4. Abdominal pain (*udarshool*)
5. Nausea (*hrulas*)
6. Vomiting (*chhardi*)
7. Fullness (*udargaurav*)

Criteria for assessment of Result

Specific scores were given for each and every parameter and recorded initially and during subsequent assessments. Based on the individual score of each finding before and after treatments, the response of the treatment can be assessed.

Classification of the Results

1. Good Response: 75% or more relief in clinical symptomatology
2. Fair Response: 50% to 75% relief in symptomatology.
3. Poor Response: 25% to 50% relief in symptomatology.

Table 2 Showing the Percentage of relief of treatment in various Parameters

4. No Response: Relief below 25% in symptomatology

Table 1 Assessments of both subjective and objective parameters

1) Acid Eructation (<i>amlodgar</i>)	Acid Eructation Absent	0
	Acid Eructation Present	5
2) Bitter Eructation (<i>tiktodgar</i>)	Bitter Eructation Absent	0
	Bitter Eructation Present	5
3) Fullness (<i>udargaurav</i>)	Fullness absent	0
	Fullness present	5
4) Abdominal pain (<i>udarshool</i>)	Abdominal pain absent	0
	Mild abdominal pain	5
	Moderate abdominal pain	10
5) Nausea (<i>hrulasa</i>)	Severe abdominal pain	15
	Nausea absent	0
6) Vomiting (<i>chhardi</i>)	Nausea present	5
	Vomiting absent	0
	Vomiting present	5

OBSERVATIONS

Demographic pattern of 33 *Amlapitta* patients

Sr. no	Parameters	Total score before Treatment	Total score after Treatment	Percentage of relief
1	<i>Amlodgar</i>	390	70	82.05%
2	<i>Tiktodgar</i>	360	70	80.56%
3	<i>Udargaurav</i>	140	15	89.03%
4	<i>Udarshool</i>	40	5	87.5%
5	<i>Hrulas</i>	125	25	80%
6	<i>Chhardi</i>	85	10	88.24%
	Overall	1140	195	84.56%

Table 3 Showing the effect of treatment on amlodgar (N=33)

Symptom	Mean grade score			S.D	S.E	T	P
	B.T	A.T	BT-AT				
<i>Amolodgar</i>	11.82	2.12	9.70	±3.29	0.57	16.92	<0.001

Table 4 Showing the effect of treatment on tiktodgar (N=33)

Symptoms	Mean grade score			S.D	S.E	T	P
	B.T	A.T	BT-AT				
<i>Tiktodgar</i>	10.91	2.12	8.79	±3.07	0.53	16.45	<0.001

Table 5 Showing the effect of treatment on udargaurav (N=23)

Symptoms	Mean grade score			S.D	S.E	T	P
	B.T	A.T	BT-AT				
<i>Udargaurav</i>	5	1.304	3.696	±2.24	0.647	7.90	<0.001

Table 6 Showing the effect of treatment on udarshool [N=20]

Symptoms	Mean grade score			S.D	S.E	T	P
	B.T	A.T	BT-AT				
<i>Udarshool</i>	11.750	2.00	9.750	±3.02	0.68	14.42	<0.001

Table 7 Showing the effect of treatment on Hrulas (N=25)

Symptoms	Mean grade score			S.D	S.E	T	P
	B.T	A.T	BT-AT				
<i>Hrulas</i>	5	1	4	±2.04	0.41	9.80	<0.001

Table 8 Showing the effect of treatment on chhardi [N=17]

Symptoms	Mean grade score	S.D	S.E	T	P
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	B.T	A.T	BT-AT				
Chhardi	10	1.176	8.824	± 3.32	0.81	10.95	<0.001

Table 9 Observations obtained with the help of CRF

Parameters	Observations				
1) Sex	Male	Female			
	16	17			
2) Age	20–30yrs	31–40yrs	41-50yrs		
	5	12	16		
4) Residence	Rural	11	Urban	22	
5) Occupation	Education	House wife	Labourers	Job	
	4	13	5	11	
6) Religion	Buddha	Hindu	Muslim		
	9	14	10		
8) Ahar	Shakahar	Mishra			
	12	21			
9) Agni	Visham	Manda	Teekshana		
	17	7	9		
10) Koshtha	Mrudu	Madhya	Krura		
	8	14	11		
11) prakruti	Vat-Pitta	Vat-Kaph	Kapha-Pitta		
	15	6	12		
12) Chronicity	Up to 1yr.	1-2yrs.	2-3 yrs.	3-5yrs.	
	4	10	23	8	

Table 10 Results obtained after treatment

Drug	Good Response	Fair response	Poor response	No response	Total
Shunthi	24	7	2	0	33

RESULTS

Based on total score of each clinical finding before and after treatments, more than 80% relief was noted in **Table 2**. In-fullness,

abdominal pain, vomiting more than 85% relief was seen. Among the 33 cases, 24

cases got good response and 7 got fair response (**Table 10**).

On the statistical analysis highly significant (P <0.001) results were found in all symptoms **Table 3-8**. Though there are so many herbal and herbo-minaral treatments, effect of shunthi churna as a single drug was found highly significant (P < 0.001) in the treatment of *amlapitta*. More over the drug is well known easily available and low cost.

Further clinical research studies are required to draw definite conclusion.

DISCUSSION

In the present paper effect of *shunthi churnat*, d. s., for 30 days on 33 patients was dealt in detail. This clinical trial has revealed that most of the cardinal symptoms of *amlapitta* has subsided after the treatment and the single drug had shown highly significant effect ($P < 0.001$) on overall subjective parameters **Table 2**. The observations indicate the high incidence of the disease in patients 41-50 years of age, young patients of age 31-40 also shows second high incidence of *Amlapitta*. Though the disease have been stated to run a chronic course, most of the patients studied, have been suffering from the disease for less than three years (**Table 9**). *Amlapittais* considered as the manifestation of *vidagdapitta*. According to *Ayurved* *amlapitta* is a life-style disorder. It's because of faulty food habit and consequence of indigestion (*ajirna*). The mechanism of action of the drug in treatment of *amlapitta* could be explained in many ways. Firstly, the drug possesses all the three action viz. *triptighana*, *dipana*, *pachana* and *grahi*, which are considered to

be essential for the treatment of this disease. *Shunthi* possess *Mudhurvipak* which helps in neutralizing *amlatva* of *amlapitta*. *Grahiguna* of *Shunthi* absorbs *dravaguna* of *amlapitta*. This action of *shunthi* relieves acute to chronic condition of *amlapitta*. Secondly, most of the patients under observation in this series had predominance of *vata* and *pitta Doshas* and *sunthi* ipossesses, *kapha-vata samaka* and tridoshaghana properties. *Sunthi* is said to have a powerful stimulant action on gastrointestinal system and has been recommended for treatment of certain types of diarrhea in modern medicine as well (Anonymous, 1963; Ozol, 1968; and David, *et at.* 1969). The drug contains a substantial percentage of volatile oil, which might be the main factor is improving the digestion and thereby cure this disease. (Chopra, *et al* 1956). Thus it seen that the *Sunthia* common house hold remedy could be utilized successfully for the treatment of such conditions.

CONCLUSION

Amlapitta (hyperacidity) is a common problem due to change of life style, stress, habits like alcohol, western dietary habits.

Easily available single drug *Shunthi* is very effective in this condition.

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