



# Ayurvedic Management of Gastroesophageal Reflux Disease (*Urdhwag Amlapitta*) - A Case Report

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## Abstract

**Background:** In this busy life, people hardly find time for themselves, giving rise to a sedentary lifestyle, one of the leading causes of lifestyle disorders in which Gastroesophageal Reflux Disease (GERD) is also included. GERD is a very common disease found in society. It not only affects the mental but also the social life of a person. GERD causes retrosternal burning, sour eructation and anterior precordial chest pain (non-radiating) associated with constipation and anorexia. In *Ayurveda*, it is correlated with *Amlapitta*, which is one among the forty *Pitta Nanatamja Vikara*. In Modern science, there is no sure treatment that cures the patient completely but antacids and symptomatic treatment can give temporary relief. In such cases, Ayurvedic management proved to be the best as it cures the disease from the base. **Aim:** To discover the efficacy of *Ayurvedic* management in GERD and improve the patient's quality of life. **Methods:** It is a single case study of a 50-year-old male patient who presented with retrosternal burning, sour eructation, anterior precordial chest pain (non-radiating) associated with constipation and anorexia for 5 months. After thoroughly examining the patient, *Shamana Chikitsa* was started (*Laghu Sutashekhara Rasa, Avipattikarachurna, Kanchan Pittashamak Yoga, Abhayarishtha*). This treatment was given for one month. **Results:** The successful outcome of *Shamana Chikitsa* was found to be very effective with symptomatic assessment carried out after one week, fifteen days, and one month, respectively and the overall quality of life of the patient was significantly improved.

**Keywords:** *Amlapitta, Ayurveda, GERD, Sedentary Lifestyle*

## 1. Introduction

In this busy life, people hardly find time for themselves giving rise to a sedentary lifestyle which is one of the main causes of lifestyle disorders in which Gastroesophageal Reflux Disease (GERD) is also included. GERD has been described as the fifth most common disease found in the society<sup>1</sup>. It not only affects the mental life but also the social life of a person. GERD is defined as mucosal damage produced by the abnormal reflux of gastric contents into the oesophagus or the oral cavity due to disruption of the lower oesophageal sphincter which acts as a primary barrier to gastroesophageal reflux<sup>2</sup>. It causes retrosternal burning, sour eructation, and anterior precordial chest pain (non-radiating) associated with constipation and anorexia<sup>3</sup>. Ancient

*Ayurveda* classics explained the signs and symptoms of *Amlapitta*as, *Tikta Amla Udgara* (sour eructation), *Gaurava* (heaviness), *Hrudaya-Kantha Daha* (retrosternal and throat burning), *Aruchi* (anorexia) and *Vantya* (vomiting) which are also the symptoms of Gastroesophageal reflux disease<sup>4</sup>. Hence, in *Ayurveda* GERD is correlated with *Amlapitta* which is one among the forty *Pitta Nanatamja Vikara*. Causative factors for GERD are rotten food, *Amla-Lavana-Katu Rasatmak Ahara*, sedentary lifestyle, sitting for a longer duration, *Vegavarodha*, etc.,<sup>4</sup> which creates stress on the lower oesophageal sphincter leading to the formation of GERD.

Currently, in modern science, there is no appropriate treatment modality and the focus is mainly on the use of antacids, laxatives and supportive therapy

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to reduce the intensity of GERD symptoms. But soon after stopping the drugs, symptoms start. Then some interventions like upper GI endoscopy and if needed surgery are advised which are somehow painful physically as well as economically. But it has also some limitations and doesn't promise a permanent cure. But through *Ayurvedic* management, a permanent cure can be achieved both by *Shodhana Chikitsa* as well as *Shamana Chikitsa*. In this study, only *Shamana Chikitsa* is carried out.

Nowadays, the cases of GERD are increasing rapidly and becoming a threat to the population. Hence, there is a need to find a complication-free and effective treatment with full of efficacy. *Ayurvedic* management is the best in such cases as it cures the disease from the base. As a result, this case study aims to find a complication-free therapy and effective remedy by ayurvedic management thus giving scope for clinical practice and further research.

## 2. Patient Information

Table 1 shows the basic information of the patient. The patient was a 50-year male patient with, residence in Sai Nagar, Wardha. He was a teacher by profession and has been married for the last 23 years. He lived a comfortable life belonging to the upper middle class. His routine was fixed without much physical exertion.

### 2.1 Chief Complaints and its Duration

Table 2 shows the chief complaints of the patient with which he approached the hospital. The patient was complaining of retrosternal burning pain with on and off sour eructation for the last 5 months. He was also

**Table 1.** Demographic data of the patient

Sr. No.	Objectives	Result
1	Name	XYZ
2	Age	50 years
3	Sex	Male
4	Address	Sainagar, Wardha
5	OPD no.	2205220013
6	Occupation	Teacher
7	Marital Status	Married
8	Socioeconomic Status	Upper Middle Class
9	Allergy	Not known to him till now

having pericardial chest pain over the anterior side. The nature of pain was not radiating but on a specific site.

### 2.2 Associated Complaints and its Duration

Table 3 shows the associated complaints of the patient when he has the above-said complaints. The patient had frequent constipation and unsatisfactory bowels for the last 3 months and a lack of appetite for the last 1 month.

### 2.3 History of Present Illness

A 50-year-old male patient was well before 5 months. Gradually he started complaining about retrosternal burning, sour eructation, anterior precordial chest pain (non-radiating) for five months and constipation and anorexia for 3 months and 1 month respectively. The patient took allopathic treatment at various private hospitals at Wardha and somehow felt a reduction in symptoms only after taking medications but didn't get satisfactory relief. Hence, the patient came to Kayachikitsa OPD of Mahatma Gandhi Ayurved Hospital and Research Institute, Salod (Hi), Wardha for further management.

### 2.4 History of Past Illness

No H/o any systemic illness.

No H/o any surgical interventions.

### 2.5 Drug History

Table 4 shows the drugs that the patient was prescribed in the last 5 months which gave him temporary relief. He had taken Capsule Rabekind DSR in a dose of 20/30mg OD, Tablet Clonafit 0.25mg HS, Liquid Cremaffin Plus 15ml HS and

**Table 2.** Chief complaints and its duration

Sr. No.	Chief Complaints	Duration
1	Retrosternal Burning	5 months
2	Sour Eructation	5 months
3	Anterior Precordial Chest Pain (non-radiating)	5 months

**Table 3.** Associated complaints and its duration

Sr. No.	Associated Complaints	Duration
1	Constipation	3 months
2	Anorexia	1 month

Liquid Mac MPS 10ml BD. The above medicines were taken frequently by the patient but any slight gaps in taking the medicines caused the symptoms to be aggravated.

## 2.6 Personal History

**Food Habits:** Mixed diet, craving for spicy and oily food items.

**Sleep:** 5-6 hours, sound.

**Addiction:** Alcohol (once a week), coffee (once daily) and tobacco (3–4 times a day).

**Stool:** 2-3 times a day (unsatisfactory).

**Family History:** Not significant.

## 3. Examinations

### 3.1 General Examination

Table 5 shows basic information related to the patient's general examination. The patient had a blood pressure of 140/82mm Hg with a pulse rate of 78/min. Respiratory rate was 16/min with a body temperature of 98.7° F. The Patient did not have any signs of pallor, icterus clubbing and cynosis. No significant lymphadenopathy was noted in the patient. Overall, his BMI was 26.03 Kg/m<sup>2</sup>.

### 3.2 Systemic Examination in Ayurveda Ashtavidha Pariksha

Table 6 shows the *Asthavidha Pariksha* i.e General examination as per *Ayurveda* context. Patient Nadi was 78/min with *mandukgati*, *mala* was *malavastambha* and *jivha* was *sama*. Rest all 5 parameters i.e. *Mutra*, *Shabda*, *Sparsha*, *Drik* and *Akriti* were in the normal entity.

### 3.3 Systemic Examination

Table 7 gives detailed information about the systemic examination of the patient. During the cardiovascular

**Table 4.** Drug history

Sr. No.	Medicines	Dose	Duration
1	Capsule. Rabekind DSR	20/30mg OD	5 months
2	Tablet Clonafit	0.25mg HS	5 months
3	Liquid Cremaffin plus	15mlHS	3months
4	Liquid Mac MPS	10mlBD	2 months

examination, the patient showed normal heart rate with S1 and S2 clearly audible with adventitious sounds and murmurs present. The respiratory system showed bilateral air entry with no added sounds. The patient on Central Nervous System examination did not show any sign of neurological deficiency. Per abdomen examination was soft and non-tender. Systemic examination did not reveal any related complications.

### 3.4 Examination as per Ayurvedic Sciences - Dashavidha Pariksha

Table 8 shows detailed information related to Ayurvedic systemic examination which is termed as *Dashavidha Pariksha*. The patient was having *Pitta Pradhan - Kapha Prakruti* and *Dosha Vikruti* suggestive of *Pitta Pradhan Kapha. Satwa, Samhana, Pramana, Vyavyam Shakti* was *Madhyam*. Patient was *Rasa Majja Sara*.

**Table 5.** General examination

Sr. No.	Objectives	Parameters
1	BP	140/82mmHg
2	Pulse	78/min – Regular
3	Respiratory Rate	16/min – Regular
4	Temperature	98.7° F
5	Pallor	NAD
6	Icterus	NAD
7	Cyanosis	NAD
8	Clubbing	NAD
9	Lymphadenopathy	Not significant
10	Weight	82kg
11	Body Mass Index	26.03kg/m <sup>2</sup>

**Table 6.** Ashtavidha Pariksha

Sr. No.	Objectives	Parameters
1	Nadi	78/min – Regular
2	Mala	Malavashtambha
3	Mutra	Prakrut
4	Jivha	Sama
5	Shabda	Spashta
6	Sparsha	Anushna
7	Drika	Prakrut
8	Akriti	Madhyam

## 4. Pathophysiology (*Nidana Panchaka*)

### 4.1 Causative Factor, *Hetu*

Rotten food, *Amla*, *Lavana Katu Rasatmak Ahara*, sedentary lifestyle, sitting for a longer duration and *Vegavarodha*<sup>4</sup>.

### 4.2 Pre-symptoms, *Purvarupa*

Mild discomfort in the epigastric area, increased thirst, nausea, heaviness and fullness in the abdomen<sup>4</sup>.

### 4.3 Symptoms, *Rupa*

Retrosternal burning, sour Eructation, anterior precordial chest pain (non-radiating)<sup>4</sup>.

### 4.4 Previous Treatment for Temporary Relief, *Upashaya*

Rest in lateral position and after taking antacids and supportive medicines (Capsule Rabekind DSR20/30mg OD, Tablet Clonafit 0.25mg HS, Liquid Cremaffin plus15ml HS, Liquid Mac MPS10ml BD)<sup>4</sup>.

### 4.5 Pathogenesis (*Samprapti*)<sup>4</sup>

Figure 1 Shows pathogenesis i.e. *Samprapti* of disease. According to *Ayurveda*, the progression of the disease has steps by which the disease progresses systematically. Disease-causing factors go on increasing which leads to vitiation of *Vata* and *Pitta* doshas causing *Agnimandya*. This *agnimandya* leads to *Ama Dushti* and leads to the production of *Ajeerna* and causes *Amlapitta*.

## 5. Investigations

Electrocardiogram (ECG): Normal Sinus Rhythm, No ST-T changes.

Complete Blood Count (CBC): Within normal limits.

Liver Function Test (LFT): Within normal limits.

**Table 7.** Systemic examination

Sr. No.	Objectives	Parameters
1	CVS	S1 S2 Normal, No murmurs
2	RS	B/L air entry, No added sounds
3	CNS	No focal neurological deficit
4	P/A	Soft, Non-tender

## 6. Diagnosis

*Urdhwag Amlapitta* Gastroesophageal Reflux Disease (GERD)

## 7. Chikitsa Sutra

*Chikitsa sutra* of *Amlapitta* involves *Nidana Parivarjana*, *Anulomana*, *Deepana*, *Pachana*, *Snehana*, *Virechan*, and *Basti*. Out of this, *Nidana Parivarjana* along with *Shamana Chikitsa* was carried out for this patient<sup>4</sup>.

## 8. Pacifying Treatment (*Shamana Chikitsa*)

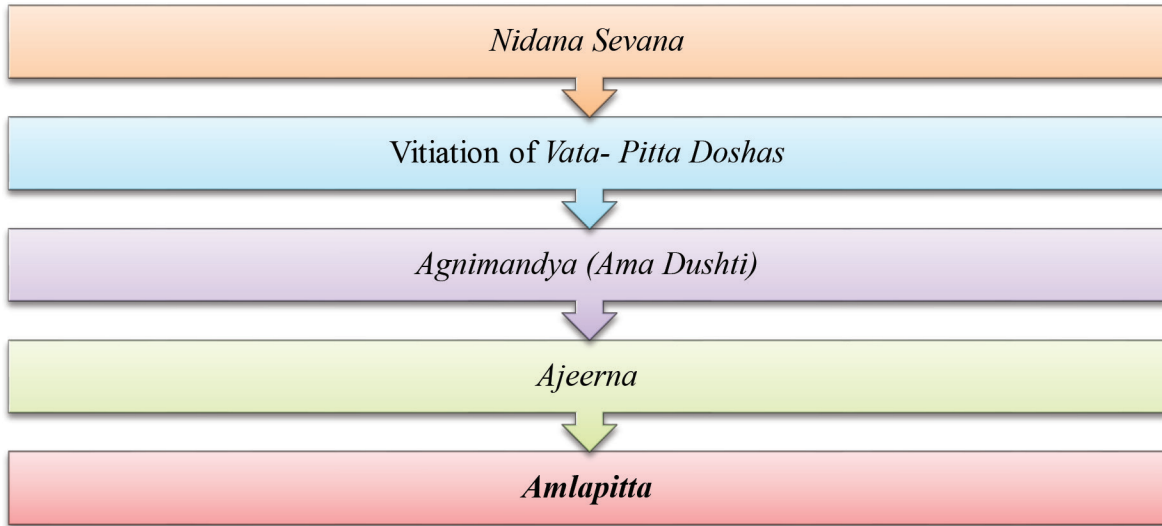
- *Laghu Sutashekhar Rasa* 250mg 1 tablet TDS with lukewarm water before food.
- *Avipattikara churna* 5gm HS with lukewarm water before food.
- *Kanchan Pittashamak Yoga* 250mg BD after meals with cow ghee (*goghrita*)
- *Abhayarishta* 30ml HS 1 hour after meals with lukewarm water.

## 9. Observations and Results

Table 9 shows observations and results in the current case study. Treatment given in this case study had a great impact on precordial chest pain in 15 days of treatment. The pain was completely relieved. The patient's retrosternal burning pain, sour eructation, constipation and anorexia were relieved on day 30.

**Table 8.** *Dashavidha Pariksha*

Sr. No.	Objectives	Result
1	<i>Prakriti</i>	<i>Pitta Pradhana-kapha</i>
2	<i>Vikruti</i>	<i>Dosha-pittapradhanakapha</i>
3	<i>Satwa</i>	<i>Madhyama</i>
4	<i>Sara</i>	<i>Rasa, Majja</i>
5	<i>Samhana</i>	<i>Madhyama</i>
6	<i>Pramana</i>	<i>Madhyama</i>
7	<i>Satmya</i>	<i>Sarva rasa</i>
8	<i>Aharshakti</i>	<i>Avara</i>
9	<i>Vyayamshakti</i>	<i>Madhyam</i>
10	<i>Vaya</i>	<i>Madhyam</i>



**Figure 1.** Pathogenesis (Samprapti).

**Table 9.** Observation and results

Sr. No.	Parameters	Symptoms Gradation Score			
		Day 1	Day 7	Day 15	Day 30
1	Retrosternal Burning	+++	++	+	0
2	Sour Eructation	+++	++	+	0
3	Anterior Precordial Chest Pain (non-radiating)	++	+	0	0
4	Constipation	++	++	+	0
5	Anorexia	+	0	0	0

## 10. Discussion

*Chikitsa Sutra* of GERD (*Amlapitta*) in *Ayurveda* classics involve *Nidana Parivarjana*, *Anulomana*, *Deepana*, *Pachana*, *Snehana*, *Virechan* and *Basti*. Out of this, *Nidana Parivarjana* along with *Shamana Chikitsa* was carried out for this patient. The various drugs used in this case study include *Rasa* (*Tikta*, *Madhur*, *Kashay*), *Vipaka* (*Madhur*), *Guna* (*Ruksha*, *Sheeta*, *Laghu*) *Deepana*, *Pachana*, *Srotoshodhana*, *Vatanulomana*, *Pittakaphahara*<sup>5</sup>. *Katu Rasa* has a predominance of *Vayu* and *Agni Deepana*<sup>5</sup>. *Yashtimadhu* a potent ayurvedic medicine acts as a *Pittashamaka*<sup>6</sup>.

*Laghusutshekhar Rasa* pacifies *Amlata* and *Tikshnata* which *Pittashamana* and *Agnideepana*<sup>7</sup>. *Gairika* has *Kashay-Madhur Rasa*, *Sheeta Virya*, *Madhur Vipaka*, *Snigdha Guna* predominance and thus have *Pittashamaka* property<sup>8</sup>. *Shankha Bhasma* has *Katu Rasa*, *Laghu- Ruksha Guna*, *Sheeta Virya*, *Madhur*

*Vipaka* predominance and thus reduces *Amlatva Guna*<sup>9</sup>. *Guduchi* has *Tikta* and *Kashaya Rasa* as well as *Madhura Vipaka* which helps to relieve the *Pitta dosha*<sup>10</sup>. *Avipattikarachurna* is being used for the management of *Amlapitta*. It has different ingredients viz.: *Pipali* (*Piper longum* Linn), *Maricha* (*Piper nigrum* Linn), *Shunthi* (*Zingiber officinale* Roxb), *Haritaki* (*Terminalia chebula* Retz), *Vibhitaki* (*Terminalia bellerica* Roxb), *Amalaki* (*Emblica officinalis* Gaerth), *Salt* (*Vida lavana*), *Mustha* (*Cyprus rotodus* Linn), *Ela* (*Elettoria cardomum* Maton), *Vidanga* (*Embiliaribes* Burmf), *Lavanga* (*Syzygium aromaticum* Linn), *Patra* (*Cinnamomum tamala* Nees and Eberm), *Trivit* (*Operculinatrpetum* Linn) and *Sharkara* (Sugar candy) which collectively have property of *Pitta shaman*<sup>11</sup>.

*Guduchi*, due to its *Tikta*, *Kashaya Rasa* and *Madhura Vipaka* which helps in alleviating the *Pitta dosha*, whereas *Shankha bhasma* helps in reducing the *Amlatvaguna* of vitiated *pitta*, which in turn reduces the related symptoms.

## 11. Conclusion

Currently, modern science mainly focuses on the use of antacids, laxatives and supportive therapy to reduce the intensity of GERD symptoms. But soon after stopping the drugs, symptoms start. Then some interventions like upper GI endoscopy and if needed surgery are advised which are somehow painful physically as well as economically. But surgery also has some limitations and doesn't promise a permanent cure. But through *Ayurvedic* management, a permanent cure can be achieved both by *Shodhana Chikitsa* as well as *Shamana Chikitsa*. In this study, only *Shamana Chikitsa* is carried out. The observation revealed that *Kanchan Pittashamak Yoga*, *Laghu Sutashekhar Rasa*, *Avipattikar Churna* and *Abhayarishtha* for one month gives significant relief in the management of *Amlapitta* (GERD). The patient was completely relieved from all the symptoms of GERD by *Shamana Chikitsa* with symptomatic assessment carried out after one week, fifteen days and one month respectively and the overall quality of life of the patient was significantly improved.

## 12. Patient Perspective

The patient was feeling more comfortable in his daily routine as the psychological stress due to frequent constipation and the stress of avoiding foods reduced considerably. The patient was also relieved from retrosternal burning pain and sour eructation which was his chief complaint. Improvement in his quality of life was seen after the treatment.

## 13. Consent

Written informed consent was taken by the patient in his local language with permission for publication of his medical case report.

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