ABSTRACT

In today’s era Amlapitta is a common disease found mostly in middle aged persons due to faulty dietary habits and changing lifestyle. It hampers the daily routine activities due to its symptoms like heart burn, abdominal pain, loss of appetite, nausea and vomiting. Amlapitta is caused by the increased Drava guna and Amlaguna of Pachaka Pitta. It affects the Annavaha, Rasavaha, Raktavaha, Purishvahasrotasa. Due to increasing incidence of the disease, scholars of different medical field are working to develop various means and measures to overcome this burning problem. In allopathic system of medicine Amlapitta cannot be correlated with any specific disease, but its symptoms are found in many disorders such as gastric ulcer, duodenal ulcer, gastroesophageal reflux disease and gastritis commonly named as acid peptic disorder. Acid peptic disorder results from an imbalance between aggressive factors (gastric acid, pepsin) and protective factors (gastric mucus, bicarbonate and prostaglandins). Antacids neutralize acid which is the first line of immunity and thus make the person more prone to various infections. While Ayurvedic approach is Agni vridhdi and Aampachana by various means. So, the present study is aimed at finding effective treatment of Amlapitta (gastroesophageal reflux disease). For the present clinical study 20 patients of Amlapitta were registered from the O.P.D., P.G. Department of Kayachikitsa, Rishikul Campus Haridwar. Phalatrikaadi Kwath was selected for managing the patients of Amlapitta.

KEYWORDS

Amlapitta, Mandagni, Gastroesophageal Reflux disease, Phalatrikaadi Kwatha
INTRODUCTION

Since long time, infectious (communicable) diseases were the biggest killer diseases globally. But now, the trend is changing towards increased prevalence of chronic diseases with causative factors mostly related to diet and lifestyle. Ayurveda is as old as human civilization, it is based on two principles maintaining healthy state of the human body and curing the disease. Most of the Vikara are deeply rooted in faulty habits like improper dietary habits, stress, anger, spicy irritant food, oily foods, etc. and Amlapitta is one of them.

Amlapitta is not considered as a separate disease in Bruhatatrai but is mentioned as a symptom in number of diseases by Acharya Charaka. Acharya Kashyapa was the first to give a detailed description of the disease. It is also the first text which has counted the Manasika Bhavas (Psychological factors) as a chief cause of the disease and analyse the disease on the basis of Doshika predominance. Kashyapa believed that the disease is caused by vitiation of Tridoshas leading to Mandagni and Amlapitta. He describes it as “Bhishakamohakara” as clinical pictures of many diseases like Vidagdhajirna, Parinamshoola, Annadравashoola, Pittajashoola, Pittaja Grahani are overlapping with Amlapitta so it is very difficult to diagnose it and differentiate it. Whereas Acharya Madhavakara has described the disease in detail and classified it on the basis of Gati i.e., Urdhvaga Amlapitta and Adhoga Amlapitta.

According to Acharya charak Amlapitta develops when Aamvisha, get mixed with Pitta. In Ayurvedic text Mandagni is the main cause of all the Roga including Amlapitta. In allopathic system of medicine Amlapitta cannot be correlated with any specific disease, but its symptoms are found in many disorders such as gastric ulcer, duodenal ulcer, gastroesophageal reflux disease and gastritis commonly named as acid peptic disorder. Acid peptic disorder results from an imbalance between aggressive factors (gastric acid, pepsin) and protective factors (gastric mucus, bicarbonate and prostaglandins). Major causes are H. pylori infection, NSAIDS, psychosocial factors etc. According to NDDIC (National digestive Disease Information clearing house), the prevalence rate of gastritis is 10 million and that of peptic ulcer is 5 million (1987) in India. The frequency of both duodenal and gastric ulcer showed a decline from 1998 to 2008 i.e., from 12% to 2.9% and 4.5 to 2.7%. Antacids are among the one of the most widely used
medicine all over the world. Food and drug Administration (FAD) warned that there is increased risk of fractures with the use of Proton Pump Inhibitor. By taking antacids the person neutralizes acid which is the first line of immunity and becomes more prone to various infections. While in Ayurveda we concentrate more on Agni vraddhi and AamPacha by various means. So there is an open field for Ayurvedic scholars. The drug selected under the study is Phalatrikaadi Kwatha described in Chakradutta. Phalatrikaadi Kwatha contains Triphla, Patol, Kutki and Yashti Madhu. Most of the contents have Virechan property. Yashtimadhu has Madhur Rasa, Madur Vipaka and SheetaVirya which act against the excessive Drava, Tikshna and Ushna Guna of Pitta.

AIMS & OBJECTIVES
1) To study the aetiopathogenesis of Amlapitta.
2) To evaluate the efficacy of Phalatrikaadi Kwatha in the management of Amlapitta.
3) To study the probable mode of action of Phalatrikaadi Kwatha in Amlapitta

MATERIALS AND METHODS
The study comprised of 20 patients of Amlapitta. The patients were selected from OPD and IPD of Rishikul campus, Haridwar.

Ethical Committee Approval Number- UAU/R/C/IEC/2016-17/2

Selection of Sample: -Randomized Sampling

Type of Study: Single Blind

Duration of Study: 45 days

Selection of Drug:

Phalatrikaadi Kwatha
1. Dose: 40 ml
2. Time of administration: two times (during morning and evening)
3. Duration of therapy: 45 days
4. Patients were guided regarding Pathya/Apathya regimen.

Assessment & Follow Up
Periodic assessment of the signs and symptoms was done at interval of 15 days for 45 days. A follow-up was done after 15 days to check the recurrence if any, after withdrawing the therapy.

INCLUSION CRITERIA-
2. Age 20-60 years.
3. GERD without any metabolic complication.

**EXCLUSION CRITERIA**-

1. Age group < 20 years and more than 60 years
2. Known case of Gastric and Duodenal ulcer
3. Known case of Gastric carcinoma
4. Chronic gastritis (more than 1 year)
5. Any other chronic illness.

**Criteria for Assessment:** Subjective parameters were employed for assessment of the impact of the treatment. Following sign and symptoms of *Amlapitta* were looked into for assessment:

- *Avipaka*
- *Klama*
- *Utklesha*
- *Tiktaudgara*
- *Amlaudgara*
- *Gaurav*
- *Urahadaha*
- *Kanthadaha*
- *Aruchi*
- *Aadhmaan*

- *Shiroruka*

The above symptoms were graded as below:

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>0</td>
</tr>
<tr>
<td>Mild</td>
<td>1</td>
</tr>
<tr>
<td>Moderate</td>
<td>2</td>
</tr>
<tr>
<td>Moderate to Severe</td>
<td>3</td>
</tr>
<tr>
<td>Severe</td>
<td>4</td>
</tr>
</tbody>
</table>

**INVESTIGATIONS**

I. Routine haematological, urine examination carried out to rule out any other pathology.

II. USG (if required).

III. Barium meal test (if needed).

**STATISTICAL ANALYSIS**

- Wilcoxon Signed Rank Test was applied on the subjective parameters.
- The obtained results were interpreted as:
  
  P> 0.05 Not Significant
  P< 0.01 &<0.05 significant
  P< 0.001 highly significant

**RESULTS AND DISCUSSION**

**Discussion on Disease:**

*Amlapitta* is a disease of *Pitta* dominancy but in vitiated condition. According to *Kashyapa Samhita* and other classics this vitiation could happen by four main groups of reasons (*Aharaja, Viharaja, Manasika, Agntuka*). Subsequently after increase in *Drava Guṇa* of *Pitta* formation of *Amla Rasa Pradhana Ama* takes place. Two more additional *Pitta*-vitiating factors i.e. *Anupa Desha* (*Ka.Ki. 16/22*) and the *Varsa Ritu* has specifically observed and mentioned by
Kahsyapa and Srikanthadatta respectively. Kashyapa has mentioned such etiological factors of Amlapitta, which are Kapha Prakopa (Pitta Prakopa along with Kapha).

**Table 1** Efficacy Study of Phalatrikaadi Kwatha

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Median</th>
<th>Wilcoxon Signed Rank W</th>
<th>P-Value</th>
<th>% Effect</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>BT</td>
<td>AT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVIPAKA</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-2.428a</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>AMALAUDGARA</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-1.633a</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>KANTHA DAHA</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>-3.066a</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>GAURAV</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>-3.002a</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>UTKLESHA</td>
<td>2</td>
<td>0.5</td>
<td>0</td>
<td>-2.739a</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>KLAMA</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>-3.700a</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>ARUCHI</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>-3.601a</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>URAH DAHA</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>-3.397a</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>TIKTAUDGARA</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-1.633a</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>SHIRO RUKA</td>
<td>2</td>
<td>0.5</td>
<td>0</td>
<td>-2.877a</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>AADHMAAN</td>
<td>0.5</td>
<td>0</td>
<td>0</td>
<td>-2.598a</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>

Sharangadhara recognized that in the case of lust (Kama) and anger (Krodha), pulse - a somatic factor, is rapid and in case of anxiety and fear it is weak (Sarangadhara Samhita 1:3:9). This proves the effect of Manasik Bhavas on our body activities. Psychological factors like Kama, Krodha, Shoka etc, leads to Agnidusti. Dusti of Mana or Agni leads to Indigestion (Su.Su. 46/50).

In Amlapitta, Agni will be diminished due to the Nidana Sevana. The food which is not properly digested becomes Vidagdha and produces Shuktapaka which is having increased Amla Guna in the stomach. If one has no control on eating due to greed vitiated Pitta Dosha finally produces Amlapitta.

**Discussion On Observations & Results (Table 1)**: Statistically highly significant results were found in 2 symptoms – Amlaudgara & Urahadaha (p<0.001).

- Statistically significant results were found in 7 symptoms viz. Avipaka, Kanthadaha, Gaurav, Utklesha, Klama, Shiroruka and Aadhmaan.
- **Statistically non significant** results were found in only 2 symptoms Aruchi and Tiktaudgara.
- Percentage wise maximum effect was found on KanthaDaha (68%), Shiroruka (56%) and Tiktaudgara (55.6%) followed by Avipaka (52.9%), Adhmana (52.4%), Shiroruka (52.4%), Aruchi (52.1%), Urahadaha (51.3%), Utklesha (50%), Klama (48.8%) and Amlodgara (40%).

**Discussion on Probable mode of action of Phalatrikaadi kwatha:**
Most of the contents of Phalatrikaadi Kwatha have Tikta, Kashaya and Madhura Rasa. Madhura, Tikta and Kashaya Rasa are Pitta Shamaka. Tikta Rasa and Kashya Rasa also pacifies Kapha Dosha.

In this drug, 4 ingredients have Tikta Rasa. According to Charaka Samhita, Tikta Rasa is having properties like Krimighna, Dahanashak, Agnidipana and Pitta Slesha Upasoshana.

Yashtimadhu present in it has Madhur Rasa. Madhura Rasa counteract the Tikshna Guna of Vitiated Pitta. It also promotes strength, pacify Pitta and Vata Dosha and useful in Daha. Moreover, Yashtimadhu has Madhur Vipaka, and Sheeta Virya which act against the excessive Drava, Tikshna and Ushna Guna of Pitta.

Yashtimadhu and Patola relieve the symptoms like Amlodgara, Tiktodgara, and Urahadafa because of their Madhura Rasa and Tikta Rasa respectively.

Triphala, because of its mild Virechaka property, eliminates the vitiating Pitta from the body.

Vatanulomana property of Haritaki and Amalaki helps in expelling the excessive Vidgdha Pitta from the body.

Kutaki has Pittarechak property which also help to eliminate vitiating Pitta from body.

In pathogenesis of Amlapitta, Mandagni leads to Ama formation. Haritaki also has Agnideepan property. According to Aacharya Sharangdhara it is the best medicine for Amapachana and alleviates the Srotorodhaby Ushna, Tikshana Guna.

Yashtimadhu and Patola relieve the symptoms like Amlodgara, Tiktodgara, and Urahadafa because of their Madhura Rasa and Tikta Rasa respectively.

From the above discussion, we can conclude that Phalatrikaadi Kwatha effectively carries out Samprapati Vighatana of Amlapitta.

CONCLUSION

“Conclusions” drawn from present work are as follows:

Amlapitta is a Pitta Pradhan Vyadhi which has clinical features similar to GERD.

Out of 11 subjective parameters Phalatrikaadi Kwatha has shown significant results in 9 parameters.
As discussed above due to the properties of contents of *Phaltrikadi kwatha* it was found to be effective in controlling symptoms of *Amlapitta*. 
REFERENCES

1. Pt. Hemraj Sharma, Vidyotini Hindi commentary, Kashyapa Samhita, Chaukhamba Sanskrit Sansthan, Varanasi (2009), Kash. khi.16/6, pg.no.335.


