**CASE STUDY**

**Yasthimadhu Ksheerapamaka in Gastro-Esophageal Reflux Disease**

Rajeshwari P N1*, Rabinarayan Tripathy2, Revana Siddesh3, Shijo Y J4 and Amrita M. Nandakumar5

1,4Dept of Shalya Tantra (General Surgery), Amrita School of Ayurveda, Amritapuri, Amrita Vishwavidyapeetham, India

**ABSTRACT**

Gastro – esophageal reflux disease (GERD) is a condition in which stomach acid or bile irritates the esophageal lining. Acid reflux can give rise to irritation and inflammation of lower end of esophagus. Stomach acids travel upwards causing an unpleasant burning sensation and it is referred to hyperacidity or heartburn.

The nervous system and endocrine system work together to improve gastric secretion and motility. Its balance is maintained when food is eaten, and secretion is suppressed when stomach empties. The stages of HCL secretion has cephalic phase, gastric phase and intestinal phase. Fasting, overeating while having indigestion, practicing irregular eating habits, stress full work, overnight awaking cause increased acid secretion.

Ayurveda references say *Yastimadhu Ksheerapaka* is a good remedy for hyperacidity and it is successfully used in curing many stomach ailments. *Yastimadhu Ksheerapaka* with its properties like madhura, rasaandvipaka, seta, snigdhagurugunas will shield the excess acid secretion and balance it. This occurs due to the antagonistic action of yashtimadhuksheerapaka on hyperacidity/GERD. The present case report deals with brief discussion on action *Yastimadhu Ksheerapaka* and its importance in the management of Hyperacidity.

**KEYWORDS**

Hyperacidity, GERD, Yastimadhu Ksheerapaka
INTRODUCTION

BACKGROUND:

Hyperacidity is the condition where in there is excess amount of secretion of gastric juices in the stomach than the normal. It can be a result of inappropriate dietary regimen or stress. Untreated cases result in peptic ulcer and other complications.

Tissues associated with the stomach produce digestive enzymes and hydrochloric acid. Parietal cells, secrete HCl which can have a pH as low as 1.5. The HCl helps to chemically break down the food in the stomach. The digestive enzymes have evolved a molecular structure that functions well in a very acid environment. The cells lining the stomach and associated ducts are coated with a protective mucus.

Amlapitta, is a common disease, in the present scenario of unhealthy diets & regimens. The stomach and its functions are predominantly monitored by Pachaka Pitta, Kledaka Kapha and Samana Vayu. When the mentioned sub-types of Doshas are in equilibrium the activities related to digestion take place in an uninterrupted way.

In established stages excess Pitta destroy the mucosal lining and muscular coat of stomach causing Gastric erosions and ulcers (AnnadravaShoola and ParinamaShoola). This condition is a painful one, the pain is associated with nausea, sour belching, heartburn, vomiting and many other symptoms.

CASE PRESENTATION

CASE 1

Patient aged 19 yr/F came to OPD complaining of severe pain in abdomen pain, heart burn, anorexia since past 1 year, with sour belching and dysphagia.

H/o, Lack of sleep from 5 months due to exams and untimely food intake

O/E, Epigastric tenderness ++

CASE 2

Patient aged 55 yr/M came to OPD complaining of severe pain in abdomen, heart burn, anorexia, belching, nausea and back pain since 8 months.

Patient gives the history of stress full work, night duty shifts, and not having food in proper time.

O/E, Epigastric tenderness ++, nausea ++

CASE 3

Patient aged 26 yr/M came to OPD with severe colic pain, anorexia, and nausea since from 6 months, sore belching and Dysphagia.

He has the history of stressful work since 8 months and not having food in time, allopathic medicines were taken for hisame complaint but no relief was observed.
O/E, Tenderness all over the abdomen is present
Above mentioned cases have symptoms like anorexia, nausea, epigastric tenderness, tenderness all over the abdomen.

**In all the above discussed cases the endoscopic report impression was**
1. Pan gastritis.
2. Erosive gastritis.

**TREATMENT**
As per the references we got from research articles Yashtimadhu with Ksheera is effective in controlling the symptoms of GERD which was caused by physical and psychological parameters.\(^1\) So the trial was done to assess the efficacy of *Yastimadhu Ksheerapaka* in the patients with the above symptoms of hyperacidity.

i. **METHOD OF PREPARATION OF KSHEERAPAKA:**
   ✓ Here the quantity of Ksheerapaka to be prepared, will be enough for single dose consumption.
   ✓ Coarse powder of *Glycyrrhiza glabra* root is taken in the quantity of 3g in a vessel.
   ✓ To this, milk is added in a quantity of 25 ml or approximately 8 times the quantity of Yashtimadhuchurna (powder).
   ✓ Water is added about 100 ml i.e. nearly 32 times of quantity of powder
   ✓ The contents are heated until only milk remains.
   ✓ This procedure allows the medicinal qualities of Yashtimadhu to get downed into the milk. Processing of Yastimadhu in milk enhances the palatability and bioavailability of active principles. The filtrate is consumed in lukewarm status. The resultant is known as Yashtimadhu Ksheerapaka.

ii. **DOSE:**
   ✓ 30 ml.
   ✓ The combination was given before food in morning and evening for a period of 3 weeks

**OUTCOME AND FOLLOW-UP**
✓ After three weeks of treatment, all the patients were advised to follow the diet regimen to prevent the reoccurrence of signs and symptoms
✓ Total symptoms were reduced without any complication in a review of 3 months

<table>
<thead>
<tr>
<th>Case I</th>
<th>After 3 weeks of treatment there was reduction in pain, dysphagia, clear belching and patient can have food without any epigastric discomfort.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case II</td>
<td>After 3 weeks of treatment back pain, heart burn, belching, vomiting was reduced.</td>
</tr>
<tr>
<td>Case III</td>
<td>After 3 weeks of treatment mild pain, belching reduced, no fullness in abdomen, comfortable after intake of food.</td>
</tr>
</tbody>
</table>

**DISCUSSION**
In the present case report commonly practiced and the underexplored formulation Ksheerapaka– Milk extracts was used. Ksheera i.e. Milk is widely used from ancient days as a food and as a base of medicament. It has a high nutritive and medicinal value, because of its components like proteins, lipids, fatty acids, vitamin, enzymes and minerals which are easily acceptable by healthy individuals as well as patients. Qualities of milk have been potentially used as a medicine by merging it with different herbs as in the case of Ksheerpaka. Physical properties of milk validate this concept. It has been studied that on gradual increase in the temperature of milk, solubility of fats and proteins also surges, which may enhance the extraction of the medicinally important active ingredients Ayurvedic community uses Ksheerapaka when nourishment is also expected along with medication. It is suggested that more free radical scavenging potential is found in Kasheerapaka by supporting traditional belief and on the other hand some studies have strongly put other judgement. Milk is considered as Nitya-Rasayana (Rejuvenator that is consumed daily) and Yashtimadhu (Glycyrrhiza glabra) is rich in antioxidant property which is used extensively used in Ayurveda, since the time of Charaka and Sushruta. Yashtimadhu Ksheerapaka is having properties like Madhura Rasa and Vipaka, Sheeta, Snigdha, Guru Gunas which will buffer the excess Pitta and balance it. It is due to the antagonistic action of Yashtimadhu Ksheerapaka on Pitta and Vata which play major role in the causation of Gastric ailments. Rasayana means, which is highly beneficial for all the tissues in the body, mind and senses, provides good health and immunity at a distance from healing and curing the diseases. Thus, Yashtimadhu Ksheerapaka provides an additional effect of Rasayana in dropping the symptoms of hyperacidity. Research studies have shown that the Glycyrrhizin in Yashtimadhu decreases swelling of the mucous membrane in inflammatory conditions. It thins down mucus secretions and enables healing of ulcers It is also beneficial in relieving H. Pylori infection.2

CONCLUSION

The use of natural substances as a source of medicines are practiced from generations. Herbs are being used for primary healthcare requirements and as nutritional supplements. The medicinal value of the plant is mainly due to the active principles and is generally used in the form of an extract where the active constituents are concentrated. This helps to reduce dose of
drug, potentiates action and enhances palatability. *Yastimadhu Ksheerapaka* was found to be a good remedy and ray of hope for GERD / Reflux esophagitis / Acid Reflux / Heartburn. It relieved pain in Mid-epigastric and Duodenal point Pain and tenderness experienced by the patients on ingestion of food and during the process of Digestion.
REFERENCES

1. A comparative clinical study to compare the efficacy of madhuyesti and amalakichoorna in amlapitta., pub. International research journal of pharmacy. DOI:10.7897/2230-8407.06343