A COMPARATIVE CLINICAL STUDY ON THE EFFECTIVENESS OF VASADI DASHANGA KWATHA AND PATOLADI KWATHA IN AMLAPITTA (NON ULCER DYSPESPIA)

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ABSTRACT

The ignorance about food and present life styles has made people at large to indulge in unwholesome food habits and regimens. Due to this lifestyle and improper diet pattern, there will be metabolic impairment leading to Amlata and Vidagdhata of the consumed food. This is recognized as Amlapitta in Ayurveda. The Lakshanas of Amlapitta can be correlated with signs and symptoms of Non-ulcer Dyspepsia. The line of treatment as per allied science is lifestyle changes, use of H2 receptor blocking agents and Proton Pump Inhibitors (PPI). Long term use of these antacids has shown various side effects. The patients with non ulcer Dyspepsia will have regurgitation despite of adequate acid suppression by treatment. It causes significant economic impact due to the long-term management of the disease and costs of possible complications. There is a need for a better medicine which can counter such changes and can reduce Amlata and Vidagdhata of consumed food. Medicines explained in Ayurveda have the ability to do the same. For this purpose, Vasadidashanga kwatha which is explained in Bhaishajya Ratnavali in comparison with Patoladi kwatha as per mentioned in Chakradatta in the management of Amlapitta has been undertaken. Methods: In Clinical study, 60 patients fulfilling the diagnostic inclusion criteria were selected from OPD and IPD of Hospitals of South Canara and special camps conducted for the same. Patients were divided into 2 groups Group A and Group B and compared with Vasadidashangakwatha and Patoladi kwatha with the standard dosage of Kwatha for a period of 30 days. Results: Assessment of the total effect of therapy was made by analyzing the data with suitable statistical tests of significance. Overall the test has shown significant result in Group A compared to Group B. Conclusion: Both Vasadidashanga kwatha and Patoladi kwatha showed good results in reduction of signs and symptoms of Amlapitta. Vasadidashanga kwatha gave better results in comparison with Patoladi kwatha clinically. The statistical analysis also supported this by concluding that the improvement after treatment is highly significant in Group A (Vasadidashanga kwatha) when compared to Group B (Patoladi kwatha).

KEYWORDS: Amla pitta, Non-ulcer Dyspepsia, Vasadidashanga kwatha, Patoladi kwatha.

INTRODUCTION

The word “Amlapitta” comprised of two words- Amla and Pitta[1]. In Amlapitta, the quantity of Pachaka Pitta is increased its quantity of normal bitter taste (alkaline) is changed to more sour taste (acidic) as a result of fermentation. Because of this sour quality of Pitta, it is called Amlapitta.[2] It is a Disease of gastrointestinal track, due to abnormal secretion of gastric and pancreatic enzymes. In medical science it is described as Acid peptic Disorder. In Ayurveda it is described as Amlapitta.

Amlapitta is one of the commonest Vyadhi of Annavahasrotas (Gastrointestinal track disorder) [3] caused by vitiated Agni. Amlapitta is a condition where Amlaguna of Pachakpitta increases due to Samata causing Vyadhi condition. Acharya Kashyapa has accepted the involvement of three Doshas in Amlapitta[4] while Madhavakara has accepted the dominance of Pitta in this disease. Acharya Charaka has not mentioned Amlapitta as separate disease but described in Grahaniroga as one of its Lakshana. According to Ayurveda many disorders are due to vitiated Agni. Due to various factors in the progressive civilization of the present day like speedy environmental changes, adaptation of new food materials, change in method of cooking, atmospheric pollution, encroachment of various chemical agents in newer life style, occupational hazards etc. have precipitated the increasing trend of the diseases. Along with those stimulating factors tremendous stress and anxiety have significantly aggravated the disease including Amlapitta. This is a life style problem and those who are addicted with tobacco,
alcohol as well as excess of packaged food rich in salt content can easily caught by this disease.

The Lakshanas of Amlapitta can be correlated with signs and symptoms of Non ulcer Dyspepsia. Dyspepsia is a term that describes a collection of symptoms that affect the oesophagus (gullet), stomach or duodenum (the first part of the small intestine). It is sometimes called indigestion. Non-ulcer dyspepsia is the diagnosis given to a patient who has symptoms of dyspepsia when no specific medical cause can be found. It is a very common problem, 6 out of 10 people who experience indigestion are diagnosed with non-ulcer dyspepsia. It is also sometimes referred to as ‘functional dyspepsia’.

The line of treatment as per allied science is life style changes, use of H2 receptor blocking agents and Proton Pump Inhibitors (PPI). Long term use of these antacids has shown various side effects.

There is a need for a better medicine which can counter such changes and can reduce Amlata and Vidagdhata of consumed food. Medicines explained in Ayurveda have the ability to do the same. For this purpose, Vasadidashanga kwatha which is explained in Bhaishajya Ratnavali in comparison with Patoladi kwatha as per mentioned in Chakradatta in the management of Amlapitta has been undertaken.

MATERIALS AND METHODS

Source of Data

Literary source

All the Ayurvedic classics, contemporary Ayurvedic literatures, modern texts and internet sources mentioning about the condition, medicine and administration were reviewed and documented for the intended study.

Sample source

Patient who fulfills the inclusion criteria will be randomly selected from OPD and IPD of Teaching hospitals in south Canara and also from referral sources and special camps conducted for the purpose.

Pharmaceutical source

Raw drugs will be procured from authentic sources and preparation of Kwatha will be carried out at the Teaching pharmacy attached to Karnataka Ayurveda Medical College, Mangaluru.

Method of preparation

Vasadidashanga Kwatha

Ingredients

Vasa, Amritha, Parpataka, Bhunimba, Nimba, Bringaraja, Haritaki, Vibhitaka, Amalaki and Kulaka (Patola).

Process of drug making: Take equal quantity of the above mentioned ingredients and raise 25gm of their coarsely powdered mix. Decoct it along with water measuring 400ml, till it reduced to one fourth.

Anupana: Madhu

Patoladi kwatha

Ingredients: Patola, Haritaki, Vibhitaka, Amalaki and Nimba.

Process of Drug Making: Take equal quantity of the above mentioned ingredients and raise 25gm of their coarsely powdered mix. Decoct it along with water measuring 400ml, till it reduced to one fourth.

Anupana: Madhu

Method of collection of data

a. Sample size

A minimum of 60 patients fulfilling the diagnostic and inclusion criteria of either gender will be selected for the clinical study. They will be randomly assigned into two groups A and B with 30 patients each.

Group A: 30 Patients will be administered with Vasadidashanga kwatha.

Group B: 30 Patients will be administered with Patoladi kwatha.

b. Diagnostic criteria

Patients presenting with the Lakshanas of Amlapitta will be selected. Associated with one or multiplicity of these:

i. Avipaka (Indigestion)
ii. Klama (Tiredness)
iii. Utklesha (Gastritis)
iv. Tiktaamlaudgara (bitter and sour Belching)
v. Hritdaha (Heartburn)
vi. Kantadaha (Throat burn)

c. Inclusion criteria

i. Patients presenting with Lakshanas of Amlapitta.
ii. Age 1–80 years
iii. Either sex

d. Exclusion Criteria

i. Patients suffering from other systemic illness like Diabetes mellitus, Hyperlipidemia, Tuberculosis which interfere with the course of treatment.
ii. Pregnant and lactating women.
iii. Patients above age of 80 years

e. Investigations

For diagnosis and exclusion criteria:

i. Blood Routine: Hb gm%, TC, DC, ESR
ii. Urine-Albumin, sugar, micro
Procedure and Design of the Study

Plan of Treatment

Included patients will be treated as follows

| Table 1: Vasadidashanga kwatha Group A |
|--------------|--------------------|
| Sample size  | 30 patients |
| Drug         | Vasadidashanga kwatha |
| Dose         | 48ml before breakfast and 48ml before dinner with honey 6ml |

| Table 2: Patoladikwatha Group B |
|--------------|--------------------|
| Sample size  | 30 patients |
| Drug         | Patoladikwatha |
| Dose         | 48ml before breakfast and 48ml before dinner with honey 6ml |

Duration of Study

The total duration of the study will be 30 days of active intervention and periodic observation done once in a week during the intervention of drug.

Follow-Up Period: 10th day after completion of the study.

Assessment criteria

All patients to be assessed once a week during the 30 day medication period. Thereafter, follow-up consisted of fortnightly assessments. All the observations will be recorded in the proforma.

Assessment of Results

Assessment of the total effect of therapy will be made by analyzing the data with suitable statistical tests of significance.

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Table 3: Grading of the Subjective Parameters

| Symptom    | Normal (0) | Mild (1) | Moderate (2) | Severe (3) |
|------------|------------|----------|--------------|------------|
| Avipaka    | Absent     | Irregular digestion | Indigestion associated with Nausea | Indigestion associated with Chardi and Bhakta Dwesha |
| Klama      | Absent     | Fatigued due to excretion and relieved by rest | Fatigued without excretion, more in the morning | Fatigue associated with heaviness |
| Utklesa    | Absent     | In relation with specific food | In relation with normal food | Associated with Chardi |
| Tiktodgara | Absent     | Associated with Avipaka | Associated with Hrillasa | Associated with Kanthadaha |
| Amlodgara  | Absent     | Associated with Avipaka | Associated with Hrillasa | Associated with Kanthadaha |
| Hritdaha   | Absent     | Retrosternal discomfort | Associated with pain | Associated with Gastric regurgitation |
| Kanthadaha | Absent     | Associated with Avipaka | Associated with Utklesha | Associated with Gastric regurgitation |

Statistical Analysis

- Statistical analysis will be done using SPSS package, version 22
- All the qualitative variables are summarized using frequency and percentage.
- The quantitative variables are summarized using mean and standard deviation, median and interquartile range (Q3, Q1)
- Data needs to be analyzed using normal distribution then performing parametric and non parametric tests
- Since all subjective variables are qualitative data, assessment will be done by Wilcoxon sign test and Mann-Whitney test.

OBSERVATIONS AND RESULTS

Out of 60 patients in group A and Group B, 25 patients were female and 35 patients were male. Out of total 60 patients in group A and group B, maximum patients were in age Group 31-40 years. They were 40% and 40% respectively in A and B Group. Out of total 60 patients in Group A and Group B, maximum patients were found moderate Nature of Work. They were 40 (66.7%) in Group A, they were 63.3% and Group B they were 70%. Out of total 60 patients in group A and Group B, maximum patients were of Hindu religion (71.7%). In Group A they were 73.33% of Hindus, while in Group B they were 70% of Hindus. Out of total 60 patients in group A and Group B, maximum patient's occupation are Housewife (31.7%). In Group A 30% and in Group B is 33.33%. Out of total 60 patients in Group A and Group B, maximum patients' Socio Economic Status were middle i.e: 34 (56.7%). In Group A it was 56.7% and Group B (56.7%). In the study as a total 60 patients, 36 patients Sleep was disturbed (60%). Among the 30 patients in group A, 17 patients Sleep...
was in disturbed (56.7%). Among the 30 patients in group B, 19 patients Sleep was in disturbed (63.3%). Out of total 60 patients in Group A and Group B, maximum patients BMI were 20-31 (85%). In Group A, they were 80% and in Group B they were 90%. Out of total 60 patients in Group A and Group B, maximum patients Prakruti were Kapha Pitta (33.33%). In Group A, they were 23.33% and in Group B they were 43.33%. Out of total 60 patients in Group A and Group B, maximum patients Diet were mixed (80%). In Group A, they were 83.33% and in Group B they were 76.67%. Out of total 60 patients in Group A and Group B, maximum patients Education were upper primary (41.7%). In Group A, they were 46.7% and in Group B they were 36.7%.

RESULTS

Table 4: The effects of Vasadi dashanga kwatha (Group A) on subjective Parameter

| Symptom     | Mean score | %       | S.D (±) | S.E (±) | Wilcoxon Z Value | p value |
|-------------|------------|---------|---------|---------|-----------------|---------|
|             | BT         | BT-AT   |         |         |                 |         |
| Avipaka     | 2.33       | AT      | 1.07    | 1.27    | 54.29           | 0.450  | 0.084 | 4.78 | <0.05 |
|             |            | AF      | 0.33    | 2.00    | 85.71           | 0.587  | 0.109 | 4.78 | <0.05 |
| Klama       | 2.50       | AT      | 1.03    | 1.47    | 58.67           | 0.507  | 0.094 | 4.78 | <0.05 |
|             |            | AF      | 0.10    | 2.40    | 96.00           | 0.498  | 0.093 | 4.78 | <0.05 |
| Utklesha    | 2.57       | AT      | 1.04    | 1.53    | 59.74           | 0.507  | 0.094 | 4.78 | <0.05 |
|             |            | AF      | 0.17    | 2.40    | 93.51           | 0.498  | 0.093 | 4.78 | <0.05 |
| Tiktdagara  | 2.57       | AT      | 1.07    | 1.50    | 58.44           | 0.509  | 0.094 | 4.78 | <0.05 |
|             |            | AF      | 0.24    | 2.33    | 90.91           | 0.661  | 0.123 | 4.78 | <0.05 |
| Amlodgara   | 2.40       | AT      | 1.03    | 1.37    | 56.94           | 0.490  | 0.091 | 4.78 | <0.05 |
|             |            | AF      | 0.13    | 2.27    | 94.44           | 0.521  | 0.097 | 4.78 | <0.05 |
| Hritdaha    | 2.57       | AT      | 0.94    | 1.63    | 63.64           | 0.615  | 0.114 | 4.70 | <0.05 |
|             |            | AF      | 0.07    | 2.50    | 97.40           | 0.630  | 0.117 | 4.78 | <0.05 |
| Kantadaha   | 2.63       | AT      | 1.00    | 1.63    | 62.03           | 0.556  | 0.103 | 4.70 | <0.05 |
|             |            | AF      | 0.20    | 2.43    | 92.41           | 0.728  | 0.135 | 4.78 | <0.05 |

Table 5: The Effects of Patoladi kwatha (Group B) on Subjective Parameter

| Symptom     | Mean score | %       | S.D (±) | S.E (±) | Wilcoxon Z Value | p value |
|-------------|------------|---------|---------|---------|-----------------|---------|
|             | BT         | BT-AT   |         |         |                 |         |
| Avipaka     | 2.33       | AT      | 1.06    | 1.27    | 54.29           | 0.521  | 0.097 | 4.70 | <0.05 |
|             |            | AF      | 0.46    | 1.87    | 80.00           | 0.571  | 0.106 | 4.70 | <0.05 |
| Klama       | 2.70       | AT      | 1.07    | 1.63    | 60.49           | 0.490  | 0.091 | 4.78 | <0.05 |
|             |            | AF      | 0.63    | 2.07    | 76.54           | 0.521  | 0.097 | 4.78 | <0.05 |
| Utklesha    | 2.63       | AT      | 1.07    | 1.56    | 59.49           | 0.504  | 0.094 | 4.78 | <0.05 |

In this work of 30 patients studied in Amlapitta with Avipaka lakshana, Group-A showed 85.71% improvement and Group-B 80% improvement. An assessment of Klama in patients of Amlapitta before and after the treatment with Group-A showed 96% improvement and Group-B showed 76.54% improvement. Magnitude of Utklesha in patients of Amlapitta before and after the treatment was 93.51% improvement in Group-A and 75.95% improvement in Group-B. Magnitude of Tiktdagara in patients of Amlapitta before and after the treatment with Group-A showed 90.91% improvement and Group-B showed 84.62% improvement. Magnitude of Amlodgara in patients of Amlapitta before and after the treatment in Group-A showed 94.44% improvement and Group-B showed 73.97% improvement. Magnitude of Hritdaha in patients of Amlapitta before and after the treatment in Group-A showed 97.40% improvement and Group-B showed 81.48% improvement. Magnitude of Kantadaha in patients of Amlapitta before and after the treatment in Group-A showed 92.41% improvement and Group-B showed 78.82% improvement.
Ayurveda has a lot to not having proper medicament for gastric and Ph.D. have been co-mentioned for these diseases. Charakahas first mentioned separate chapter on it. Madhavkar & Bhavaparakas have given detailed description on and Chikitsa of Amlapitta.

Gastritis and non-ulcer dyspepsia disease have been co-related with Amlapitta by several M.D. and Ph.D scholars of Ayurveda. Modern medicine is not having proper medicament for gastric disease. Ayurveda has a lot to offer in this regard. Ayurvedic physicians are providing cure for the patients of these type chronic diseases.

In Amlapitta chikitsa, Shodhana procedure has given more importance by ancient Acharyas. But it is not used in practice due to more time consumption.

Several single and compound drugs have been tried in this disease. The drugs which are having Tikta Madhura Rasa, Madhuravipaka, Sheetavirya and Laghu Ruksa property with Kapha-pittahara action, used in these diseases.

This study aims at the management of Amlapitta by Shamanavidhi using Vasadidashanga kwatha and Patoladi kwatha. The properties of the drugs used like Tikta rasa, Deepana, and Pachana helps in Ama-pachana and Agnideepana. The ingredients of both these Kwatha are easily available, economical and the treatment using them will not affect the daily routine of the individual and would thus provide better patient compliance.

The trial drugs is Vasadidashanga kwatha

Vasa: Vasa is considered as one of the best Pitta shamaka drug. According to Ganavargikarana Vasa is included under Guduchyadivarga. The main action on Dosa is, it is Kapha pitta shamaka. Pitta shamaka due to Sheetavirya and Tiktakashayarasa. Kaphahara because of Katuvipaka and Tiktakashaya rasa.
Amritha (Guduchi)

Guduchi acts as rasayana and dhatvagnivardhaka. Due to Rasayana karma it gives Bala to Aashaya which avoid Punaruddhbha of any disease. Because of its ‘Vichitrapraptarabdha’ property Guduchi act as Tridoshagna, Pitta, Vishahashamaka. It exhibits Deepana, Pachana, Pittasara Karma which is useful in Prakruta pitta nirmana and it improves Panchakriya. Haritaki reduces Aamashayagataamlata which is the main Sampraptigatahata of Amlapitta.

Parpataka

Parpataka act as Trisahara, Dahahara, Ruchikara and charkindha. Parpataka is included under Trishnanigrahanaavarga according to Acharya Charaka and Guduchyadivarga according to Bhavaprakasha. Parpataka have Pitta Kaphahamaka property Pitta shama due to Sheetaviya and Tikta rasa. Kaphahamaka due to Katuvipaka and Tikta rasa.

Bhunimba

Due to its Tikta rasa, Deepana, and Pachana property. It helps in Ama-pachana and Agnideepthi. Bhunimba acts as Kapha pitta shama, Pitta shama due to Tikta rasa and Kaphahamaka because of Ushnaviry, Katuvipaka and Tikta rasa.

Nimba

Nimba acts as Rucikara, Trishnahara, Krimitghna and charkindha. Acharya Charaka included it under kandughnawarga. Acharya Sushrutha included Nimba under Aragvadhadi, Guduchyadu and Lakshadigana. It acts as Pitta kaphahamaka, Pitta shama due to its Sheetaviya and Tikta kashaya rasa. Kaphahamaka due to Katuvipaka and Tikta kashaya rasa.

Bhringaraja

Due to its Rasayana and Balya properties, it gives Bala to Aashaya and avoids Punaruddhbha of disease. Bringaraja has Virechana property which helps in overcoming the Amadosha. It has Kapha Vata hara property, Kaphahamaka because of Ushnaviry, Katuvipaka and Katutiktarasa. Vatahara because of Ushnaviry.

Haritaki

Haritaki is Tridosha-shamaka. It also exhibits Rasayana karma by which it gives Bala to Aashaya and avoids Punaruddhbha of disease. Due to Rukshaguna and Kashaya rasa (Kashaya rasa is Grahigunatmakha) it reduces Drava Pitta which is the responsible factor of Amlapitta. It acts as Deepana, Pachana, Yakrutittejana which is useful to reduce Agnimandya and improve Panchakriya. Haritaki acts as Anulomaka, Mrudu-rechana and because of this, it is Vibhandha-nashaka.

Vibhitaki

Vibhitaki is Tridoshashamaka. Due to its Bhedana property it will ease motion and has laxative action. It is used as an astringent and in the treatment of dyspepsia and diarrhoea. According to Acharya Charaka, it is included under Virecanopaga and Jvarahara. According to Acharya Sushrutha, under Mustadi and Triphala. Vibhitaki is Tridoshashamaka mainly kaphahamaka. Kaphahara cause of Usnaviry and Kashaya rasa, Pittahara because of Madhura vipaka and Kashaya rasa, Vatahara because of Ushnaviry and Madhuravipaka.

Amalaki

Amalaki is Tridoshashamaka. It acts as Rasayana and charkindha. It promotes Ojas and Reproductive fluids and is useful in the treatments of ulcers and hyperacidity. Acharya Charaka included it under Kushtaghna, Kasahara, Virechanopaga, Jvarahara, Vasasthanawarga. Acharya Sushrutha under Parusakadigana, Amalakayadigana and Triphala. Bhavaprakasha mention Amalaki under Haritakayadivarga. Amalaki is Tridoshashamaka, Vatahara because of Amla rasa, Pittahara because of Sheetaviya and Madhuravipaka, Kaphahara because of Rukshaguna and Kashaya rasa.

Kulaka (Patola)

Due to its Deepana, Pachana and Balya properties it is useful in reducing Angimandya and improves Panchakriya. Patolapathra is mainly indicated in Amlapitta and Agnimanahya. Patola is Sukhavirechaka and it exhibits Samshodhana karma in Kapha- Pittajavikaras. Patola is Tridoshashamaka, Vatahara because of Ushnaviry, Pitta shama because of Tikta rasa and Kaphahara owing to its Ushnaviry, Katuvipaka and Tikta rasa.

The control drug is Patoladikkatha

Patoladi kwatha contains ingredients such as Patola, Haritaki, Vibhitaki, Amalaki and Nimba so it is Tridosha-shamaka. It also exhibits Rasayana karma by which it gives Bala to Aashaya and avoids Punaruddhbha of disease. Due to Rukshaguna and Kashaya rasa (Kashaya rasa is Grahigunatmakha) it reduces Drava Pitta which is the responsible factor of Amlapitta. It acts as Deepana, Pachana, Yakrutittejana which is useful to reduce Agnimandya and improve Panchakriya. Patoladi kwatha acts as Anulomaka, Mrudu-rechana and because of this, it is Vibhandha-nashaka.
Discussion on Observations

Age: A total of 60 patients were involved in the study, of whom 58.3% were males and 41.7% were females. Age of participants ranged from 16 to 80 years, with a mean age of 31-40 years. The probable cause for increasing in this age group may be that the person of this age groups are more exposed towards the changing external environment & mental stress owing to their socio-economic responsibilities i.e. improper Vihara and irregularity in diet. Madhyamavastha is considered as Pitta Prakopavaya and thus, this age group is more prone to suffer from Pitta predominant disease.

Sex: In the sample of 60 patients of Amlapitta, it was observed that 58.3% of patients were male and 41.7% were female. In this Modern life style, male and female, both are suffered from mental stress, and intake irregular and spicy food which leads to aggravation of the process of Amlapitta.

Religion: Religion wise distribution shows Hindus were found 71.7% the total patients. However Muslims were eating spicy and fried foods, non-veg food more commonly. But in present time Hindus are also eating this type of food, and eating pizza, Burger, Idali, Dhosha like fast food. Majority of Hindu may be due to that this region that is near to the hospital belongs to more Hindu population.

Nature of Work: Nature wise distribution shows Moderate nature of work were found 66.7% the total patients. Nature of work also effects on process of Amlapitta like the intake of food in time and in proper quantity. People selected for this work mainly belongs to Moderate nature of work.

Occupation: Maximum 31.7% patients were housewife and 16.7% were businessmen. It was observed that most off housewife, was Diwasvapnasevan and Diwasvapnaseva leads to Agnimandhya and Tridosha Prakopa and then Amlapitta. Businessmen suffered from mental stress as Amlapitta is considered as a Psycho-somatic disease.

Socio Economic Status: Maximum number of the patients was 56.7% found in middle socio-economic status group and 35% belong to lower socio-economic status. Due to lower and middle socio-economic condition, the persons were mostly unaware about the food habits. They were habituated to take rough and pungent food which leads to aggravation of the disease process.

Sleep: Maximum number of the patients 60% found to have disturbed sleep. Due to the aggravations of the symptoms of Amlapitta almost all patients had Disturbed and Delayed sleep.

Body Mass Index (BMI): Maximum BMI Ranged between 20-30 that is 85% showed this range out of the total 60 patients. Usually persons having Higher BMI used to have the more symptoms of Amlapitta due to their nature of work, sedentary life styles and improper intake of food substances. But the area of research work showed maximum range of BMI between 20-30.

Prakruti: 33.3% patients were having Kapha-Pitta Prakruti. 33.3% have Pitta Kapha Prakruti and 16.7% have Pitta-Vata Prakruti. Kapha-Pitta Prakruti dominant persons were more prone to get Kaphaja and Pittaja disease. When they take Mithya AharaVihara all these Doshas get vitiation and produce disease.

Diet: In this present study, 80% patients were Mixed group and 20% patient were in taking Vegetarian diet. Maximum number of the patients (65%) have the habit of irregular food intake. Non vegetarian diet and irregular pattern of food intake lead to Agnimandhya and Tridosha Dusti which also lead the aggravation of this disease.

Marital Status: Maximum number of the patients was married (73.3%) because this status is related to middle age group. Family involved patients were under stress due to various reasons.

Chronicity: 65% patients were having chronicity of 0 to 12 months and 35% patient were having chronicity 1 year and above. As this is not routine life disturbing disease patients initially does not care of mild symptoms and keep them on self-medication once prescribed by physician. Just as antacid, milk, cold drink. They are attending hospital lately and making this disease chronic in nature. Moreover patients usually indulge in Apathyasevana causing chronicity of the disease.

Family History: Maximum number of patients (90%) had absent family history only 3 patients had present family history in Amlapitta. Ancient Acharyas are not indicating hereditary predisposition of disease. Modern medicine gives indication of ‘O’ blood group person as a hereditary predisposition of this disease. (Acid peptic diseases). The observation of family history suggests that dietetic pattern and environment also plays the important role as the 85% of cases had no family history.

Education: 41.7% patients were having Upper primary level and 36.7% were graduates. This incidence is maximum in educated people due to hurried and worried life, irregular diet habit etc

DISCUSSION ON RESULTS

Avipaka

Group A: In this work of 30 patients studied with Group-A, Avipaka was a major symptom. Statistical
analysis showed that the mean score which was 2.33 before the treatment was reduced to 1.07 after the treatment and after follow up it became 0.33 with 85.71% improvement.

**Group B:** Statistical analysis showed that the mean score which was 2.33 before the treatment was reduced to 1.06 after the treatment and after follow up it became 0.46 with 80% improvement.

**Mode of action:** Both the drugs have Deepana, Pachana, Tikta rasa which is useful to reduce Agnimandayatwa, helps in Prakruta Pitta nirmana and it improves Pachanakriya. Thus improves the digestion. Here Vasadidasangha kwatha showed better improvement.

**Klama**

**Group A:** An assessment of Klama in patients of Amlapitta before and after the treatment with Group-A showed reduction in the mean score from 2.50 to 1.03 after the treatment and after follow up it became 0.10 with 96% improvement.

**Group B:** An assessment of Klama in patients of Amlapitta before and after the treatment with Group-B showed reduction in the mean score from 2.70 to 1.07 after the treatment and after follow up it became 0.63 with 76.54% improvement.

**Mode of action:** Klama symptoms was found due to Amadosha and Rasa Dhatu Dusti. Pitta Dosha responsible for Mandagni in Amlapitta, was kindled by the Sheettavirya and Tikta kashaya rasa of Vasadidasangha kwatha, and after the intake of Kashaya, Agni was increased and Amadosha was decreased. And so Rasa Dhatu Dusti was also relieved in group A more than group B.

**Utklesha**

**Group A:** Magnitude of Utklesha in patients of Amlapitta before and after the treatment was assessed and analyzed statistically. In patients registered in Group-A group showed significant improvement. The mean score which was 2.57 before treatment reduced to 1.04 after the treatment and after follow up it become 0.17 with 93.51% improvement.

**Group B:** Magnitude of Utklesha in patients of Amlapitta before and after the treatment was assessed and analyzed statistically. In patients registered in Group-B group showed statistically significant improvement (P<0.05). The mean score which was 2.63 before treatment reduced to 1.07 after the treatment and after follow up it become 0.63 with 75.95% improvement.

**Mode of action:** Utklesha is a specific Avastha of Doshas. In this Avastha Dosha get aggravated in its own Sthana and they can mobilize. In Utklesha, Pitta and Kapha Doshas, Drava and Sandra guna increases and also the Chalaguna of Vatadosha. Due to the Rukshaguna and Kashaya rasa it reduces Drava Pitta and Sandra guna of Kapha. Thus reduces Utklesha. Vasadidasangha kwatha showed better improvement than Patoladi kwatha.

**Tiktodgara**

**Group A:** Magnitude of Tiktodgara in patients of Amlapitta before and after the treatment was assessed and analyzed statistically. In patients registered in Group-A group showed significant improvement. The mean score which was 2.57 before treatment reduced to 1.07 after the treatment and after follow up it become 0.24 with 90.91% improvement.

**Group B:** Magnitude of Tiktodgara in patients of Amlapitta before and after the treatment was assessed and analyzed statistically. In patients registered in Group-B group showed statistically significant improvement. The mean score which was 2.60 before treatment reduced to 1.03 after the treatment and after follow up it become 0.40 with 84.62% improvement.

**Amlodgara**

**Group A:** Magnitude of Amlodgara in patients of Amlapitta before and after the treatment was assessed and analyzed statistically. In patients registered in Group-A group showed significant improvement. The mean score which was 2.40 before treatment reduced to 1.03 after the treatment and after follow up it become 0.13 with 94.44% improvement.

**Group B:** Magnitude of Amlodgara in patients of Amlapitta before and after the treatment was assessed and analyzed statistically. In patients registered in Group-B group showed statistically significant improvement. The mean score which was 2.60 before treatment reduced to 1.03 after the treatment and after follow up it become 0.63 with 73.97% improvement.

**Mode of action:** Due to the Tikta rasa of ingredients of Kwatha, it directly act on the Vidagdha Pitta and convert it into Nirama Pitta. Tikta rasa decreases the Pitta Dravatavridhi thereby pacifying Amlodgara. Here Vasadidasangha kwatha showed significant result than Patoladi kwatha.

**Hritdaha**

**Group A:** Magnitude of Hritdaha in patients of Amlapitta before and after the treatment was assessed and analyzed statistically. In patients registered in Group-A group showed significant improvement. The mean score which was 2.57 before treatment reduced to 0.94 after the treatment and after follow up it become 0.07 with 97.40% improvement.
Group B: Magnitude of Hritdaha in patients of Amlapitta before and after the treatment was assessed and analyzed statistically. In patients registered in Group-B group showed statistically significant improvement (P<0.05). The mean score which was 2.70 before treatment reduced to 1.07 after the treatment and after follow up it become 0.50 with 81.48% improvement.

Kantadaha

Group A: Magnitude of Kantadaha in patients of Amlapitta before and after the treatment was assessed and analyzed statistically. In patients registered in Group-A group showed significant improvement. The mean score which was 2.63 before treatment reduced to 1.00 after the treatment and after follow up it become 0.20 with 92.41% improvement.

Group B: Magnitude of Kantadaha in patients of Amlapitta before and after the treatment was assessed and analyzed statistically. In patients registered in Group-B group showed statistically significant improvement. The mean score which was 2.83 before treatment reduced to 1.00 after the treatment and after follow up it become 0.60 with 78.82% improvement.

Mode of action: Daha in Hrit and Kantadesha is mainly due to Pitta vridhhi. The ingredients of both the Kwata that is Amalaki and Patola controls Daha due to its Sheetavirya and Nimba Twak is reported as anti-peptic, analgesic and anti-inflammatory properties which are very much beneficial in this condition.

CONCLUSION

Amlapitta is considered as a Psycho somatic disorder where diet and psychological factors like stress, socio economic status etc. plays an important role in the causation of the disease. Agnimandya and Ama are the important factors in the pathogenesis of the disease. Poorvaroopa of the disease is not mentioned in the classics, some of the Lakshanas in mild stage can be considered as Poorvaroopa itself. As such co relation to Amlapitta in modern science cannot be done but some of the Lakshana's of Amlapitta is seen in Non ulcer dyspepsia. People with hectic schedule, sedentary lifestyle and indulging in incompatible food habits were seen to be more prone to the disease.

Two Kashayayogas-- Vasadidashangakwatha and Patoladi kwatha were taken as the trial drug and control drug respectively. Effect of therapy on each and every sign and symptom was considered and critically analyzed. The results thus obtained were subjected to analytical statistical techniques to compare both types of treatments.

Both Vasadidashanga kwatha and Patoladi kwatha showed good results in reduction of signs and symptoms of Amlapitta. Vasadidashanga kwatha gave better results in comparison with Patoladi kwatha clinically. The statistical analysis also supported this by concluding that the improvement after treatment is highly significant in Group A (Vasadidashanga kwatha) when compared to Group B (Patoladi kwatha).

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