

EFFECT OF VASA GHRITA IN AMLAPITTA – A CLINICAL STUDY

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ABSTRACT

Amlapitta is a commonest disease found in present era. Due to improper food habits including its quantity and quality, poor health consciousness, improper lifestyle will result in aggravation of *Tridosha*, mainly *Pitta Dosha* which impairs the functions of *Agni*. This leads to indigestion and food attains *Amla Rasa*. At this stage, whatever food and liquid taken causes burning sensation. This pathological condition is called as *Amlapitta*. Symptoms of *Amlapitta* are seen in Gastritis of Allied science. Many Research works and Clinical trials have been carried out and proved to be effective to some extent, but still this disease is a burning issue. Keeping this under consideration, an attempt has been made to clinically study *Vasa*

Ghritha in *Amlapitta* as no study is done on this drug so far. The *Vasa* possess *Tikta Rasa*, *Laghu-Ruksha Guna*, *Sheetha Veerya* and *Katu Vipaka*. It functions as *Kapha-Pittha Shamaka* which is beneficial in *Amlapitta* as this disease develops in *Amashaya* which is the site for both *Kapha* and *Pitta*. The *Ghritha* is best *Pittha Shamaka* and will be helpful when used in *Niramavastha*. Thus, *Vasa Ghritha* helps to subside the *Dosha* and normalize the functions of *Agni*. Considering all these points, as the drug is easily available and cost-effective it is chosen for clinical study to know the action of *Vasa Ghritha* on *Amlapitta*.

KEYWORDS: *Agni, Amlapitta, Tridosha, Vasa Ghritha.*

INTRODUCTION

This universe is made up of *Panchamahabhuta*'s similarly human body as well.^[1] *Agni* is a key factor for the processing, transforming and assimilating whatever is offered to it in this *Panchabhoutika Sharira*. The food consumed gets converted to energy by *Agni*.^[2] Ignorance about food and present lifestyle has made people to indulge in unwholesome food habits and regimens. This causes aggravation of *Dosha*'s which inturn disturbs functions of *Agni* which is the root cause of disease^[3] *Amlapitta*. There is no direct description of etiopathogenesis and treatment protocol of *Amlapitta* in *Brihatrayi* but many scattered references are available. *Charaka* describes that when *Ama* gets associated with *Pitta* it leads to many diseases, *Amlapitta* is one among them.^[4] Elaborate description of *Amlapitta* as a disease is available in *Kashyapa Samhita*.

This disease is a burning issue in the present era, so an attempt has been made to clinically study *Vasa Ghrita*^[5] in *Amlapitta* as no study is done on this drug so far. *Vasa* does the functions of *Kapha-Pitta Shamaka*^[6] which is beneficial in *Amlapitta* as this disease develops from *Amashaya*.^[7] *Ghrita*^[8] is considered highly effective in *Pittaja* disorders, moreover it is effective in *Vata-Pittaja* disease. Due to the *Samskara* (with association of *Vasa*), it acts on *Kaphaja* disease also. Thus, *Vasa Ghrita* is choose as it helps to subside *Tridoshas*, especially *Pittahara* and normalize the functions of *Agni*.

AIMS AND OBJECTIVES

To know the Comprehensive action of *Vasa Ghrita* in following conditions.

- According to *Dosha Pradhanatha* – *Vataja*, *Pittaja*, *Kaphaja*
- According to Chronicity of disease – *Nava* & *Purana*
- According to Severity of Disease – Based on Symptomatology
- According to *Marga* - *Urdhwaga* and *Adhoga Amlapitta*

MATERIALS AND METHODS

The present clinical study was conducted in P.G. Dept. of Kayachikitsa, K.V.G.A.M.C & H Sullia. In this study total number of 31 patients were registered out of which 1 patient had discontinued. Patients were collected from both O.P.D and I.P.D of our hospital based on criteria of selection.

SOURCE OF DATA

A) Literary Source

All the classical, modern literatures, contemporary texts, journals, internet and previous research works about the disease and drug will be reviewed and documented for the intended study.

B) Sample Source

Patients will be diagnosed and selected from the OPD and IPD and Camp programs of KVG Ayurveda Medical College and Hospital, Sullia irrespective of age, sex, religion, socioeconomic status, etc.

C) Drug Source

The raw drug will be collected from local area after proper identification and medicine will be prepared in K.V.G. Ayurveda Medical College Pharmacy, Sullia.

METHOD OF COLLECTION OF DATA

Study Design: An open clinical study

Sample Size: 30 patients irrespective of sex, religion, socioeconomic status, age group between 16-70 years are selected.

Selection Criteria

a) Diagnostic criteria

The Diagnosis will be purely based on *Nidana Panchaka* as mentioned in Ayurvedic classics.

b) Inclusion criteria

1. Patients of age 20-70 years irrespective of sex, religion and occupation.
2. Patients having the classical *Lakshanas* of *Amlapitta*.
3. *Sneha Yogyā*^[9] according to the Classics.

c) Exclusion criteria

1. Patients below 20 years and above 70 years.
2. Patients with other serious systemic disorders.
3. *Sneha Ayogyā*^[10] according to the Classics.

ASSESSMENT

In Ayurveda, assessment is done purely based on *Roga Lakshana* (symptomatology). Even though for (academic point of view) convenience it is divided into two parameters, namely subjective parameter and objective parameter. In this disease all *Lakshana* comes under subjective parameter.

Clinical Parameter

Subjective Parameter

1. *Amla Udgara*
2. *Hrith Daha*
3. *Kantha Daha*
4. *Adhmana*
5. *Shirashoola*
6. *Uthklesha*
7. *Kukshishoola*
8. *Bhrama*
9. *Kota*
10. *Guru Koshtata*

Objective Parameter: Nil.

DRUG REVIEW

Criteria for selection of the drug

- a) Drug is purely herbal.
- b) Ingredients are easily available and cost effective.
- c) It is suitable for oral administration.

Rasapanchaka of Vasa^[11]

<i>Rasa</i>	-	<i>Tiktha</i>
<i>Guna</i>	-	<i>Laghu</i>
<i>Veerya</i>	-	<i>Sheeta</i>
<i>Vipaka</i>	-	<i>Katu</i>
<i>Doshagnata</i>	-	<i>Kapha Pittahara</i>

Table No. 01: Proportions of drugs.

SR.NO.	SANSKRIT NAME	BOTANICAL NAME	PROPORTION
01	<i>Vasa Kalka</i>	<i>Adhatoda vasica</i>	1 part
02	<i>Ghrita</i>	<i>Butyrum deparatu</i>	4 part
03	<i>Vasa Kashaya</i>	<i>Adhatoda vasica</i>	16 part

Method of preparation of *Vasa Ghrita*

- Raw drug *Vasa* was collected from local areas after proper identification.
- *Vasa* leaves and stems were cleaned and washed properly. Later they were cut into small pieces and was grinded in *Khalva Yantra*.
- Large vessel was taken and 1:8 ratio of *Vasa* and *Jala* was kept to boil under medium flame and reduced to 1/4th part and *Kashaya* was prepared.^[12]
- A wide-open vessel was selected for *Ghrita* preparation. Later 5 liter *Go Ghrita* was added along with prepared *Vasa Kashaya* and 1.25 liter of *Vasa Kalka* was added to it.^[13]
- *Ghrita* was boiled in mild flame and waited till *Sneha Sidhi Lakshana*.^[14]
- Later it was allowed to cool and filtered with clean white cloth. Then it was divided into 150ml each for 30 patients and stored in glass container with lable.

ASSESSMENT OF RESULT

Statistical assessment of results – The symptoms observed for the study among trial were carefully recorded for all the 30 patients. The signs and symptoms before and after treatment are also recorded. The mean standard deviation before treatment of each symptom was compared with after treatment. The paired t-test was used for the purpose of test of significance. The effectiveness of the trial drug to different symptoms were assessed through p-value.

Grading: Grade points were done based on severity of the symptoms are

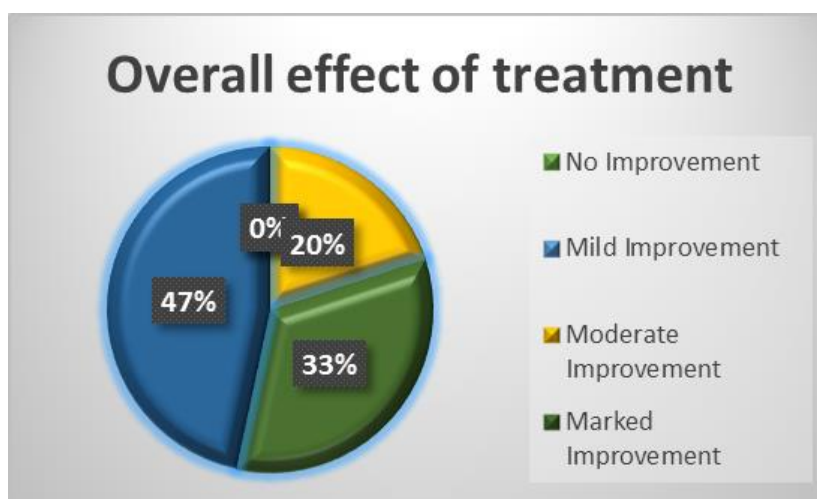
Severity	Grading	Grade Point
No Symptoms	G ₀	0 (-)
Mild	G ₁	1 (+)
Moderate	G ₂	2 (++)
Severe	G ₃	3 (+++)

RESULTS

Table No.13: Showing Overall effect of treatment on *Amlapitta*.

OVERALL EFFECT OF TREATMENT		
GRADING	RELIEF IN PERCENTAGE	RELIEF IN PATIENTS
No improvement	0%	0
Mild improvement	1-30%	0
Moderate improvement	31-60%	6
Marked improvement	61-99%	10
Complete remission	100%	14

In overall effect of treatment in *Amlapitta*, out of 30 patients in the study, 6 patients (20%) have moderate improvement, 10 patients (33.33%) have Marked improvement and 14 patient (46.66%) has Complete remission. Overall effect of the treatment is 85.6%.



OBSERVATION

In the present study, 30 patients fulfilling the inclusion criteria were randomly selected and studied. Each patient was observed thoroughly and the observations are recorded with necessary charts and graphs.

In the sample taken for study, 53.33% of female patient were registered in comparison to 46.66% of male patient. Analysis of age incidence of 30 patients suffering from *Amlapitta* shows a greater number of patients between the age group of 61 to 70 years i.e. 30%. The occupational incidence of 30 patients of *Amlapitta* shows majority of patients were housewives and agriculturists. Chronicity of the disease shown 30% patients with less than 1-year duration and 70% of patients more than 1 year of duration. The Socio-Economic status in 30 patients shows, 53.33% of patients were Middle class, 26.66% were lower middle class, 10% were poor and 10% were upper middle class. Analysis of *Prakruthi* of 30 patients of

Amlapitta shows, maximum of i.e. 65% of patients with *Vata Prakruthi*. Analysis of *Doshadhikyata* of 30 patients of *Amlapitta* shows, 33.33% of *Vatadhika Amlapitta* condition.

The treatment was given for 14 days with *VASA GHRITA* as *Shamana Yoga* which had a significant result. The treatment modalities are safe and are of therapeutic value. The outcome of the treatment indicates that patients have shown marked improvement in all criteria of assessment of *Amlapitta*.

DISCUSSION

In *Ayurveda*, it is explained that the single drug remedy is possible on the basis of *Rasa*, *Guna*, *Veerya*, and *Vipaka*.^[15] Aim of all the treatment is to resolve the *Samprapthi* and bring back *Dosha* and *Dushya* into normalcy.^[16] *Amlapitta* disease is originated from *Amashaya* and so it is considered as *Amashayottha Vikara*. *Amashaya* is the common seat for *Pitta* and *Kapha*. In *Amlapitta*, impairment of *Agni* takes place due to aggravated *Doshas*, moreover the *Pitta* is considered as responsible *Dosha*. Therefore, the drugs which act on *Amlapitta* should normalize the *Agni* and subside the *Pitta Dosha*. Among *Shadrasas*, only *Tikta Rasa* has such quality which enhances the *Agni* and decreases the *Pitta*.^[17]

The increased *Amla guna* of *Pitta* is reduced by its opposite *Rasa* i.e., *Tikta rasa*, *Madhura rasa* and *Madhura Vipaka*. The *Vasa* possess *Tikta Rasa*, *Laghu-Ruksha Guna*, *Sheetha Veerya* and *Katu Vipaka*. It functions as *Kapha-Pittha Shamaka* which is beneficial in *Amlapitta*. *Ghrta* possess *Madhura Rasa*, *Sheetha veerya*, *Madhura Vipaka* and *Vata-Pitta Shamaka* Property. Here, *Vasa Ghrta* due to its *Tikta Rasa* subsides the *Pitta* and *Kapha Dosha* and due to *Madhura Vipaka* of this *Yoga*, it pacifies the *Pitta* and *Vata*.

Thus the drug was effective as the *Chikitsa Sutra* of *Amlapitta* mentioned by *Acharaya Yogarathnakara* about the *Shamana Chikitsa* says — “*Amlapitte Prayoktavya: KaphaPittaharo Vidhi:*” i.e. in *Amlapitta* mainly *Kapha Pitta Hara Vidhi* should be followed.

Effect of *Amlodgara* in *Amlapitta*

This *Lakshana* is mainly due to *Pitta* and *Pratiloma Gati* of *Vata Dosha*. *Vidagdghata* and *Shuktata* of *Aahara*, a considerable factor for *Amla Udgara*. *Vasa Ghrta* possess *Tikta Rasa* which pacify the *Pitta* and reduces the *Amlodgara*.

Statistical analysis showed that the mean score which was 1.03 in before treatment, was reduced to 0.2 after treatment and increased to 0.33 after follow up with 67.96% improvement, and there is a statistically significant change. ($P < 0.05$)

Effect of *Hrith Daha* in *Amlapitta*

Hrith Daha is mainly due to *Pitta Dosha*. *Tikta Rasa* and *Sheeta Veerya* of *Vasa Ghrita* acts on *Pitta* and reduces the symptom *Hrith Daha*.

Statistical analysis showed that the mean score which was 0.9 in before treatment, was reduced to 0.133 the after treatment and later increased to 0.233 after follow up with 74.11% improvement, and there is a statistically significant change. ($P < 0.05$)

Effect of *Kantha Daha* in *Amlapitta*

Kanta Daha is also a *Lakshana* due to *Ushna Teekshna Guna* of *Pitta Dosha*. *Tikta Rasa* and *Sheeta Veerya* of *Vasa* acts on *Pitta* and reduces the symptom *Kantha Daha*. Statistical analysis showed that the mean score which was 0.166 before treatment, was reduced to 0.06 after treatment and after follow up with 63.85% improvement, but it is not statistically significant ($P < 0.05$)

Effect of *Adhmana* in *Amlapitta*

Adhmana is a *Lakshana* seen in *Amlapitta* due to aggravated *Vata Dosha*. *Ghrita* used in the medicine is having best *Vatahara* property and does *Anuloma* of *Vata Dosha* and reduces the symptom of *Adhmana*.

Statistical analysis showed that the mean score which was 0.633 before treatment, was reduced to 0.66 after treatment and 0.166 after follow up with 73.77% improvement, and there is a statistically significant change. ($P < 0.05$)

Effect of *Shirashoola* in *Amlapitta*

Shirashoola is mainly caused due to *Vata* and *Pitta Dosha*. *Ghrita* having *Snigdha Guna* and *Vata-Pittahara* property will help in reducing *Shirashoola*.

Statistical analysis showed that the mean score which was 0.733 before treatment, was reduced to 0.166 after treatment and later increased to 0.2 after follow up with 72.71% improvement, and there is a statistically significant change. ($P < 0.05$)

Effect of Uthklesha in Amlapitta

It is mainly caused due to *Kapha* and *Pitta Dosha Prakopa*. *Tikta Rasa* of *Vasa* acts as *Pitta-Kapha Hara* and reduces *Uthklesha*.

Statistical analysis showed that the mean score which was 0.233 before treatment, was reduced to 0.033 after treatment and 0.033 after follow up with 85.83% improvement, and there is a statistically significant change. ($P < 0.05$)

Effect of Kukshishoola in Amlapitta

It is mainly caused due to *Vata* and *Pitta Dosha Prakopa*. *Vasa* and *Ghrita* acts on *Vata* and *Pitta* and helps to reduce *Kukshishoola*.

Statistical analysis showed that the mean score which was 0.4 before treatment, was reduced to 0.1 after treatment and 0.066 after follow up with 83.5% improvement, and there is a statistically significant change. ($P < 0.05$)

Effect of Kota in Amlapitta

The aggravated *Vata* and *Kapha Dosha* in association with *Pitta* produces *Kota*. *Vasa Ghrita* having *Tridosha Shamaka* property will reduce symptoms of *Kota*.

Statistical analysis showed that the mean score which was 0.033 before treatment, was reduced to 0 after treatment and after follow up with 100% improvement, but it is not statistically significant ($P < 0.05$)

Effect of Guru Koshtata in Amlapitta

Guru Koshtata here refers to heaviness of abdomen. Aggravated *Kapha Dosha* depletes the *Agni* and produces *Ama*. *Tikta Rasa* of *Vasa* does the *Amapachana* and ultimately reduces *Guru Koshtata*.

Statistical analysis showed that the mean score which was 0.066 before treatment, was reduced to 0 after treatment and after follow up with 100% improvement, but it is not statistically significant ($P < 0.05$)

Effect of Bhrama in Amlapitta

Bhrama mainly occurs due to *Pitta Vriddhi* by its *Ushna-Teekshna Gunas*. *Sheeta Veerya* and *Madhura Vipaka* the drug may be helpful in reducing *Bhrama*.

Statistical analysis showed that the mean score which was 0.1 before treatment, was reduced to 0 after treatment and after follow up with 100% improvement, but it is not statistically significant ($P < 0.05$)

PROBABABLE MODE OF ACTION

- *Amlodgara*, *Hridh Daha* and *Kanta Daha* was seen in majority of the patients. These findings were subsided due to *Madhura Vipaka* of *Ghrita* and *Sheeta Veerya* of both *Vasa* and *Ghrita*.
- *Adhmana*, *Shirashoola* and *Kukshishoola* was subsided due to *Vatahara* and *Anuloma* property of *Ghrita*.
- *Uthklesha* and *Guru Koshtata* is mainly due to impairment of *Agni*. *Tikta Rasa* of *Vasa* and *Agnivardhaka* property of *Ghrita* corrects the *Agni* and subsides *Uthklesha* and *Guru Koshtata*.
- *Bhrama* is mainly caused due to *Vata* and *Pitta dosha*. *Vata-Pittahara* property and *Madhura Vipaka* of *Ghrita* pacify the *Vata* and *Pitta*. Finally, it relieves the *Bhrama*.
- *Kota* is caused due to aggravated *Kapha* and *Vata* in association with *Pitta Dosha*. The *Tridosahara* property of this *Yoga* relived the symptoms of *Kota*.

The *Dravya*'s used in this *Yoga* are having *Pittashamaka* and *Tridosahara* property. So, it does the *Shamana* of aggravated *Pitta* in *Amlapitta*. In this way, this formulation does the *Samparpti Vighatana* and cures the disease.

CONCLUSION

The following conclusions are drawn from the clinical study undertaken with *Shamana* in *Amlapitta* through *Vasa Ghrita* at K.V.G. Ayurveda Medical College and Hospital, Sullia.

1. Faulty dietary habits are the main contributing factors in the establishment of disease. Excess intake of *Amla*, *Lavana*, *Katu Rasa Dravyas* and food articles like *Dadhi*, *Masha*, *Mamsa*, *Drava Aharas* and change in life style were the commonest etiological factors found in this study.
2. *Vasa Ghrita* gave moderate improvements in *Amlodgara*(73.33%), *Hrid Daha*(73.33%), *Adhmana*(63.33%), *Shirashoola*(43.33%), *Kukshi Shoola*(40%), *Uthklesha*(26.66%), *Kanta Daha*(16.66%), *Bhrama*(10%), *Guru Koshtata*(6.66%), *Kota*(3.33%). It is statistically significant.

3. This *Yoga* has proved more significant in patients with recent onset (mean relief 71.42%) than the chronicity of above 1 year (mean relief 44.44%)
4. Overall, the treatment showed result of 85.6% in relieving *Amlapitta*, showing statistically significant result (P Value <0.05) on symptoms like *Amlodgara*, *Tiktodgara*, *Hrith Daha*, *Shirashoola*, *Kukshishoola*, *Adhmana* etc.
5. The present study was carried for a limited time and it showed encouraging result. But one patient had discontinued the medicine within a day due to increased abdominal pain.

Thus, we can conclude that *Vasa Ghrita* is more effective in correcting the *Agni* which is the main factor for the cause of the disease. It also helps to reduce *Pittaja* symptoms like *Hridh* and *Kanta Daha*, *Kaphaja* symptoms like *Tiktata*, *Amlata* and *Uthklesha*, *Vataja* symptoms like *Adhmana*, *Shirashoola*, etc.

Limitations of the study

- Patients with severe conditions of the diseases were not observed. Hence it couldn't be found that whether it is effective in patients with severe symptoms.
- The size of sample and time period was small to draw a generalized conclusion.

Suggestions for the future study

- This drug showed good results, so it can be taken for further study in comparison with other medicine.
- *Tikta Rasa* is having *Stanya Shodhana* property, so study can be carried in Lactating women.
- *Vasa Ghrita* is also beneficial in other clinical conditions, so the drug can be taken for other clinical trials.
- The taste of *Ghrita* is bitter and unpalatable for some patients. So, it is needed to make it palatable by packing in capsule or coated tablet.
- Treatment has shown good effect on *Amlapitta*, but study is conducted on small sample size, so further it should be done on large sample size.

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