

## Management of Dyspepsia W.S.R to Amajirna- A Case Study

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### ABSTRACT

*Amajirna* is a common clinical condition that has symptoms such as - *Yadhabhukta Avidagdha Udgara, Praseka, Utkleda, Gatra Gaurava, Akshikoota sotha*. As per classics, the treatment of *Amajirna* includes *Dipana* and *Pachana*. *Amajirna* has resemblance with dyspepsia. Dyspepsia or indigestion is a common gastro-intestinal disorder with symptoms like nausea, bloating, early satiety, post prandial fullness, abdominal discomfort etc. There are various causes for the occurrence of dyspepsia including micro-organisms. The present case report is of a 41 years old male with onset of symptoms such as nausea, bloating, abdominal discomfort, early satiety, *Yadhabhukta Avidagdha Udgara* (burping with the same taste of food consumed), *Praseka* (excess salivation) and *Utkleda* (nausea) since one or two weeks in every month for the last 6 months. He was taking antacids while coming to the OPD, and got temporary relief. Gradually, even after taking his normal diet, the symptoms started to re-occur and effect of his medications lasted for only a few weeks. The patient was given *Pathyadi Churna* with *Masthu* as *Anupana* for 7 days. It was observed after the completion of treatment that all the symptoms disappeared after 7 days. Also, no reoccurrence for the next 4 months. This shows the *Pathyadi Churna* with *Masthu* has a significant effect in relieving the symptoms of dyspepsia/*Amajirna*.

### KEYWORDS:

Dyspepsia, *Amajirna*, *Pathyadi Churna*, *Masthu*, Probiotic.

### INTRODUCTION

*Ajirna* is the Ayurvedic term indicated for indigestion<sup>[1]</sup>. *Ajirna* is generally classified into 6 via, *Ama, Vidagdha, Vishtabdha, Rasasesha, Dinapaki and Prakrutha*<sup>[2]</sup>. Among these 6, *Ama* is the most common type of indigestion which is caused by *Kapha Dosha*<sup>[3]</sup>. Due to *Nidana seva*, the increased *Kapha* diminishes the *Jadharagni* and cause *Amajirna*<sup>[4]</sup>.

Dyspepsia is a possible modern correlation for *Amajirna*. The term dyspepsia stands for bad digestion or improper digestion<sup>[5]</sup>. Dyspepsia is a clinical condition associated with a complex of upper abdominal symptoms including abdominal discomfort/pain, abdominal fullness, early satiety, bloating, belching and nausea<sup>[6]</sup>.

*Pathyadi Churna* is a classical herbo mineral preparation mentioned in both, *Chakradutta*<sup>[7]</sup> and *Bhaishajya Ratnavali*<sup>[8]</sup>. The ingredients of *Pathyadi Churna* are *Pathya (Terminalia chebula Retz.)*<sup>[9]</sup>, *Pippali (Piper longum L)*<sup>[10]</sup>, and *Souvarchala Lavana* (black salt)<sup>[11]</sup>. This medicine is advised to take either with *Ushna Jala* or *Masthu* (curd water)<sup>[12]</sup>. As per the text, this medicine is beneficial in 4 types of *Ajirna* via *Ama, Vidagdha, Vishtabdha* and *Rasasesha*<sup>[13]</sup>.

As *Amajirna* and dyspepsia are correlated, the present case was treated with *Pathyadi Churna* with *Masthu* as *Anupana* considering the probiotic effect of *Masthu* in dyspepsia<sup>[14]</sup>.

### Patient information

A 41 years old male patient working as shop keeper of Indian citizen approached *Kayachikitsa* OPD of Vishnu Ayurveda College, Shoranur, Palakkad dist, Kerala, India on November 16<sup>th</sup> of 2021 with symptoms nausea, bloating, early satiety, abdominal discomfort, *Yadhabhukta Avidagdha Udgara, Praseka* and *Utkleda*. For the last 3 years, patient has these symptoms lasting one or two weeks in every month and aggravated very much

since last 10 days. Symptoms get worse while he takes curd, sweets and oily food items. Taking light foods like *Kanji* reduced the symptoms for a short period. On physical examination, the patient was moderately built, anxious, pale and had coated tongue. The blood pressure was 134/78mmHg, pulse was 84bts/min, respiratory rate was 14 per minute. Body temperature was 98.6°F. On abdominal examination, no significant symptoms like tenderness were present. The patient had *Kapha- Pitta Prakruthi*. The patient had no history of any other major systemic diseases. The patient was non-alcoholic and non- smoker. There was no significant family history. When the patient came for consultation, he was taking Pan D capsules and Gelusin tablets in the last 10 days, but with not much relief (table 2). The differential diagnosis includes GERD, gastric ulcer and peptic ulcer. From Ayurvedic point of view, *Vidagdhajirna*, *Vishtabdh- ajirna* and *Urdhwaka Amlapitta* are included in the differential diagnosis (table 1).

Table 1: Differential Diagnosis of Dyspepsia and *Amajirna*

S.No.	Disease	Inclusion	Exclusion
1	GERD <sup>15</sup>	Regurgitation of food, abdominal discomfort, early satiety	No nausea. Chest pain and sensation of lumb in the throat present
2	Peptic ulcer <sup>16</sup>	Abdominal discomfort, loss of appetite	Pain relieved by food intake and increased pain between meals
3	Gastric ulcer <sup>17</sup>	Bloating, nausea, fullness of abdomen	Symptoms of gastric ulcer such as vomiting and pain in the abdomen are absent
4	Dyspepsia	Early satiety, abdominal discomfort, nausea and bloating	
5	<i>Vidagdhajirna</i> <sup>18</sup>	<i>Udgara</i> , <i>Aruchi</i> , no <i>Bhaktakamksha</i>	No <i>Praseka</i> , <i>Utkleda</i> and <i>Yadhabhukta Avidagdha Udgara</i>
6	<i>Vishtabdhajirna</i> <sup>19</sup>	<i>Adhmana</i> (distention), <i>Aruchi</i> , no <i>Bhaktakamksha</i>	No <i>Praseka</i> , <i>Utkleda</i> and the patient have <i>Vibandha</i>
7	<i>Urdhwaga</i> <sup>20</sup> <i>Amlapitta</i>	<i>Aruchi</i> , <i>Yadhabhukta Avidagdha Udgara</i>	Patient do not have symptoms like <i>Chardi</i> , <i>Daha</i> , <i>Sirashoola</i>
8	<i>Amajirna</i>	<i>Yadhabhukta Avidagdha, Udgara, Praseka, Utkleda</i>	

The patient had symptoms such as nausea, bloating, early satiety, abdominal discomfort, *Yadhabhukta Avidagdha Udgara*, *Praseka* and *Utkleda*. In view of similarity of symptoms and comparability established in previous published work the case was diagnosed as *Amajirna* (dyspepsia).

## Ayurvedic Management

The patient was assessed by *Dasavidha Pareeksha* and *Ashtasthana Pareeksha* before planning the Ayurvedic treatment. No conventional medicines were administered during this period. Advised and notified the patient about the importance of *Pathya* (diet) during the treatment. Patient's consent was collected before the starting the treatment. 5gm of *Pathyadi Churna* with 60ml of *Masthu* (curd water) was given to the patient 2 hours before the breakfast, on the 1<sup>st</sup> day of treatment. For around 2 hours, patient had *Yadhabhukta Avidagdha Udgara* and later, when the pure burping started, patient was given *Laja Peya*<sup>15</sup> with a pinch of *Saindhava Lavana*. Advised to take *Kanji* (rice gruel) for lunch and not to take any pickle and oily food items. Evening at around 6.30pm, 5gm of *Pathyadi Churna* with 60ml of *Masthu* was given to the patient. *Avidagdha Udgara* continued for around 2 hours. At around 8.30pm, he took rice and garlic *Rasam* for dinner. For the next 7 days, the medicine with its *Anupana*<sup>16]</sup> continued 2 hours before food twice a day via morning and evening 2 hour before food. A special diet chart was given for the first 3 days of treatment (table 3). After 7 days of medications, the patient examination was conducted to check any symptoms still persisting and also advised him about the do's and don'ts for the next 1 month.

## Outcome

The follow up of the patient through telephone was done for next 4 months. The effect of the treatment was assessed based on the subjective parameters and QoL scale<sup>[17]</sup>. After the treatment, the patient didn't report the reoccurrence of symptoms till 4 months. Overall condition of the patient was improved. The symptoms of *Amajirna* like *Yadhabhukta Avidagdha Udgara*, *Praseka* and *Utkleda*<sup>[18]</sup> were completely disappeared in 7 days of treatment along with the symptoms of dyspepsia<sup>[19]</sup> like early satiety and nausea. Abdominal discomfort and bloating were disappeared after 10 days of medications. The QOL (Quality of Life) changed from 10 to 100 in 7 days.

## DISCUSSION

Table 2: Course of the Disease

Date/ Year	Incidence
2019 May/June	Patient felt very much bloated after drinking soft drink in the afternoon and by night, he started feeling pain in the abdomen. Consulted doctor next day and took Pantoprazole tab and symptoms reduced gradually.
2019 December	Again, he started feeling bloated and abdominal discomfort after having Biriyani. He didn't consult doctor, but took Pantoprazole tab and symptoms temporarily relieved.
2020 August	Already he had mild bloated feeling, but he observed after eating non-vegetarian food, oily food and curd, the symptoms got worse. Then he consulted doctor and took LFT (19/08/20) and the results were normal.
2021 January	Continues bloating and discomfort in the abdomen. Whenever he takes sweets and oily food, the started getting <i>Utkleda</i> /Nausea, <i>Praseka</i> , <i>Yadhabhukta Avidagdha Udgara</i> . Then he reduced intake of sweets and oily food items. Other than bloating and discomfort, other symptoms gradually reduced. Didn't consult any doctor.
2021 June	After taking fish curry and rice, already persisting bloating and abdominal discomfort got worse. Also, the symptoms like Nausea, <i>Utkleda</i> , <i>Praseka</i> , <i>Yadhabhukta Avidagdha Udgara</i> , early satiety etc. started. Symptoms continued for more than 8 days and then he consulted doctor and LFT done on 13/06/2021 and the results were normal.
2021 November	Abdominal discomfort and bloating got very worse. Recurrent onset of other symptoms like Nausea, <i>Utkleda</i> , <i>Praseka</i> , <i>Yadhabhukta Avidagdha Udgara</i> , Early satiety etc. appeared. Then he consulted at <i>Kayachikitsa</i> OPD of Vishnu Ayurveda College on 16/11/2021. LFT taken and the results were normal. QoL scale showed the value 10 (scale is ranging from 0-100).

Table 3: Timeline of Ayurveda Management

Time/Date	Incidence	Intervention
Day 16/11/2021	1: Patient consulted at <i>Kayachikitsa</i> OPD of Vishnu Ayurveda College, Shoranur, Palakkad, Kerala. The symptoms like nausea, bloating, early satiety, abdominal discomfort, <i>Yadhabhukta Avidagdha Udgara</i> , <i>Praseka</i> and <i>Utkleda</i> were present at the time of visit. LFT taken. Bilirubin (Total)- 0.9mg/dl, Bilirubin (Direct)- 0.3mg/dl, Bilirubin (Indirect)-0.6mg/dl, SGOT- 37 IU/L, SGPT- 40 IU/L, Alkaline Phosphate- 64 IU/L, total protein- 7.0gm/dL, Albumin- 4.1gm/dL, Globulin- 2.9 gm/dL, A/G ratio- 1.4	5 gm <i>Pathyadi Churna</i> + 60ml of <i>Masthu</i> given at 11 am and advised to take <i>Laja Peya</i> for lunch. Evening at 6.30pm, 5gm of <i>Pathyadi Churna</i> + 60ml of <i>Masthu</i> taken. Dinner taken at 8.30pm. Only rice gruel without any pickle was taken. No tea and snacks were taken in the evening.
Day 17/11/2021	2: All symptoms still persist QoL= 15	5gm <i>Pathyadi Churna</i> + 60ml <i>Masthu</i> at 7am. Breakfast at 9.30am- <i>Laja Peya</i> + <i>Dadima</i> . Lunch- Rice + <i>Rasa</i> . 6pm- 5gm <i>Pathyadi Churna</i> + 60ml <i>Masthu</i> . Dinner at 8.30pm. 3 Idly.
Day 18/11/2021	3: Nausea, <i>Utkleda</i> and <i>Praseka</i> absent. Other symptoms like early satiety, Abdominal discomfort, bloating, <i>Yadhabhukta Avidagdha Udgara</i> present. QoL= 30.	5gm <i>Pathyadi Churna</i> + 60ml <i>Masthu</i> at 6.30am and 7pm Breakfast: Idly Lunch: Rice and <i>Rasa</i> Dinner: <i>Kanji</i> /Rice gruel
Day 19/11/2021	4: No continues bloating present. Abdominal discomfort still present. no early satiety. Duration of <i>Yadhabhukta Avidagdha Udgara</i> reduced 50%. QoL=50	5gm <i>Pathyadi Churna</i> + 60ml <i>Masthu</i> at 7am and 6pm. No special diet given. But advised not to take oily food and non-vegetarian items.
Day 20/11/2021	5: Only persisting symptoms are Bloating and abdominal discomfort. All other symptoms are absent. QoL= 70	5gm <i>Pathyadi Churna</i> + 60ml <i>Masthu</i> at 6.30am and 6pm. No special diet.
Day 21/11/2021	6: Only occasional bloating present. no significant abdominal discomfort felt. QoL= 90	5gm <i>Pathyadi Churna</i> + 60ml <i>Masthu</i> at 7am and 6.30pm. Normal diet started. Minimal quantity of oily food items and non-vegetarian food.
Day 22/11/2021	7: No symptoms present. also felt good appetite. QoL= 100	5gm <i>Pathyadi Churna</i> + 60ml <i>Masthu</i> at 6.30am and 6pm. Normal diet with minimal oily and non-vegetarian food recommended.

Dyspepsia is a very common, with surveys reporting a point prevalence of 25-40%<sup>[21,22,23]</sup>. This would only be important if dyspepsia resulted in a reduction in the length or quality of life. Unfortunately, although the usual

causes of dyspepsia are rarely fatal, it may be associated with a reduction in quality of life<sup>[24]</sup>. Investigations and treatments for dyspepsia continue to be more sophisticated and expensive. Resources however are limited and health care decision makers are increasingly under pressure to contain costs<sup>[25]</sup>.

The modern management of dyspepsia with several drug classes like proton pump inhibitors, H2 blockers, prokinetic drugs etc., have been performed frequently without validated disease specific test instruments for the outcome measurements<sup>[26]</sup>. Also, there occurrence of the symptoms is very common.

In the present case, the patient has symptoms such as nausea, abdominal discomfort, early satiety, bloating, *Yadhabhukta Avidagdha Udgara, Praseka* and *Utkleda*. These symptoms come under dyspepsia in modern view and *Amajirna* in Ayurvedic view.

*Agni* has an important role in the physiological functioning of body<sup>[27]</sup>. *Agni* converts *Ahara* into *Dhatu* and nourishes the body<sup>[28]</sup>. *Ajirna* is a pathological condition in which the diminished *Agni* causes improper digestion of food. *Amajirna* is one among the 6 types of *Ajirna* which has *Kapha* predominance. The main organ involved in the manifestation of *Ajirna* is *Grahani*<sup>[29]</sup>.

The general treatment protocol for *Ajirna* is *Langhana*<sup>[30]</sup>. *Langhana* is of 12 types<sup>[31]</sup>. *Upavasa, Dipana, Pachana* etc. are some of them. Generally, if *Ama* is very excessive in quantity, *Sodhana* is done<sup>[32]</sup>. If *Ama* is moderately present, *Pachana* and *Dipana* medicines are consumed<sup>[33]</sup>. If the *Ama* formed is very less, *Upavasa* or fasting is enough<sup>[34]</sup>.

When we closely observe the ingredients of *Pathyadi Churna*, all three of them are *Agni Dipana* and *Ama Pachana* in nature. The other properties of ingredients, like *Laghu Guna, Ruksha Guna, Ushna Virya, Katu Rasa, Anuloma Guna* helps to digest the *Ama* quickly and increase the digestive fire (*Jadharagni*).<sup>[35]</sup>

The antimicrobial activities, especially antibacterial and antifungal activity of *Pathya* has been discovered<sup>[36]</sup> which may help to cure dyspepsia. An active content in *Pippali* called Piperine is found to have antimicrobial activities<sup>[37]</sup>. Also, a content called Piperlongumine is found to have antispasmodic effect<sup>[38]</sup>. These may help to relieve the symptoms of dyspepsia.

Both *Ushna Jala* and *Masthu* are indicated as *Anupana* for *Pathyadi Churna*<sup>[39]</sup>, but preferred *Masthu* over *Ushna Jala* for the patient because of the probiotic nature of *Masthu*/curd water. *Masthu* has the same properties of *Takra*, like *Laghu Guna, Kashaya-Amla Rasa, Dipana* and *Kapha-Vatahara*<sup>[40]</sup>. These qualities help to digest the *Ama* and increase the *Jadharagni*. *Masthu*/ curd water is rich in *Lactobacillus* bacteria<sup>[41]</sup>. It helps to promote digestion, so when consumed with *Pathyadi Churna*, it helps to cure dyspepsia/*Amajirna*.

*Pathyadi Churna* with *Masthu* is prescribes before food, because it helps to increase the activity of probiotic organisms and secretion of digestive enzymes. By that way, the *Ama* will be digested and appetite is restored

## CONCLUSION

This case report demonstrates clinical improvement in dyspepsia/*Amajirna* with *Pathyadi Churna* with *Masthu* as *Anupana*. *Asthis* is a single case study, this may be a new path to the clinicians and researchers to explore the herbo-mineral preparations added with probiotic ingredients as an option for the treatment of dyspepsia/*Amajirna*.

## Limitations

To establish the treatment as preferred one, a large sample size should be taken. As one third of the ingredient is Salt, it may adversely affect those who have hypertension. Also, there may be some adverse effect for *Pathya* or *Pippali* in some people.

## Declaration of Patient consent

The authors certify that they have obtained all appropriate patient consent forms.



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