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Research Article

The Effect Of *Vaasa Kushmanda Khanda* In The Management Of *Amlapitta*-A Controlled Comparative Clinical Study

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ABSTRACT-

Amlapitta is a *vidagdha Pitta vyadhi,* being the result of a faulty diet and life style adaptations. An increased *amla guna* and *dravatha* of *Pachaka pitta* due to *pitta prakopaka ahara vihara* leads to *Vidagdhajirna*. Further the *vidagdha anna* achieves *Shuktha paka* and develops *Avipaka, Klama, Utklesha, Gourava, Hrid kanta daha, Tiktha-amla udgara* and *Aruchi* clinically.

The symptoms of *Amlapitta* explained in Ayurveda are nearer clinical entity with Gastritis. An inflammation of stomach lining

with the symptoms of upper abdominal pain, nausea, vomiting, bloating, loss of appetite and heartburn.

The objective of the study is to evaluate and compare the efficacy of *Vaasa kushmanda khanda and Pippali khanda* in the management of *Amlapitta*. 40 patients diagnosed with *amlapitta* were randomly assigned equally to two groups (A and B). Group A received the trial drug *Vaasa kushmanda khanda* and Group B received *Pippali khanda* for a 30 days.

Statistical analysis revealed that both the interventions were effective in the management of *Amlapitta* with a significant overall improvement in Group A compared to group B. The *Vaasa kushmanda khanda* has given maximum result on the *Tikta amla udgara, Klama and Hrid –Kanta Daha* followed by *Avipaka, Aruchi, Utklesha and Gourava*. (By comparing t' value).

Key words:-*Amlapitta*, *Gastritis*, *Vaasa kushmanda khanda*, *Pippali khanda*

INTRODUCTION

Ayurveda the science of life, guide us through its various principles of daily routine *(vihara)*, diet *(ahara)* and behavioral conducts *(achara)* to maintain the positive mind and body and keep the disease at the bay. The same time balances the life by holding a preventive aspect *(Swasthya rakshana)* and a curative aspect *(Athura vikara Prasamana)*[1].

Human being need to go for short term or long term adaptations to survive in this world. Irregular and improper food habits, busy stressful lifestyle and westernization are the main culprits of an Obstinate disorder escalating in its prevalence i.e. *Amlapitta.* As per Ayurveda, when a person with an excessive *Pitta* secretion due to its own aggravating factors like season , age etc ,will habitually takes incompatible , sour ,heart burn producing ,*Pitta* vitiating food and drinks leads to a diseased condition called as *Amlapitta*[2].

In *Amlapitta* ,due to *nidana sevana ,amla guna of Pitta* increases which leads to *agnimandya* there by ingested food becomes *vidagdha* and finally the symptoms like *Amla udgara, Urovidaha* and *Aruchi* are evident clinically[3].

Digestive system disturbance is one of the most important and challenging area of general practice. It is important because it causes one third of new consultations and nearly a quarter of all consultations[4]. The above symptoms of *Amlapitta* as explained in Ayurveda are nearer clinical entity with symptoms of gastritis, an inflammation of lining of the stomach. It may occur as a short episode or may be of a long duration. There may be no symptoms but, when symptoms are present, the most common is upper abdominal pain. Other possible symptoms include nausea and vomiting, bloating, loss of appetite and heartburn[5].

The prevalence rate of gastritis in India is around 10 millions [6]. A population-based study, using a validated questionnaire, found that 58.7% of the population has heartburn or acid regurgitation at least once during the course of a year and that 19.8% experience symptoms at least once weekly[7].

The *ahara ,vihara , varsha ruthu* and *anupa desha* are falls under the troubling factors while considering *Amlapitta*[8].The disease leads to malnutrition too; due to the lack of proper digestion and assimilation. Search of a perfect medicine that can counter against the troubling factors and malnutrition end up with the trial drug *Vaasa kushmanda khanda*;

explained by Acharya Vangasena in *Vangasena Samhitha kasa adhyaya*, which is indicated in *Amlapitta* too[9].

Tikta rasa pradhana ahara oushada Kalpana and *laghu guna yuktha dravyas* with *Pitta kapha shamaka* qualities are explained in Ayurveda for the management of Amlapitta[10]. *Vaasa* is mentioned in *kapha pradhana Amlapitta* and the *kushmanda* in *Pitta pradhana* one by chakradatta[11] .*Vaasa* is *kapha Pitta hara* in action and having *hridya* and *rasayana* properties[12]. *Kushmanda* is *Pitta- vata hara, Hridya, Bruhmana* and *Medhya* in action.[13]

The *Vaasa kushmanda khanda* contains the drugs having *Tikta – Madhura Rasa, Madhura Vipaka, Sheeta veerya* and *Laghu, Ruksha* property with *pitta-Kaphahara* action. This will help to manage the *Pitta* and *kapha dosha* involved in the genesis of *Amlapitta*. In addition the *rasayana, bruhmana* and *medhya* actions of medicine will take care of physical and mental well being of the person. So the *Vaasa kushmanda khanda* can tact the *doshik* combination of *Amlapitta* so easily.

The *khanda avalehya* form of preparations having comparatively longer shelf life in addition to the palatability, due to less

moisture content, presence of sugar, ghee, and honey[14]. It helps to preserve the medicine throughout the year and even in *anupa desha*. They were aromatic with sweet and astringent taste. The easy availability of raw drugs and cost of preparation made the drug of choice.

The standard drug *Pippali khanda* was a proved medicine in *Amlapitta* explained by *Bhaishajya Ratnavali Amlapittaprakaranam[15]*. The cost and availability of *Pippali* is a challenge to pharmaceutical industry .The milk used in preparation will leads to higher moisture content and short shelf life comparatively. Hence the search for a better choice came up.

A good number of research works has been carried out on *Amlapitta* at various institutes of Ayurveda and many of the clinical trials have proved effective to some extent but failed to provide satisfactory answers to cure the disease. Keeping all these factors into consideration here is an attempt to compare the effect of *Pippali khanda* [16]and *Vaasa Kushmanda khanda* [17]in the management of *Amlapitta*.

AIMS AND OBJECTIVE OF THE STUDY:-

1. To evaluate the efficacy of *Vaasa kushmanda khanda* in the management of *Amlapitta*
2. To evaluate the efficacy of *Pippali khanda* in the management of *Amlapitta*.
3. To compare the efficacy of *Pippali khanda* and *Vaasa kushmanda khanda* in the management of *Amlapitta*.

HYPOTHESIS:-

1. **H_0:** There is an equal effect of Pippali khanda and Vaasakushmanda khanda in the management of Amlapitta.
2. **H_1:** Pippali khanda has got more effect than Vaasakushmanda khanda in the management of Amlapitta.
3. **H_2:** Vaasakushmanda khanda has got more effect than Pippali khanda in the management of Amlapitta.

MATERIELS AND METHODS

Patients attended the *Kayachikitsa* OPD and IPD of Dhanvantari Ayurveda college hospital, Siddapur were screened for *Amlapitta roga* .Out of which 40 diagnosed patients of *Amlapitta roga*, who fulfilled the inclusion criteria, were selected for the study. Demographic data related to disease were collected as per the case record Performa and consent taken from the patient in written consent format.

Inclusion criteria:-

1. Age 16 – 60 years
2. Either gender
3. Chronicity less than 5 years
4. No discriminations of severity of disease
5. Patients of classical *Amlapitta* symptoms irrespective of gender, cast, occupation and economical status.
6. *Amlapitta* of any *dosha anubandha*.
7. Cases of *Amlapitta* in whom treatment were interrupted are considered with a period of one week gap for the treatment.

Exclusion criteria:-

1. Patients with history of systemic illness like diabetic mellitus, hypertension, thyroid hormone imbalances, cardiac pathology, immune deficiency disorders like AIDS.
2. Patients with history of *Parinama Shula* (gastric ulcer, duodenal ulcer), *Annadrava Shula, Krimiroga, Arbuda* etc.
3. Patient with history of hematemesis, melena and anemia.

Criteria of Diagnosis:-

Diagnosis is made on the basis of classical symptoms.

1. *Avipaka*
2. *Klama*
3. *Utklesha*
4. *Tikta- amla udgara*
5. *Gourava*
6. *Hrid - kanta daha*
7. *Aruchi*

STUDY DESIGN:-

TYPE OF STUDY:- Randomized Controlled Comparative Clinical study.

Research design:- 40 diagnosed patients of *Amlapitta,* fulfilling inclusion and exclusion criteria were taken for the study and randomly divided in to two groups A and B.

Table shows the research design of group A

Group A Sample size	Drug	Dose	Anupana	Duration
20 patients	*Vaasakushmanda khanda*	12 gm twice a day	*Sukoshna jala*	30 days

Table shows the research design of group B

Group B Sample size	Drug	Dose	Anupana	Duration
20 patients	*Pippali Khanda*	12gm twice a day	*Sukoshna jala*	30 days

Observation period:- Patients were reviewed on 1^{st,} 15th, 21st, and 30th day

Follow up:-Fifteen days after the course of treatment

Total study Duration:- Thirty days.

DRUG SOURCE

Preparation Of The Trial Drug *Vaasa kushmanda Khanda*[18]:-

Table Shows Ingredients of *Vaasa kushmanda Khanda*:-

Sl.	Sanskrit Name	Botanical name	Part used	Proportion
1	*Kushmanda*	*Benincasa hispida*	Fruit	4 kg
2	*Vaasa*	*Vasa Adhathoda*	Leaf	20.48 ltr
3	*Vamsalochana*	*Carum bulbocastanum*	Heartwood	80 gm
4	*Amlaki*	*Emblica officinalis*	Fruit	80gm
5	*Mustha*	*Cyperus rotundus*	Rhizome	80gm
6	*Barangi*	*Clerodendrum indicum*	Leaf	80 gm
7	*Twak*	*Cinnamomum zeylanicum*	Bark	80 gm
8	*Ela*	*Elettaria cardamomum*	Seed	80gm
9	*Pathra*	*Cinnamomum tamala*	Leaf	80 gm
10	*Pippali*	*Piper longum*	Seed	320 gm
11	*Ghee*			1280 gm
12	*Honey*			640 gm
13	*Sharkara*			8 kg

Method of Preparation:-

Preparation was done in 4 stages.

1-*Vaasa kwata* preparation.

Vaasa kwatha prepared by adding 10 kg of Vaasa patra and 80 litre of water; boiled and reduced to 20.48 litres.

2- Steaming of *kushmanda khanda*.

The *kushmanda* pieces steamed well till it reach paste like consistency.

3- Cooking stage.

Steamed pieces of *kushmanda* was fried with ghee, and then cooked with *Vaasa kwatha* and *Sharkara*.

4- Addition of *Prakshepaka churna*.

When it is almost cooked the powders of *Vamsalochana , Amlaki , Barangi Pippali Mustha , Thrijatha* are added and stirred well with a ladle . After it gets cooled honey were added .

Paka Lakshana.

The sign of completion of *paka* is determined by finger-print.

Physical test for *Vaasa kushmanda khanda Paka*[19]:-

- *Tantumatwam*: - *Avalehya paka* should have thread like consistency, when pressed in between two fingers.
- *Apasumajjati*: - If put in water, should sink in it.
- *Kharatwam*: - Solid or rough to touch.
- *Pidite mudra*: - Should give finger prints, when pressed between two fingers.
- *Gandha Varna rasa samudbhava*: - Must attain the smell, color and taste of its ingredients

Preparation Of Standard Drug *Pippali Khanda*[20]:-

Table Shows Ingredients of *Pippali khanda*:

Sl.	Sanskrit Name	Botanical name	Part used	Proportion
1	*Pippali*	*Piper longum*	Dried rhizome	3kg
2	*Satavari*	*Asparagus racemosus*	Decoction	6.4 kg
3	*Amlaki*	*Emblica officinalis*	Fruit	100gm
4	*Dhanyaka*	*Coriander sativum*	Fruit	100gm
5	*Krishna jiraka*	*Carum bulbocastanum*	Seed	100gm
6	*Twak*	*Cinnamomum zeylanicum*	Bark	100gm
7	*Ela*	*Elettaria cardamomum*	Seed	100gm
8	*Tejapatra*	*Cinnamomum tamala*	Leaf	100gm
9	*Mustha*	*Cyperus rotundus*	Tuber	100gm
10	*Sweta jiraka*	*Cuminum cyminum*	Seed	100gm
11	*Shunti*	*Zingiber officinale*	Dried rhizome	100gm
12	*Vamsalochana*	*Bambusa arundinaceae*	Rind	100gm
13	*Haritaki*	*Terminalia chebula*	Fruit	100gm
14	*Khadira*	*Acacia catechu*	Sara	50 gm
15	*Maricha*	*Piper nigrum*	Fruit	50 gm
16	*Ghrita*			2.3kg
17	*Goksheera(Cow milk)*			12.5 litre
18	*Madhu(Honey)*			1.2 kg
19	*Mishri (Sugar)*			7 kg

Method of Preparation:-

Ksheera (milk) was boiled with *Pippali churna* (powder) on *Mridu Agni* till it became a paste. *Go Ghrita, Satavari kwatha* (decoction) and sugar were mixed in it. Fried on *Mridu Agni* until *Ghrita* got separated from the paste form. When the *Paka lakshanas* were obtained, vessel taken out of the fire and *Sukshma Churna* (fine powder) of *Prakshepaka* drugs are added and mixed uniformly. After it gets cooled, *Madhu* (honey) was added. *Paka*

lakshanas are similar to *vaasa kushmanda khanda*

ASSESSMENT CRITERIA:-

The Symptoms of Amlapitta in classical text are taken as assessing parameters.

1. *Avipaka*
2. *Klama*
3. *Utklesha*
4. *Tikta- amla udgara*
5. *Gourava*
6. *Hrid - kanta daha*
7. *Aruchi*

GRADING OF CLINICAL PARAMETERS

The signs and symptoms were graded for assessment as follows;

A) *AVIPAKA* (INDIGESTION)

GRADE	SYMPTOMS
Grade 0	No indigestion at all
Grade 1	Indigestion occasionally 1-2 days / week
Grade 2	Indigestion is not more than 3-4 days/week
Grade 3	Indigestion daily

B) *KLAMA* (EXHAUSTION OF BODY)

GRADE	SYMPTOMS
Grade 0	No *Klama*
Grade 1	Occasionally and Mild
Grade 2	Continues but tolerable
Grade 3	Continues but not tolerable

C) *GOURAVA* (HEAVINESS OF BODY)

GRADE	SYMPTOMS
Grade 0	No *Gourava*
Grade 1	Occasionally in Mild
Grade 2	Frequent but tolerable
Grade 3	Frequent but intolerable needs medication

D) *HRID-KANTA DAHA* (HEART BURN)

GRADE	SYMPTOMS
Grade 0	No *Daha*
Grade 1	*Daha* of mild degree in any area of *Kanta, Udara, Ura, Kukshi*
Grade 2	*Daha* of severe degree involving *Hrid, Kanta* etc. and relieved after digestion of food, vomiting
Grade 3	Severe degree of *Daha* involving major Areas of abdomen

E) _TIKTA - AMLA UDGARA_ (BITTER AND SOUR BELCHING)

GRADE	SYMPTOMS
Grade 0	No _Amla udgara / Tikta udgara_
Grade 1	Occasionally 1-2 days /week
Grade 2	_udgara_ daily but subside without medicine
Grade 3	Daily _udgara_ and not subsided without medicine

F) _ARUCHI_ (ANOREXIA)

GRADE	SYMPTOMS
Grade 0	Patient is taking food without hesitation.
Grade 1	Mild _Aruchi_ without hampering intake of food
Grade 2	Moderate _Aruchi_ hampering intake of food
Grade 3	Severe _Aruchi_ with hesitance towards intake of food

G) _UTKLESHA_ (NAUSEA)

GRADE	SYMPTOMS
Grade 0	No _Utklesha_
Grade 1	Feeling of Nausea occasionally
Grade 2	Feeling of Nausea almost daily
Grade 3	Severe nausea followed by Vomiting

ASSESMENT:

Considering the overall changes seen in the assessment parameters the total effect of the treatment was assessed as follows-

- Complete remission   relief of 100% of sign & symptoms
- Marked improvement   relief of >60%
- Moderate improvement   50% to 60% relief
- Mild improvement   40% to 50% of relief
- No Change   <40 % relief

Statistical Analysis

Paired t-test and Unpaired t –test were used for statistical analysis.

OBSERVATION AND RESULTS

The demographic data reveals the following factors about *Amlapitta* patients. 50% of patients were in the age group of 16 to 30 years. 70% patients were females and 90 % of the participants were Hindus while 05% were Muslims and Christians. Majority of the subjects belonged to middle class Socio-economic status (67.5%). 92.5% patients were in Active occupation. Maximum numbers of patients (62.5%) were not having family history of *Amlapitta and* 70% of the participants consumed mixed diet.

35% of the patients claimed *Mandagni and Tikshnagni*, 30 % had *Vishmagni*. 37.5% of the patients claimed an *Alpa Kshudha*, 32.5% reported *Madhyama Kshudha* 30 % had *Ati Kshudha*. 42.5% of the patients were followed *Vishamashana*, 40% were followed *Samashana* and 17.5% were followed *Adhyashana*. 50% of the patients had *Madhyama Koshta*, 40% were *Mrudu koshta* patients and 10% were *Kroora koshta.*

70% of patients are *Anupa desha jatha* 77.5% were *Anupa desha Varditha* and 95% of them are *Anupa desha Vyadhitha*. Among 40 patients, 2.5% belongs to *Vata Kapha Prakriti,* 12.5% belongs to *Vata Pitta Prakriti,* 15% belongs to *Kapha Vata Prakriti,* 10% belongs to *Pitta Vata Prakriti,* 30% belongs to *Kapha Pitta Prakriti.*30% belongs to *Pitta Kapha Prakriti*. 70% of the patients are *Rajasika,* 25% are *Tamasika* and 05% are *Satvika Prakriti.*

Distribution of Patients on the basis of Chief complaints.

Table Showing the Distribution of Patients on the basis of Chief Complaints

Chief complaints	Group A		Group B		Total	
	No.	%	No.	%	No.	%
Avipaka	19	95%	20	100%	39	97.50%
Klama	20	100%	19	95%	39	97.50%
Utklesha	13	65%	11	55%	24	60%
Tikta-Amla udgara	20	100%	20	100%	40	100%
Gourava	19	95%	18	90%	37	92.50%
Hrid –Kanta Daha	19	95%	19	95%	38	95%
Aruchi	16	80%	13	65%	29	72.50%

RESULTS

Table Showing Overall response for the treatment

Group	Overall response									
	Complete remission		Marked improvement		Moderate improvement		Mild improvement		No Change	
	No. Patients	%	No. Patients	%	No. Patients	%	No. Patients	%	No. Patients	%
Group A	00	00%	14	70%	05	25%	01	05%	00	00%
Group B	00	00%	6	30%	10	50%	04	20%	00	00%

STATISTICAL ANALYSIS

Paired t test

Following are the statistical data obtained (Paired t test with **IBM SPSS software**.)

Group A

Table No 87. Showing the Statistical analysis of Group A after treatment.

Para Meters	MEAN		MD	Reduction %	SD	SE	DF	t VALUE	P VALUE	REMARKS
	BT	AT								
Avipaka	2.45	0.2	2.25	91.83	0.72	0.16	19	14.047	<0.001	**HS**
Klama	1.85	0.2	1.65	89.18	0.49	0.11	19	15.079	<0.001	**HS**
Gourava	1.5	0.00	1.5	100	0.61	0.14	19	11.052	<0.001	**HS**
Hrid – Kanta Daha	1.55	0.05	1.5	96.77	0.69	0.15	19	9.747	<0.001	**HS**
Tikta-Amla udgara	2.20	0.1	2.1	95.45	0.55	0.12	19	16.998	<0.001	**HS**
Aruchi	1.1	0.00	1.1	100	0.64	0.14	19	7.678	<0.001	**HS**
Utklesha	1.3	0.00	1.3	100	1.03	0.23	19	5.638	<0.001	**HS**

*HS – Highly Significant, SS –Statistically Significant, NS – Not Significant

Group B

**Table No. Showing the Statistical analysis of Group B after treatment**

Parameters	MEAN		MD	Reduction %	SD	SE	DF	t VALUE	P VALUE	REMARKS
	BT	AT								
Avipaka	2.25	0.10	2.15	95.55	0.75	0.17	19	12.903	<0.001	**HS**
Klama	1.65	0.50	1.15	69.69	0.75	0.17	19	6.902	<0.001	**HS**
Gourava	1.5	0.1	1.40	93.33	0.68	0.15	19	9.20	<0.001	**HS**
Hrid – Kanta Daha	1.5	0.35	1.15	76.66	0.37	0.08	19	14.038	<0.001	**HS**
Tikta-Amla udgara	1.85	0.50	1.35	72.97	0.59	0.13	19	10.283	<0.001	**HS**
Aruchi	1.00	00	1.00	100	0.65	0.15	19	6.892	<0.001	**HS**
Utklesha	1.10	00	1.10	100	1.02	0.23	19	4.819	<0.001	**HS**

*HS – Highly Significant, SS –Statistically Significant, NS – Not Significant

Table Showing Comparison between the post treatment results of both groups

Parameter	Group A	Group B
Avipaka	91.83%	95.55%
Klama	89.18%	69.69%
Gourava	100%	93.33%
Hrid –Kanta Daha	96.77%	76.66%
Tikta-Amla udgara	95.45%	72.97%
Aruchi	100%	100%
Utklesha	100%	100%

GRAPHICAL REPRESENTATION-COMPARATIVE EFFECT OF TREATMENT IN GROUP A AND GROUP B, AFTER TREATMENT
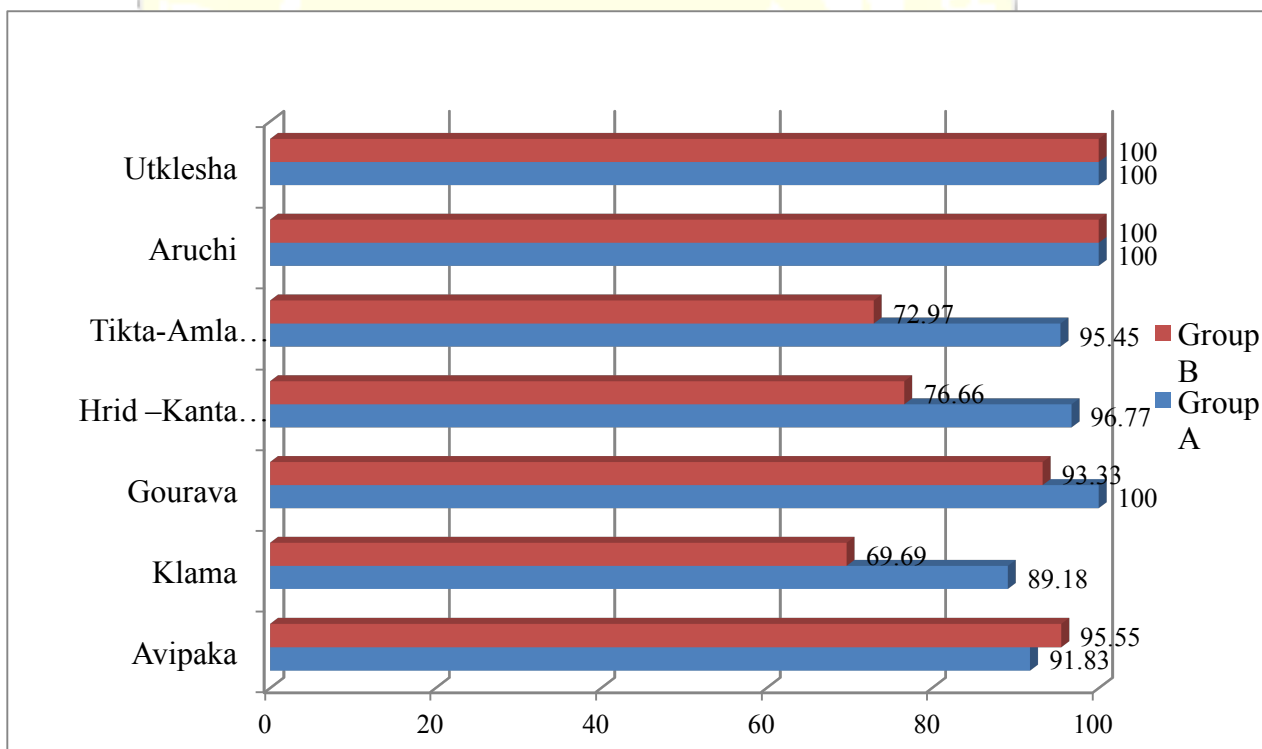
Based on the results obtained by Paired t test the following observations can be made

➢ Group A – Of the 07 parameters, changes recorded in 07 parameters were highly significant

➢ Group B – Of the 07 parameters, changes recorded in 07 parameters were highly significant.

Unpaired t test

Showing the Statistical analysis of Group A and Group B after treatment

Parameters	Group-A			Group-B			DF	t VALUE	P VALUE	REMARKS
	N	MD	SD	N	MD	SD				
Avipaka	20	2.25	0.7163500	20	2.15	0.7451600	38	0.4327	>0.05	NS
Klama	20	1.65	0.4893600	20	1.15	0.7451600	38	2.5083	<0.05	SS
Gourava	20	1.5	0.6069800	20	1.4	0.6805600	38	0.4904	>0.05	NS
Hrid –Kanta Daha	20	1.5	0.6882500	20	1.15	0.3663500	38	2.0076	<0.05	SS
Tikta-Amla udgara	20	2.1	0.5525100	20	1.35	0.5871400	38	4.1602	<0.05	HS
Aruchi	20	1.1	0.6407200	20	1	0.6488900	38	0.4904	>0.05	NS
Utklesha	20	1.3	1.0311000	20	1.1	1.0208400	38	0.6164	>0.05	NS

*HS – Highly Significant, SS –Statistically Significant, NS – Not Significant

(Unpaired t test was done using, **Graph pad Quick Calcs t test calculator**)

Based on the result obtained by Unpaired t test the following observations can be made,

➢ *Avipaka*- not significant

➢ *Klama* -statistically significant

➢ *Gourava*-is not significant

➢ *Hrid–KantaDaha.*-statistically significant

➢ *Tikta-Amla udgara-* highly significant

➢ *Aruchi* - not significant

➢ *Utklesha* - not significant .

"The overall improvements seen in Group A are more significant than that of Group B."

DISCUSSION

The present study on *Amlapitta* becomes an eye opener towards the importance of our *Ahara viharas*, Irregular and improper food habits, busy stressful lifestyle and westernization.*Viruddhahara, Divasvapna, Antarodakapana Pana, Vidahi Anna, Sheeta Jalapana* are the few common factors mentioned by all Acharyas. Any *Nidana* responsible for *Mandagni or Agnidushti* can be the cause of *Amlapitta.* This first vitiate the *Doshas,* then *dushyas* and pathogenesis progresses.

Rasa Dhatu is mentioned as the *Dushya* of disease *Amlapitta* by Acharya Kashyapa. The disease involves *Rasavaha, Raktavaha, Purishavaha and Annavaha Srotas*. Hence the overall wellbeing of diseased comes under the threat due to malnutrition by the lack of proper digestion and assimilation.

The *Purvarupa* is not mentioned in any classics. Due to a short *sthana samsraya avastha* in *Amlapitta* the *Purvarupas* are not manifesting clearly and *rupas* present at the starting of *vyadhi* can be considered as *Purvarupa* of disease. Madhavakara has given general symptom of Amlapitta as *Avipaka, Klama, Utklesha, Tikta, Amlodgara, Gourava, Hrit-kantaDaha, Aruchi* etc.

Amlapitta is mostly *Chirakari* in nature. This is caused by *Jivha-Laulya* (Ch. Chi. 15; Ka. Khi. 16), as patients are aware of the *Nidanas* and still they tries to consume it due to *Jivha – Laulya.*

Classification and types of *Amlapitta* are done based on *dosha and Marga*. There are two types based on *Marga, Adhogata* and *Urdhvaga Amlapitta*. Maximum numbers of patients are encountered of *Urdhvaga* type as *Adhogata* is misdiagnosed with *Grahani (Pittaja), Atisara* etc. Kashyapa has mentioned *Vatolvana, Pittolvana* and *Kapholvana* types and Madhavakara has mentioned three more type as *Vatika, Vata-kapha* and *Kapha*.

Kashyapa Acharya was the one and only person explained about *upashaya anupashaya* and *upadravas* of *Amlapitta*. He mentioned *Atisara, Pandu, Shula, Shotha, Aruchi, Bhrama* are the *Upadravas*.

Pathya has given a high importance in *Amlapitta* and non-compliance with *Pathya*, may make these diseases incurable. The *anupa desha, varsha ruthu, pitta prakopaka* type of diet and activities are the favourable factors for this disease. So the management demands the proper *pathya* in terms of diet and life style according to the place of living and season. Long lists of *pathya* are explained in Kashyapa (Chi.16/38-41) and other Granthakaras. *Tikta madhura rasa, Laghu Anna pana* are explained as main *pathya*.

The symptoms of Amlapitta as explained in Ayurveda are nearer clinical entity with symptoms of Gastritis. An inflamation of stomach lining with symptoms of nausea, vomiting, bloating, loss of appetite and heartburn. As *dravatha* of *pitta* increases the amount of gastric juices becomes larger. Hydrochloric Acid is an ingredient of gastric juices and can be taken as derivative of *Pachaka Pitta* and it is sour in taste. So ultimately the increased amount of Hydrochloric Acid will lead to raised acidity and inflammation of lining and the condition *Amlapitta* happens.

Ayurvedic management of *Amlapitta* gives an equal importance for Medicines, Lifestyle and Diet. *Nidana parivarjana, shodana* in terms of *Vamana* and *Mridu Virechana, Basti* and *Shamana oushada prayoga* are the management plan.

By giving importance to season and place of living (*ruthu &desha*) as disease producing factors an advice were given by Acharya Kashyapa regarding the *chikitsa* of *Amlapitta* is, **"Deshantaram Vrajet"** which means, if *Amlapitta* is not pacified with all the types of *Chikitsa*, then the person should leave the place. Because when the disease becomes *Hanthi* (chronic) there only the *parivartana of Jalavayu* can influence such disease.

Probable mode of action:

Analysis of the properties of each ingredient provided a better understanding of the action of *Vaasa kushmanda khanda.*

Rasa- 10 out of the 13 drugs i.e.77% has *Madhura Rasa,* 05 out of the 13 drugs i.e. 38.5% has *Tikta Rasa* and 05 out of the 13 drugs i.e. 38.5% has *Kashaya Rasa.*

Guna- 09 out of the 13 drugs i.e., 69% has *Laghu Guna.*08 out of 13 drugs i.e.61.5% has *Ruksha guna.*

Veerya- 08 out of the 13 drugs i.e., 61.5% has *Sheeta Veerya.*

Vipaka- 08out of the 13 drugs i.e., 61.5% has *Madhura Vipaka.*

Doshaghnata - 04out of the 13 i.e. 30.8% drugs are *Tridosha Shamaka*, 03 out of the 13 i.e. 23.1% drugs are *Kapha-Pitta Shamaka*, 03drug i.e. 23.1% is *Vata-Pitta Shamaka*, 02 drug i.e. 15.4% is *Pitta Shamaka*, 01drug i.e. 7.7% is *Kapha-Vata Shamaka.*

Karma- Out of 13 drugs 2 i.e. 15% *Hridya* in action , Out of 13 drugs 05 i.e. 38.5% *Rasayana* in action , Out of 13 drugs 02 i.e. 15.4% *Medhya* in action , Out of 13 drugs 04 i.e. 31% *Brumhana* in action , Out of 13 drugs 04 i.e. 31% *Vrishya* in action , Out of 13

drugs 04 i.e. 31% *Deepana Pachana* in action.

Based on the above, it can be asserted that *Vaasa kushmanda khanda* has a *Tridosha Shamana* property in general and a special *Pitta Shamana* property.Because of the predominant *Madura – Tikta rasa, Sheeta veerya* and *Madhura Vipaka*. Hence it is effective in *Amlapitta* on the basis of *Dosha Pratyanika* action.

Laghu and *Rooksha guna* acts on *kledaka kapha* involved in the pathogenesis of *Amlapitta* and on the *Gourava* and *Dravatha* too. *Madhura Vipaka* acts as *Brumhana* and *Balya* thereby shows specific *Roga Pratyanika* action. In addition the *Rasayana Bruhmana Vrishya, Hridya* and *Medhya* actions of medicine will take care of overall physical and mental well being of the person.

Thus, *Vaasa kushmanda khanda* has both *Dosha Pratyanika* and *Vyadhi Pratyanika* actions in *Amlapitta Roga*.

CONCLUSION

The statistical analysis of the results obtained in the present clinical work suggests that the interventions of both Group A and Group B are highly

significant and effective in the management of *Amlapitta*. But Group A (*Vaasa kushmanda khanda*) showed significantly better response than Group B (*Pippali khanda*).

The *Vaasa kushmanda khanda* had given a better result to *Tikta-amla udgara, Hrid-kanta daha, Gourava and Klama* compare to *Pippali khanda*. The effect on *Avipaka* is comparatively higher with *Pippali khanda*. *Vaasa kushmanda khanda* and *Pippali khanda* had an equal effect on *Aruchi* and *Utklesha*. The study

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reiterates the efficacy of *Pippali khanda* in the management of *Amlapitta*. *Vaasa kushmanda khanda* has got more effect than *Pippali khanda* in the management of *Amlapitta*

LIMITATIONS OF THE STUDY:

The sample size is a very small one.

Short duration of study.

A longer duration of treatment and multiple follow-ups are suggested

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