

REVIEW OF CLINICAL OBSERVATIONAL STUDIES CONDUCTED ON 1812 PATIENTS OF AMLAPITTA AT I.P.G.T. & R.A., JAMNAGAR

Ghosh Kuntal^{1*}, Baghel M.S²

¹PhD Scholar, Dept of Kayachikitsa, I.P.G.T. & R.A., Gujarat Ayurved University, Jamnagar, India

²Director, I.P.G.T. & R.A., Gujarat Ayurved University, Jamnagar, India

Received on: 05/08/11 Revised on: 11/09/11 Accepted on: 10/10/11

***Corresponding author**

Dr. Kuntal Ghosh, M.D (Ay.), PhD Scholar, Email: vaidyakuntal@gmail.com

ABSTRACT

Ayurveda is as old as human civilization based on two ideologies i.e. maintaining health of the healthy persons and curing the disease of diseased one. According to Ayurvedic point of view mandagni (reduced digestive power) is the mother of all diseases including Amlapitta. On Amlapitta more than 153 research works in PG/PhD level have been reported so far from various research institutions across India. Among these, 36 research works (PG-32/ PhD-4) were carried out at Institute for Post Graduate Training & Research in Ayurveda (I.P.G.T. & R.A.). Out of 36 research works 7 were from dept. of Kayachikitsa, 4 were from Dravyaguna department, 10 were from Basic Principles, 2 were from Rogavigyana Vikritivigyana & 13 were done from dept. of Rasashastra & Bhaisajyakalpana. Research works include 24 clinical studies and 12 experimental cum clinical studies. 21 single drug formulations (Sunthi, Bhringaraj, Patola, Shatavari, Amalaki, Guduchi etc.) & 20 compound drug formulations (Sutashekhararasa, Sunthi Khanda, Puga Khanda etc.) were studied. Maximum drugs used in these research works possess kapha-pitta shamaka, grahi, kledahara, dipana, pachana & medhya properties with Madhura, Tikta & Kasaya predominant rasa, Shita virya (potency) which very easily counteract the etiopathogenesis of Amlapitta.

KEY WORDS: Amlapitta, Single and Compound drugs

INTRODUCTION

Amlapitta is composed of two words i.e. Amla & Pitta. The term Amla¹ is as significant as a special type of taste has the similarity with sour taste which causes excessive salivation & also a typical natural property of Pitta² which is a bodily chemical substance mainly responsible for the maintenance of the process of digestion, transformation & transmutation. Acharya Sushruta mentioned that Amla is the property of vidagdha² (fermented) Pitta. The term Amlapitta may be correlated with Acid Reflux Syndrome⁴ which comprises of various types of Gastro-esophageal Reflux Diseases⁵ like Gastritis⁶, Dyspepsia⁷, Heartburn⁸, Peptic ulcer⁹, Hyperacidity¹⁰, Hypoacidity¹¹ etc. described in modern sciences.

Due to various factors in the progressive civilization of the present day like speedy environmental changes, adaptation of newer & newer food materials, change in method of cooking, atmospheric pollution, encroachment of various chemical agents in newer life styles, occupational hazards etc. have precipitated the increasing trend of the diseases. Along with those stimulating factors tremendous stress, strain, disturbed sleep & 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 with rich salt content can easily caught by this disease. According to NDDIC (National Digestive Diseases Information Clearinghouse), the prevalence rate of Gastritis is 2.7 million (1988) in USA (approximately 1 in 100 people). In India it is 10,572,391 and that of peptic ulcer is 5 million (1987). The incidence of Gastritis is 313,000 in USA (1975) and approximately up to 1 in 869. In India it is 1.225614.

DEFINITION

‘Amlapittam ceti amlagunodriktam pittam’¹² means when amlata (sourness) of pitta is increased it leads to Amlapitta. Regarding the clinical definition, the disease has the following symptoms like avipaka¹³ (indigestion), klama¹⁴ (exhaustion), utklesha¹⁵ (nausea), tikta-amla udgara¹⁶ (eructation with bitter & sour taste), gaurava¹⁷ (feeling of heaviness of the body), hrit-kantha-daha¹⁸ (burning sensation in the chest & throat), aruchi¹⁹ (loss of appetite) is termed as Amlapitta²⁰. Amlapitta is considered to be a gastrointestinal disorder caused due to suppression of jatharagni²¹ (gastric fire) by the increased drava²² guna (liquidity) & amla guna (sourness) of vidagdha pachaka pitta affecting the Annavaaha-Rasavaaha-

Raktavaha-Purisavaha srotas²³; Samana²⁴-Prana²⁵-Apana²⁶ vayu; mainly Kledaka²⁷ & partially Bodhaka kapha²⁸. Because of increasing trend of the disease, scholars of different systems of medicine are working hard to develop various means & measures to overcome it. However the antacids are among the one of the most widely used medicine all over the world and about 1/3rd of Americans and other world population. The US Food & Drug Administration (FDA) warned that there is increase risk of fractures with the use of Proton Pump Inhibitors (PPIs), including Esomeprazole, Dexlansoprazole, Omeprazole, Lansoprazole, Pantoprazole & Rabeprazole, are used to treat Gastroesophageal reflux disease (GERD), stomach & small intestine ulcers and inflammation of oesophagus for one year or longer or at high doses²⁹. The first line of treatment is the same in Allopath and Ayurveda i.e. life style modification and avoidance of the food stuff which aggravates the condition. The Ayurvedic scientists have claimed that the natural drug materials or approaches used according to the Ayurvedic system of medicine are not found to produce any resistance or side effects. This has encouraged the present scholars to assess the effect of the Ayurvedic approaches, both Shodhana³⁰ (vamana & virechana) & Shamana³¹ (dipana & pachana) treatment in Amlapitta.

AIMS & OBJECTIVES

1. To know the trend & pattern of academic research works carried out at different Ayurvedic institutions across India on Amlapitta.
2. To provide the guidelines for further research works in the area of Amlapitta.

MATERIALS & METHODS

The title of the thesis are procured from ‘Research in ayurveda’ - a book on all the thesis of PG & PhD research works are carried out at various research institutes throughout India, compiled by Prof. M.S.Baghel³².

METHODS: Hand search. All the thesis were collected from the departments of Kayachikitsa, Roga Nidana & Vikriti Vigyana, Rasashastra & Bhaisajya Kalpana, Dravyaguna & Basic Principles at the Institute for Post Graduate Teaching & Research in Ayurveda, Jamnagar. The procured thesis were studied in detail & scientific review was done.

OBSERVATIONS

On Amlapitta more than 153 research works in PG/PhD level had been carried out so far at various Ayurvedic institutions all over India. In which total 36 works (PG-32/ PhD-4) were carried out at the Institute for Post Graduate Teaching & Research in Ayurveda (I.P.G.T. & R.A.), Gujarat Ayurved University, Jamnagar. Three research works (PG-1/PhD-2) on Amlapitta are in progress. Among the 36 research works 7 were from dept. of Kayachikitsa, 4 were from Dravyaguna department, 10 were from Basic Principles, 2 were from Rogavigyana Vikritivigyana & 13 were done from dept. of Rasashastra & Bhaisajyakalpana.

Department of Kayachikitsa

Govinda Prasad Dwivedi (1964)³³ : This is the first thesis on Amlapitta was carried out at I.P.G.T. & R.A. 15 Patients with the symptoms of Amlapitta were treated with the various types of Ayurvedic drugs like Shatavari, Shuddha Mandura, Dhatri Lauha to verify their Amlapittahara property. The duration of treatment was 1 to 2 months depending upon the complete remission of the disease. From this clinical study it was observed that Shatavari, Shuddha Mandura, Dhatri Lauha are equally effective in urdhvaga, adhoga & vatanubandha amlapitta.

Upali Pilapitiya (1969)³⁴ : In this clinical study the efficacy of Samshodhana And Samshamana Chikitsa was evaluated on 8 patients of Amlapitta. Samshodhana therapy was administered (virechana with Phala virechana kwath) for two weeks followed by Samshamana with Bhringaraj churna in doses from 1 to 3 masha for 1 – 2 weeks as per need of the patients. From this study it was observed that Samshodhana therapy followed by Samshamana is very effective in Amlapitta.

Shanti S. Tiwari (1993)³⁵: In this clinical study the role of Pugakhanda & Shatavaryadi churna was evaluated on 18 patients of Amlapitta. Pugakhanda was administered at a dose of 5 gm twice daily to 10 patients whereas Shatavaryadi churna was administered at a dose of 3 gm twice daily to 8 patients of Amlapitta for the duration of 60 days. Clinically both the drugs Pugakhanda & Shatavaryadi churna provided significant relief in signs, symptoms, dosha & dushti in this study. The results of Pugakhanda & Shatavaryadi churna were statistically analysed with paired 't' test & it was observed that the effect of Pugakhanda was better in comparison to Shatavaryadi churna.

Gautam Jogad (2004)³⁶ : Conducted a comparative study to evaluate the role of virechana karma (shodhana karma) & shaman karma with the trial drug Bhunimbadi vati in the management of Amlapitta on 40 patients. In shodhana group virechana karma followed by Bhunimbadi vati at a dose of 2 gm was administered thrice daily to 15 patients for one month whereas in shaman group only Bhunimbadi vati at a dose of 2 gm thrice daily was administered to 25 patients for one month. After the treatment the data was collected & analysed by paired 't' test. From this clinical study, it was observed that the symptomatology of Amlapitta were closely resembles with both hypo-acidity and hyperacidity conditions. Virechana group showed better result in cardinal, associated and Agnidushti symptoms in comparison to Shamana group. The drug under trial, Bhunimbadi Vati was effective in both hypoacidity and hyperacidity conditions.

Jitendra Kumar (2009)³⁷: 41 Patients in two groups were evaluated with Shatpatrayadi Churna tablet & Patolyadi Yoga. In one group 23 patients were treated with two Shatpatrayadi Churna tablet thrice daily & in another group 18 patients treated with two Patolyadi Yoga Tablet thrice daily for the duration of 30 days. The overall effect of Shatpatrayadi churna tab was better than Patoladi Yoga tab.

PhD Thesis

Upali Pilapitiya (1981)³⁸: Study was conducted to make differentiation between Amlapitta & Vidagdhajirna with Adrtaka swarasa & to assess the role of Udumbara twak in patients of

Amlapitta. UdumbaraKshirapaka was administered to 23 patients, Udumbaraghrita was administered to 15 patients, Udumbaraghana vati was administered to 22 patients & placebo capsule was administered to 8 patients in Control group for 28 days. It was proved that Adrtaka swarasa is useful in differentiation of Amlapitta from Vidagdhajirna. As compared to the control group, Udumbara kalpanas had shown very favourable action in case of Amlapitta. In UdumbaraKshirapaka Group, acid level came to normal with a significant decrease in E.S.R. rather than other groups.

Shanti Tiwari (2000)³⁹: In this study Pugachurna was administered to 27 patients, Pugakhanda was administered to 25 patients & Medhyarasayana was administered to 22 patients to assess the comparative efficacy of Pugachurna & Pugakhanda in the management of disease Amlapitta over that of Medhyarasayana. Pugakhanda gave best results in the present series on the patients of Amlapitta. Medhyarasayana drug also showed good results & it was observed that manas bhavas have a significant role in the management of Amlapitta.

Roga Nidana & Vikriti Vigyana Department

Utkalinini Nayak (2006)⁴⁰ : Conducted a comparative clinical study to evaluate the efficacy of Shatavaryadi Vati in Pitta predominant Amlapitta & Shunthi Khanda in Kapha predominant Amlapitta on 42 patients dividing into two groups. In group A, 20 patients were treated with Shatavaryadi Vati in the dose of 3 gm twice daily whereas in group B, 22 patients were treated with Shunthi Khanda in the dose of 5 gm twice daily for the duration of one month. The results of this study are clearly indicated that the diagnosis of the patients into two doshika categories may help in the effective management of the disease. In this study both the groups showed very good results. So it can be concluded that Amlapitta is a disease occurring due to samata. The arambhika dosha for the condition may be Pitta or Kapha but rarely Vata.

CH. Srikrishna (2008)⁴¹ : Conducted a comparative clinical study to evaluate the efficacy of Chinnodbhavadi Yoga Ghana Vati & Medhya Rasayana compound in the management of Amlapitta on 42 patients dividing into two groups. In group A, 2 tablets of Chinnodbhavadi Yoga Ghana Vati were administered to the 21 patients thrice daily for 30 days & in group B, 21 patients were treated with 2 tablets of Medhyarasayana compound thrice daily for the duration of 30 days. The effect of Chinnodbhavadi yoga Ghana vati was quite significant statistically which can be used in all the cases of Amlapitta. However with slight better results in all the categories of the patients the medhya rasayana compound proved to be more efficacious in this study, confirming the need to be taken care of both the psycho and somatic factors in this study.

Department of Dravyaguna

Gayatri Sandhibigraha (1997)⁴² : The Experimental & Clinical study were carried out to assess the effects of the test drug Guduchi sattva on experimental gastric ulcer induced in albino rats to verify anti-ulcer activity & to make attempt to correlate the findings of experimental study to the results of the clinical evaluation. In clinical study 30 patients of Amlapitta were treated with 1 gm Guduchi sattva twice daily for 45 days. Experimentally Guduchi sattva is found to have moderate anti-ulcer effect, which seems to dependent upon selection of right dose. The drug produced anti-ulcer effect against stress induced ulcer. Guduchi sattva can be used for the treatment of Amlapitta singly, may booster its action with combination of other medicines too.

Rajesh M. Thakkar (1999)⁴³ : The Experimental & Clinical study was conducted to evaluate the comparative therapeutic efficacy of Satavari granules & Satavari powder on 73 patients of Amlapitta. Satavari granules was administered to 35 patients whereas Satavari powder was administered to 25 patients for 30 days. Experimentally it was found that Satavari is rich in vitamins & nutritive agents. The root of Satavari contains mucilage & asparagin which give cooling

effects to the stomach. It also heals the peptic ulcer & strengthens the intestine. Satavari can be used for the treatment of Amlapitta alone, other pittasamak drugs may be combined to booster its action.

Subhash Sahu (2004)⁴⁴: It was a clinical & experimental study conducted to evaluate the organoleptic characters of trial drug (Patola Patra Churna) as well as to evaluate the clinical effect on 31 patients of Amlapitta. In trial group 15 patients were treated with Patola Patra Churna at the dose of 2 gm thrice daily & in control group 16 patients were administered placebo capsule for the duration of one month. From the experimental study it was observed that the test drug in the form & the dose level administered did not possess anti-ulcer activity against pyloric ligation induced gastric ulcers which are mainly dependent on acid-pepsin activity. Result of Trial group was not satisfactory in comparison to Control group on the basis of clinical study & it can be concluded that Patola (*Trichosanthes dioica Roxb*) is a good medicine for Amlapitta.

N. Rajashekhara (2009)⁴⁵ PhD thesis : Conducted a comparative clinical & experimental study to evaluate the efficacy of Vamshalochana administered in Group I (n-34) & Tugaksheeree administered in Group II (n-33) in a dose of 4 gm thrice daily for 30 days on the patients of Amlapitta. From experimental study it was observed that both the test drugs contributed anti-ulcer activity by reducing total acidity both of them had no toxicity. Clinically both the drugs were highly effective in treating Urdhvaga Amlapitta.

Department of Rasashastra & Bhasajya Kalpana

Momin Ali (1970)⁴⁶ : The clinical study was conducted to evaluate the effect of Kapardibhasma & Shuktibhasma on 17 patients of Amlapitta. Kapardibhasma was administered to 8 patients at the dose of 1 masa & Shuktibhasma was administered to 9 patients at the dose of 1 masa thrice daily. No fixed duration of the treatment had been mentioned here. It was observed that both the drugs Kapardibhasma & Shuktibhasma were effective on Amlapitta.

R. M. Anand (1970)⁴⁷: 17 patients of Amlapitta & 15 patients of Swasa were treated with Lokanatha rasa at the dose of 2 ratis twice daily for 15 days. From this clinical study it was observed that Lokanatha rasa was highly effective in agnisandipana, amapachana, srotoshodhana & vatashamana.

Shri Parameshwar Prasad Sharma (1971)⁴⁸: 25 patients of Amlapitta were treated with Sutasekhar rasa at the dose of 2 ratis twice daily morning & evening before food for 15 days. Sutasekhar rasa had shown good result on Amlapitta. Out of 25 patients, 13 were totally cured, 9 patients were moderately cured & 3 of them remained incurable.

Shri R. Kesavadas (1974)⁴⁹: 10 patients of Amlapitta & 10 patients of Pandu were treated with Swarnamakshika bhasma at the initial dose of 2 ratis thrice daily with honey, on the 8th day the dose was doubled & on the 15th day the dose was raised to four times of the initial dose for consecutive 3 weeks. From this clinical study it was observed that Swarnamakshika bhasma had increased the Haemoglobin level as well as the R.B.C. & W.B.C. count. It had anti-anaemic action as well as resistance-restorative action. On the basis of gastric analysis it had been proved that it had good antacid activity. The clinical symptoms of Amlapitta & Pandu were diminished after the administration of Swarnamakshika bhasma.

Chetana J. Joshi (1989)⁵⁰: Efficacy of Pravalapishiti was compared with that of Pravalabhasma in this study both clinically & experimentally. 7 patients of amlapitta were treated with Pravalapishiti & 7 others were treated with Pravalabhasma at the dose of 500 mg thrice daily for 21 days. No trial drug had shown antacid effect in this study. In clinical study Pravalabhasma showed more efficacy than Pravalapishiti. Pravalabhasma was more effective in decreasing fasting Gastric juice volume, Hyperchlorhydria & increasing the level of serum calcium.

Arun Kumar Das (1997)⁵¹: Comparative study was done to assess the efficacy of Suktibhasma with that of Suktipisti. Study was conducted over 38 patients of Amlapitta. The antacid & antiulcer effects of both the trial drugs at higher dose level in the experimental study was encouraging. Suktibhasma was found to be a non-systemic type of antacid. It's acid neutralizing capacity, speed of antacid action & prolonged buffering actions were excellent as compared to those of Suktipisti.

Valani Gunavant K. (1998)⁵²: Comparative study was done to evaluate the antacid effect of Pippalichurna with that of Pippalighrita on Amlapitta. Pippalichurna was administered to 25 patients of Amlapitta at the dose of 750 mg twice daily & Pippalighrita was administered to 20 patients of Amlapitta at the dose of 3 gm twice daily for 21 days. The result supported the effect of Pippalighrita providing better relief in all the signs & symptoms of Amlapitta in comparison to Pippalivati therapy.

Zankhana G. Tank (2000)⁵³: Comparative study was conducted to assess the efficacy of Shankhabhasma alone with combination of Amalaki churna on 104 patients of Amlapitta. 41 patients were treated with only Shankhabhasma(500 mg) thrice daily & 39 patients were treated with Shankhabhasma (500 mg) along with Amalaki churna (2gm) thrice daily for 21 days. The result revealed that Shankhabhasma had more neutralizing capacity, speed of antacid action & prolonged buffering action. Shankhabhasma alone was found to be non-systemic type of antacid effect to both trial drugs.

Apoorva M. Bhatt (2003)⁵⁴: Comparative study was conducted on 15 patients to evaluate efficacy of Pravala bhasma & Pravala pishti in the management of hyperacidity. Pravalabhasma was showing comparatively better results than Pravalapishiti in experimental study of antisecretory activity but it has moderate anti ulcer activity while Pravalapishiti has no such of activity. Pravalabhasma shows better results than Pravalapishiti in the management of Hyperacidity.

Himansu S. Tiwari (2004)⁵⁵: Efficacy of two varieties of Pravalamula Bhasma was compared with that of two varieties of Pravalashakha Bhasma on the basis of antacid activity on 25 patients of Amlapitta. Pravalamula Sarjikkakshara shodhita Bhasma showed better acid neutralizing capacity in comparison to all the three samples. Pravalashakha Sarjikkakshara shodhita Bhasma showed better results in Clinical study but Pravalamula Sarjikkakshara shodhita Bhasma had better acid neutralizing capacity & moderate anti-ulcer activity in experimental study.

Bharat D Kalasaria (2005)⁵⁶: Conducted the study to evaluate the antacid activity of Ordinary Amalaki Rasayana(O.A.R), Freeze Drying Amalaki Rasayana (F.D.A.R.) and Freeze Drying Amalaki Churna (F.D.A.C.) in experimental animals and to evaluate the comparative effect of O.A.R. and F.D.A.R. on patients of hyperacidity. Results revealed that Ordinary Amalaki Rasayana, freeze dried Amalaki Rasayana and freeze dried Amalaki Churna had mild to moderate anti-acid, antisecretory and anti-ulcer activity but significant changes were not observed. However, freeze drying definitely increased the therapeutic utility of the preparation. Both Amalaki Rasayana had Amlapittahara effect but data revealed that ordinary Amalaki Rasayana is giving better results in the management of Amlapitta.

Pramod C. Baragi (2008)⁵⁷ PhD thesis : To assess the comparative results of Narikele Khanda & Narikele Khanda granules on the patients of Urdhwaga Amlapitta this study was carried out. Narikele Khanda was administered to the patients (n-51) in group A & Narikele Khanda granules was administered in group B (n-51) at a dose of 6 gm for 28 days twice daily. In experimental study both the drugs showed anti-ulcer activity against pyloric ligation induced gastric ulcer & stress induced ulcers. Clinically it can be concluded that both the formulations had shown statistically highly significant results in treating the disease Urdhwaga Amlapitta.

Kirtikumar G. Parmar (2010)⁵⁸: The study was aimed to evaluate the comparative therapeutic efficacy of Jala Shukti Bhasma and Mukta Shukti Bhasma on 73 patients of Amlapitta. Jala Shukti Bhasma (500 mg) was administered to 38 patients in group A & Mukta Shukti Bhasma (500 mg) was administered to 35 patients of group B for 28 days. From the experimental study it was observed that Magnesium was detected in Shuddha Mukta Shukti i.e. 1314.60 ppm, while in Shuddha Jala Shukti it was not detected, so it may be concluded that Mukta Shukti Bhasma has better antacid activity than Jala Shukti Bhasma. On the basis of study, it may be concluded that Jala Shukti Bhasma can be used as substitute of Mukta Shukti Bhasma, as Jala Shukti is easily available and cheaper in comparison to Mukta Shukti.

Department of Basic Principle

Shri Narahari D. Pandya (1968)⁵⁹: The study was conducted to assess the effectiveness of the various drugs available in I.P.D. & O.P.D. at I.P.G.T. & R.A., G.A.U. on 50 I.P.D. patients & 120 O.P.D. patients of Amlapitta. On the basis of graphical representation of free acidity and total acidity it was concluded that among of the all medicines used in I.P.D. & O.P.D., Pravalpanchamrita was the highly effective medicine & the next one was Shatavarighrita. Dhatri Lauha was also effective in decreasing acidity. In severe burning sensation it was observed that Guruchi swarasa & Samshamani vati was highly effective.

C.N.Balakrishnan Nair (1973)⁶⁰: This was a conceptual & clinical study conducted on 120 patients to assess the relation between vaya, bala, satmya, sattwa, sara, samhanana, prakriti, pramana, aharashakti, vyayamashakti – the ten points with Amlapitta. The present ideology established the Amlapitta as a stress & strain syndrome. The middle & young age were proved to be favourable for Amlapitta. So far the satmya is concerned, it may be pointed out that avarasatmya generally causes the disturbance of agni. The capacity of digestion is also reduced in Amlapitta.

Shri Jayanta M. Makani (1975)⁶¹: To assess the appropriation of Karyakaranavad, the study was conducted on 17 patients who were treated with Apamargabija Ksirapaka, 5 gm twice daily for 15 days. Kshirapaka had shown good efficacy on the physiological symptoms like udaradaha, amlodgara, udarashula, etc and psychological symptoms like bhrama, manodaurbalya, etc. Out of 17 patients 13 patients were totally cured i.e. 75.47 % with this treatment.

Shri Upendra D Raval (1977)⁶²: To study the effect of Musta Kshirapaka on Amlapitta & samapachakapitta Musta Kshirapaka was administered to 65 patients at the dose of 5 gm twice daily for the duration of 15 days. Mustakshirapaka had shown no remarkable effect on the acidic nature of gastric secretion. In this study it was revealed that samata & guruta are the main features of gastric fluid.

Harinath Jha (1986)⁶³: 154 patients were selected to find out & finalize the psychological symptoms in Amlapitta. From this conceptual & clinical study it was revealed that Amlapitta is rare in childhood but common in adults. Those persons who had excessive psychological strain & stress might be easily affected with Amlapitta. In most of the cases of Amlapitta it was converted into adhoga Amlapitta.

Santilal G Rana (1992)⁶⁴: To evaluate the efficacy of medhyarasayana & yoga therapy the clinical study was conducted on 24 patients of Amlapitta dividing into two groups. In medhyarasayana group 14 patients were treated with Shankhapuspi churna at the dose of 5 gm twice daily for 30 days whereas in yogasana group 10 patients were treated with Shavasana for 15 minutes in morning & evening along with 1 placebo cap (250 mg) twice daily for 30 days also. Results supported that both the therapies had the effect on sharirika & manasika symptoms. The treatment proved that psychological management influences the somatic symptoms & vice versa.

Arsi M Dodia (1998)⁶⁵: To assess the effect of Patola as a dravashosaka dravya & Chitraka as a usna gunavardhaka dravya the study was conducted on 30 patients of Amlapitta. Patola patra churna 1-5 gm applied in group A (n-20) & Chitrakamula churna applied in group B (n- 10) for duration of 30 days. The study goes to show that the effect of Patola was better than Chitraka. Though Chitraka was a usna virya dravya but it had shown no adverse effect in the present study.

Vikram A. Singh (1999)⁶⁶: Efficacy of pathyas was compared with that of routine O.P.D. medicines along with pathya on 27 patients of Amlapitta dividing into two groups. 13 patients in group I were treated with Kamadudha, Shankhabhasma, Kapardika – 500 mg each thrice before food daily & 8 patients of group II were treated with placebo capsule - 1 cap twice daily for 30 days. Conceptually it was concluded that pathyas having the properties like ruksha, kasaya, laghu had the effect to decrease the dravaguna of pitta & maintaining the proper function of agni. Similarly pathyas, having madhura, shita properties, decreased the ushna property of pitta to maintain the proper function of agni. In this clinical study it was found that there was good effect of medicine along with pathya on Amlapitta. Pathyas had their positive role in curing the disease alone.

Srividya H Iyer (2003)⁶⁷: Total 33 patients were divided into three groups. Each group contained 11 patients. Patola Pancanga churna - 2 gm twice a day was administered to each group for duration of one month but at different times like in group I at niranna kala, in group II at madhyabhaktakala & in group III at adhobhaktakala to bring out the most appropriate Kala in the disease Amlapitta. Madhyabhata Kala group proved to be more effective over the signs and symptoms of Amlapitta. Madhyabhakta Kala could be advocated Bhaisajyakala in those patients of Amlapitta in whom systemic and localized Pitta symptoms are more predominant. Niranna Kala exhibited good results over the Jirna ahara Lakshanas i.e. over assessment of Agni. Niranna Kala, could be employed in those patients of Amlapitta in whom vitiation of Agni is more extensive as compared to other symptoms.

Vrinda N. Kaka (2006)⁶⁸: Total 39 patients of Amlapitta were divided into three groups & were treated with different drugs - Guduchi Churna was applied in group A (n-16) at the dose of 1.5 gm twice daily, Sunthi Churna was applied in group B (n-11) at the dose of 1.5 gm twice daily & Avipattikara Churna was applied in group C (n-12) at the dose of 1.5 gm twice daily for duration of 30 days to evaluate the effect on Amlapitta. Guduchi had significant effect in relieving the symptomatology of amapitta and Amlapitta. Sunti Churna had highly significant effect on Samapitta symptomatology but it had not significant effect in Amlapitta otherwise it increased the disease.

CONCLUSION

Analyzing all research works it is observed that all these studies were aimed at finding for better dipana⁶⁹, pachana⁶⁹ & grahi⁷⁰ drug along with kapha-pittashamaka property. Most of the drugs used in these works have kapha-pitta shamaka, grahi, kledahara⁷¹, dipana(appetizer), pachana (digestive) & medhya(brain tonic) properties with Madhura-Tikta-Kasaya⁷² predominant rasa & Shita virya⁷³. Through these research works scholars had managed to fortify the anti-ulcer & anti-acid (hyper & hypoacidity) as well as acid neutralizing activity of the used drugs which were proved beneficial to Amlapitta.

REFERENCES

1. Datta Chakrapani, Charaka Samhita Of Charaka with Ayurvedadipika commentary, Sutrasthana, shloka no.1/60, Reprint, 2006, Rastriya Sanskrit Sansthana, New Delhi – 110058, pp – 16.
2. Shastri Ambikadutta, Sushruta Samhita of Maharsi Sushruta with Ayurveda Tattva Sandipika Hindi commentary, Sutrasthana, shloka no. 15/5, Reprint, 2007, Chaukhambha Sanskrit Sansthan, Varanasi – 221001, pp – 56.

3. Shastri Ambikadutta, Sushruta Samhita of Maharsi Sushruta with Ayurveda Tattva Sandipika Hindi commentary, Sutrasthana, shloka no. 21/11, Reprint, 2007, Chaukhambha Sanskrit Sansthan, Varanasi – 221001, pp – 89.
4. Miller Christa, Acid Reflux Syndrome Symptoms, cited on 2nd June, 2011, available from http://www.ehow.com/about_5074902_acid-reflux-syndrome-symptoms.html
5. Sontag S (1999). "Defining GERD". Yale J Biol Med 72 (2-3): 69–80. PMID 10780568.
6. A service of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), National Institutes of Health (NIH), NIH Publication No. 10–4764, January 2010, cited on 7th June, available from <http://digestive.niddk.nih.gov/diseases/pubs/gastritis/>
7. Tack J et al: Functional gastro duodenal disorders. Gastroenterology 130:1466, 2006 [PMID:16678560].
8. Heartburn & GERD symptoms, cited on 25th July, 2011, available from <http://www.wrongdiagnosis.com/h/heartburn/symptoms.htm>
9. Le Wine Howard, Peptic ulcer, cited on 7th August, 2011, available from <http://www.mayoclinic.com/health/peptic-ulcer/DS00242/DSECTION=symptoms>
10. Hyperacidity and Acid Reflux Disease, cited on 5th September, 2011, available from <http://hyperacidity.net/>
11. Digestion Expert, cited on 14th August, 2011, available from <http://digestionexpert.com/2010/01/low-stomach-acid-production-the-symptoms-sound-strangely-familiar/>
12. Datta Chakrapani, Charaka Samhita Of Charaka with Ayurvedadipika commentary, Chikitsasthana, shloka no.15/47, Reprint, 2006, Rastriya Sanskrit Sansthana, New Delhi – 110058, pp – 517.
13. Datta Chakrapani, Charaka Samhita Of Charaka with Ayurvedadipika commentary, Chikitsasthana, shloka no.15/46, Reprint, 2006, Rastriya Sanskrit Sansthana, New Delhi – 110058, pp – 517.
14. Shastri Ambikadutta, Sushruta Samhita of Maharsi Sushruta with Ayurveda Tattva Sandipika Hindi commentary, Shariasthana, shloka no. 4/50, Reprint, 2007, Chaukhambha Sanskrit Sansthan, Varanasi – 221001, pp – 36.
15. Shastri Ambikadutta, Sushruta Samhita of Maharsi Sushruta with Ayurveda Tattva Sandipika Hindi commentary, Shariasthana, shloka no. 4/52, Reprint, 2007, Chaukhambha Sanskrit Sansthan, Varanasi – 221001, pp – 37.
16. Kunte Anna Moreswara et al., Astanga Hridaya of Vagbhata with commentaries of Arundatta & Hemadri, Sutrasthana, shloka no. 4/8, Chaukhambha Orientalia, 9th edition, 2005, Varanasi – 221001, pp-54.
17. Shastri Ambikadutta, Sushruta Samhita of Maharsi Sushruta with Ayurveda Tattva Sandipika Hindi commentary, Shariasthana, shloka no. 4/54, Reprint, 2007, Chaukhambha Sanskrit Sansthan, Varanasi – 221001, pp – 37.
18. Datta Chakrapani, Charaka Samhita Of Charaka with Ayurvedadipika commentary, Sutrasthana, shloka no.20/14, Reprint, 2006, Rastriya Sanskrit Sansthana, New Delhi – 110058, pp – 114.
19. Shastri Sudarshan - Madhavanidan of Madhavakara with Madhukosa Vidyotini Vimarsha of Vijayarakshit, Arochaka nidanam, shloka no. 14/4, Chaukhambha Sanskrit Sansthan, Varanasi – 221001, pp-345.
20. Shastri Sudarshan - Madhavanidan of Madhavakara with Madhukosa Vidyotini Vimarsha, Amlapitta nidana, shloka no. 51/1, Chaukhambha Sanskrit Sansthan, Varanasi – 221001.
21. Kunte Anna Moreswara et al., Astanga Hridaya of Vagbhata with commentaries of Arundatta & Hemadri, Sutrasthana, shloka no. 9/20, Chaukhambha Orientalia, 9th edition, 2005, Varanasi – 221001, pp-169
22. Shastri Ambikadutta, Sushruta Samhita of Maharsi Sushruta with Ayurveda Tattva Sandipika Hindi commentary, Sutrasthana, shloka no. 46/527, Reprint, 2007, Chaukhambha Sanskrit Sansthan, Varanasi – 221001, pp – 224.
23. Datta Chakrapani, Charaka Samhita Of Charaka with Ayurvedadipika commentary, Vimanasthana, shloka no.5/8, Reprint, 2006, Rastriya Sanskrit Sansthana, New Delhi – 110058, pp – 250-251.
24. Datta Chakrapani, Charaka Samhita Of Charaka with Ayurvedadipika commentary, Chikitsasthana, shloka no.28/8, Reprint, 2006, Rastriya Sanskrit Sansthana, New Delhi – 110058, pp – 616.
25. Datta Chakrapani, Charaka Samhita Of Charaka with Ayurvedadipika commentary, Chikitsasthana, shloka no.28/6, Reprint, 2006, Rastriya Sanskrit Sansthana, New Delhi – 110058, pp – 616.
26. Datta Chakrapani, Charaka Samhita Of Charaka with Ayurvedadipika commentary, Chikitsasthana, shloka no.28/10, Reprint, 2006, Rastriya Sanskrit Sansthana, New Delhi – 110058, pp – 616.
27. Kunte Anna Moreswara et al., Astanga Hridaya of Vagbhata with commentaries of Arundatta & Hemadri, Sutrasthana, shloka no. 12/16, Chaukhambha Orientalia, 9th edition, 2005, Varanasi – 221001, pp-194
28. Kunte Anna Moreswara et al., Astanga Hridaya of Vagbhata with commentaries of Arundatta & Hemadri, Sutrasthana, shloka no. 12/17, Chaukhambha Orientalia, 9th edition, 2005, Varanasi – 221001, pp-195
29. The Times Of India, Ahmedabad, dated 29th May, Saturday, 2010.
30. Kunte Anna Moreswara et al., Astanga Hridaya of Vagbhata with commentaries of Arundatta & Hemadri, Sutrasthana, shloka no. 14/5, Chaukhambha Orientalia, 9th edition, 2005, Varanasi – 221001, pp-223
31. Kunte Anna Moreswara et al., Astanga Hridaya of Vagbhata with commentaries of Arundatta & Hemadri, Sutrasthana, shloka no. 14/6, Chaukhambha Orientalia, 9th edition, 2005, Varanasi – 221001, pp-223
32. Baghel M.S - Research In Ayurveda, Mridhu publications, Jamnagar, 2005.
33. Dwivedi G.P. - Amlapitta Vimarsha, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 1964.
34. Pilapitiya Upali - Samshodhana And Samshamana Chikitsa In Amlapitta, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 1969.
35. Tiwari Shanti S - The Role Of Pugakhanda In The Management Of Amlapitta And Its Shula, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 1993.
36. Jogad Gautam - Clinical study on the role of Virechana and Bhunimbadi Vati in the management of Urdhvaga Amlapitta, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 2004.
37. Kumar Jitendra - A Comparative Clinical Study Of Amlapitta And Its Management With Shatpatrayadi Churna Tablet & Patolyadi Yoga, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 2009.
38. Pilapitiya Upali - A Study Of Amlapitta And Its Management, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 1981.
39. Tiwari Shanti - A Comparative Study On The Role Of Puga And Medhya Rasayana In The Management Of Amlapitta, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 2000.
40. Nayak Utkalinini - Etio-pathological classification of Amlapitta on its doshik predominance and their management, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 2006.
41. Srikrishna CH - Etiopathological Study Of Amlapitta And Its Management With Chinnodbhavadi Yoga Ghana Vati, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 2008.
42. Sandhibigraha Gayatri - A Pharmaco-Therapeutical Study On Guduci Sattva With Special Reference To Amlapitta, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 1997.
43. Thakkar Rajesh M - A Pharmaco-Clinical Study Of Satavari In The Management Of Amlapitta, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 1999.
44. Sahu Subhas - A Phyto-chemical and Pharmacotherapeutic Study of Patola (*Trichosanthes dioica*, Roxb.) in the management of Amlapitta, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 2004.
45. Rajashekhar N - A Comparative Pharmaco-Therapeutic study of *Tugaksheeree* [*Curcuma angustifolia* Roxb. (Fam. Zingiberaceae) and *Maranta arundinacea* Linn. (Fam. Marantaceae)] w. s. r. to *Amlapitta*, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 2009.
46. Ali Momin - Kapardi Tatha Shukti Bhasma Evam Inki Amlapitta Me Tulanmaka Karyakshamata, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 1970.
47. M. Anand Ram - Lokanatha Rasa And Its Actions On Amlapitta And Swasaroga, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 1970.
48. Sharma P.P - Sutasekhara Rasa Ka Amlapitta Par Adhyana, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 1971.
49. Kesavadas. R - A Study Of The Effects Of Swarna Makshika Bhasma With A Special Reference To Amlapitta & Pandu, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 1974.
50. Joshi. J. Chetana - Pravalapishiti Evam Pravalabhasma Ka Amlapitta Me Tulanmaka Adhyana, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 1989.
51. Das Arun Kumar - A Comparative Pharmaco-Clinical Study Of Suktibhasma And Suktipisti On Amlapitta, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 1997.
52. Gunavant K. Valani - A Comparative Pharmaco-Clinical Study Of Pippali Churna & Pippali ghrita On Amlapitta, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 1998.
53. Tank Zankhana G - A Pharmaco-Clinical Study Of Shankhabhasma Alone And Shankhabhasma Along With Amalaki churna In The Management Of Amlapitta, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 2000.
54. Bhatt Apoorva M - A Comparative Pharmaceutico-Clinical Study Of Pravala Pishiti & Pravala Bhasma In Special Reference Of Hyperacidity, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 2003.
55. Tiwari Himansu S - A Comparative Pharmaceutico-Clinical Study Of Pravalamula Bhasma & Pravalashakha Bhasma W.S.R To Amlapitta, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 2004.
56. Kalasaria Bharat D - A comparative Pharmaceutico-Pharmacoclinical study of Amalaki Rasayana prepared with freeze dried and ordinary Amalaki w.s.r. to Amlapittahara effect, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 2005.
57. Beragi Pramod C - A Pharmaceutical standardization of Narikelkhand and Narikelkhand granules, its efficacy on Amlapitta, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 2008.
59. Parmar Kirtikumar G - A Comparative Pharmaceutical And Clinical Study Of Jala Shukti Bhasma And Mukta Shukti Bhasma W.S.R. To Its Amlapittahara Effect, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 2010.
60. Pandya Narahari D - Amlapitta - Eka Adhyana, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar, 1968.

61. Nair C. N. Balakrishnan - A Study Of Amlapitta In Relation To The Ten Point Investigatory Formula, I.P.G.T. & R.A, Gujarat Ayurveda University, Jamnagar, 1973.
62. Makani Jayanta M - Amlapitta Par Apamarga Bija Kshirapaka Ki Kriya – Ek Prayogatmaka Adhyayana, I.P.G.T.& R.A, Gujarat Ayurveda University, Jamnagar,1975.
63. Raval Upendra D - A Study Of Sama-Nirama Pitta With A Special Reference To Amlapitta, I.P.G.T. & R.A, Gujarat Ayurveda University, Jamnagar, 1977.
64. Jha Harinath - A Study Of Amlapitta With A Special Reference To Psychological Manifestation, I.P.G.T. & R.A, Gujarat Ayurveda University, Jamnagar, 1986.
65. Rana Santilal G - A Study On The Principle Of Sariram Hi Api Satvam Ca Sariram With Special Reference To Amlapitta, I.P.G.T. & R.A, Gujarat Ayurveda University, Jamnagar, 1992.
66. Dodia Arsi M - Annavaahasrotas Ki Vikriti Evam Amlapitta Vyadhi Me Pitta Evam Agni Ki Sthiti, I.P.G.T. & R.A, Gujarat Ayurveda University, Jamnagar, 1998.
67. Singh Vikram A - A Conceptual Study Of Pathya & Its Clinical Application In The Management Of Amlapitta, I.P.G.T. & R.A, Gujarat Ayurveda University, Jamnagar, 1999.
68. Iyer Srividya H - Concept Of Bhaishyajakala And Its Applicability In Relation To Agni W.S.R. To Amlapitta, I.P.G.T. & R.A, Gujarat Ayurveda University, Jamnagar, 2003.
69. Kaka Vrinda N - An Applied Concept Of Amapitta & Samapitta w.s.r. To Amlapitta, I.P.G.T. & R.A, Gujarat Ayurveda University, Jamnagar, 2006.
70. Kunte Anna Moreswara et al., Astanga Hridaya of Vagbhata with commentaries of Arundatta & Hemadri, Sutrasthana, shloka no. 14/7, 9th edition, 2005, Chaukhambha Orientalia, Varanasi – 221001, pp-223.
71. Shastri Ambikadutta, Sushruta Samhita of Maharsi Sushruta with Ayurveda Tattva Sandipika Hindi commentary, Sutrasthana, shloka no. 42/10, Reprint, 2007, Chaukhambha Sanskrit Sansthan, Varanasi – 221001, pp – 154.
72. Shastri Ambikadutta, Sushruta Samhita of Maharsi Sushruta with Ayurveda Tattva Sandipika Hindi commentary, Sutrasthana, shloka no. 46/524, Reprint, 2007, Chaukhambha Sanskrit Sansthan, Varanasi – 221001, pp – 56.
73. Datta Chakrapani, Charaka Samhita Of Charaka with Ayurvedadipika commentary, Vimanasthana, shloka no.1/6, Reprint, 2006, Rastriya Sanskrit Sansthana, New Delhi – 110058, pp – 231.
74. Shastri Ambikadutta, Sushruta Samhita of Maharsi Sushruta with Ayurveda Tattva Sandipika Hindi commentary, Sutrasthana, shloka no. 42/15, Reprint, 2007, Chaukhambha Sanskrit Sansthan, Varanasi – 221001, pp – 155.