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Review Article

A Literary Review on *Nidana of Amlapittaw.s.r.* to Aetiological Factors of Dyspepsia and Various Modern Terms Related to *Amlapitta*.

Dr.Dharmendra Kumar Vyas¹, Dr.Shri Ram Saini², Dr. B.K. Sevatkar.³

¹M.D. Scholar, Email:vyas.63290@gmail.com, Mobile no.9680163290

²Ph.D Scholar, Email: drshribams06@gmail.com, Mobile no. 08432220468.

³Associate Professor, Email:drbks6@gmail.com, Mobile no. 09352311105

P.G.Department of Roga Nidana EvamVikritiVijanana, NIA, Jaipur.

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Corresponding author- **Dr. Dharmendra Kumar Vyas**,
 M.D. Scholar,
 Email:vyas.63290@gmail.com,
 Mobile no.9680163290

Abstract-

Dyspepsia is a condition of impaired digestion. Hyperacidity or acid dyspepsia is a very common dietary disorder. Curbing the problem of hyperacidity needs a total overhaul of the dietary regimen in addition to healthy exercise and lifestyle conquering hyperacidity is certainly a very important issue. Prevalence of dyspepsia is about 20-30% worldwide. A study reported that prevalence of dyspepsia to be 30.4% in India. This article discusses the various aetiological factors of hyperacidity or Dyspepsia (*Amlapitta*) both Modern and ancient classical texts and various modern

relative term with *Amlapitta*. In this article various symptoms and aetiological factor show that

many conditions in Modern Science like Gastritis, Gastro-esophageal Reflux Diseases, Dyspepsia, Ulcers can be included under the broad umbrella of *Amlapitta*. Certain foods (*Pitta* provocative potency of diet) and lifestyle are considered to promote gastro-esophageal reflux. Foods that have been implicated include coffee, alcohol, chocolate, fatty foods, acidic foods, and spicy foods. Stopping smoking and not drinking alcohol do not appear to result in significant improvement in symptoms. *ManasikaHetu* [Psychological factors] plays an important role in promoting *Amlapitta*.

Keywords: *Amlapitta*, Hyperacidity and Gastro-esophageal Reflux Diseases.

INTRODUCTION:

'*Amlapitta*' is a combination of two words *Amla* and *Pitta*. Among these two words the word *Amla* denotes the *Rasa* (Sour taste) and the *Pitta* denotes the *Dosha* involved in this disease. The *Pitta dosha* is bestowed with the functions of digestion and metabolism. *Amla* according to *Charaka* is considered as the *Prakruta rasa* of *Pitta*¹ whereas *Acharya Sushruta* says that *Katu* is the *Prakruta rasa* of the *Pitta* and it attains *Amlata* in *Vidagdhavastha*². The condition where the natural *Katu Rasa* of *Pitta* is replaced by *Amlata* due to *Vidagdhapaka* can be called *Amlapitta*. In the 21st century, the era of competition life it is full with stress having more speed and accuracy are the prime demands. Nowadays, people are tempted to earn a lot of money within a short period leading to their stressful life.

Also more attraction for fast food, copying the Western life style, diet habits, behavioural pattern, stressful works and many other Psychological disorders hampers the digestion and lead to lots of health problems like *Amlapitta*, IBS due to improper digestion. Many conditions in Modern Science like Gastritis, Gastro-esophageal Reflux Diseases, Dyspepsia, Ulcers can be included under the broad umbrella of *Amlapitta*. *Acharya Charaka* has mentioned that if the person is under some psychological problem even the wholesome diet taken in proper quantity does not get properly digested³ There is no direct description of etiopathogenesis as well as treatment protocol of *Amlapitta* in *Brihatrayi*, may be due to less or nil prevalence of disease, stability in life, *Satvapradhanya* in that era. Many scattered references are there for the

disease. *Acharya Charaka* describes that when *Annavisha* gets associated with *Pitta* it leads to *Pittaja* diseases like *Amlapitta*⁴.

CONCEPTUAL STUDY:

Historical Review: Any direct reference regarding the disease *Amlapitta* could not be traced in Vedic literature.

Charaka Samhita: *Acharya Charaka* has not mentioned the disease *Amlapitta* as a separated disease, but the word *Amlapitta* is mentioned in the text at several places in the text. They are:

- In the indications of 8 types of milk, *Amlapitta* has been listed⁵.
- Description of *Kulattha* as chief etiological factor of *Amlapitta* has been mentioned⁶.
- *Adhika Sevana* of *Lavana* causes *Amlapitta*⁷
- The condition *Amlapitta* has been mentioned under the diseases caused by *Viruddhahara*⁸.
- *Rajamansha* has the property of relieving *Amlapitta*⁹.
- *Mahatiktaka Ghrita* has been indicated in *Amlapitta*¹⁰.
- The pathogenesis of *Amlapitta* is described in context to *Grahanidosh*¹¹.

The symptoms of *Amlapitta* include *Dhumaka*, *Amlaka*, *Vidaha*, which are listed under *Paittika Nanatmaj Vyadhis*¹².

- *Kansa Haritaki*'s indications also include *Amlapitta*¹³

It can be said that the clear picture of *Amlapitta* is seen in description of

Pittaja Gulma & Pittaja Grahani and their treatment resembles very much nearer to the disease *Amlapitta*.

Sushruta Samhita: During the description of the

*Atilavana Sevana janya Vyadhis*¹⁴, *Acharya Sushruta* has mentioned a disease called 'Amlika' which seems to be similar to *Amlapitta*. Also he has described *Amlika* in second *Kriyakalai*. e. *Prakopakala*¹⁵.

Kashyapa Samhita is the first text which describes the disease *Amlapitta* as a separate disease entity. *Kashyapa* believed that the disease is caused by vitiation of Tridoshas leading to *Mandagni* and *Amlapitta*.¹⁶ *Harita* has described *Amlapitta* as a separate disease and the treatment is also given separately. The special synonym 'Amlahikka' to *Amlapitta* is contribution of *Harita*¹⁷ (Hiccups with sour taste). *Madhava Nidana* : *Madhavakara* has

described two types of *Amlapitta*¹⁸ as follows: *Urdhavaga* and *Adhoga*.

NIDANA (Aetiological Factors):

The etiological factors of *Amlapitta* can be broadly classified as *Aharaja*, *Viharaja*, *Manasika* and *Agantuja* *Hetus*. The brief explanations of these factors may be presented as under.

Aharajagroup¹⁹:

- a) **According to the type of Ahara**: *Kulattha*, *Pruthuka* and *Pulaka* (Husky food)
- b) **According to the quality of food**: *Abhishyandi*, *Atisnigdha* (Unctuous), *Atiruksha* (Very coarse and dry), *Gurubhojya* (heavy diet) and *VidahiPana*.
- c) **According to the Samskara of the Ahara**: *Apakwanna* *Sevana* (uncooked food), *Bhrishtadhanya* *Sevana* (fried paddy), *Ikshuvikara* *Sevana* (Sugar-cane products) and *Pishtanna* *Sevana* (flour).
- d) **According to Dushitanna**: *Dushta Anna* *Sevana* *Paryushita Anna* *Sevana*.
- e) **According to the Pitta provocative potency of diet**: *Adhyashana* (eating before the previous diet is digested), *Ajirna* *Sevana* (intake of food in indigestion condition), *AtiAmla* (intake of

excessive acidic diet), *Ati Drava* (intake of excessive liquid), *Ati Tikshna* (intake of very sharp substance), *Ati Panam* (Over drinking), *Katu Anna Pana* (Pungent diet and drinks) and *Viruddhashana* (incompatible diet).

- f) **According to the capacity of weakening the digestive power**: *Ati Snigdha* *Sevana* (excessive oily diet) and *Ati Ruksha* *Sevana* (excessive coarse dry diet).
- g) **Faulty dietary habits**: *Akalabhojana* (untimely eating), *Antarodaka Pana* (drinking of excess water during meal), *Kala Anashana* (avoiding the diet in proper time) and *Visamashana*.
- h) **Miscellaneous**: *Annahina Madya* (Alcohol without eating), *Madya* *Sevana* (alcohol drinking) and *Gorasa* *Sevana* (milk products).

Viharaja Hetu²⁰: Proper *Viharas* are to be followed to maintain the good health. The regular habits of eating, sleeping and excretion must be followed. If this is not followed regularly, the whole functioning of the body will be disturbed and in long run, they will cause the disturbances of the equilibrium of *Pitta* and digestion, which

ultimately will lead to *Amlapitta*. *AcharyaKashyapa* has mentioned that the causative factors may be *Vegadharana*, *Diwaswapna* after intake of *bhojana*, excessive *Snana*, and *Avagahana*. *AtiSnat* (Taking excessive bath), *AtiAvagahanat* (Excessive swimming), *Bhuktwabhuktwadiwasvapna* (Sleeping in day time after meals), *VeganamDharanam* (Suppression of natural urges) and *ShayyaPrajagaraihi* (Improper sleeping schedule).

***ManasikaHetu*²¹ [Psychological factors]:**

Mental factors also play a great role in maintaining the health. Abnormal mental factors such as *Chinta*– (worries, anxiety etc.), *Shoka*– (Sad), *Bhaya*– (Fear), *Krodha*– (Anger), *Moha*– Over attachment etc. would affect the physiology of digestion. Either there would be a lesser secretion of the digestive juice or secreted at improper times and sometimes it may be secreted in excessive quantity. All these conditions lead to *Agnimandya*, which further produces *Amlapitta*. The modern science also have established that gastritis is nothing but is the syndrome resulting from stress and strain which shows the important role played by psychogenic factors in the production of

Amlapitta. An abnormal *Manobhavas* of a person in terms of anxiety, anger, greediness, etc. would affect the *Pachanakriya*. These factors tend to affect the secretion of the gastric juice and by that; they are disturbing the homeostasis, which interns *Amlapitta*. Psychosomatic and cognitive factors are important in the evaluation of patients with chronic dyspepsia. The psychiatric hypothesis holds that the symptoms of dyspepsia may be due to depression, increased anxiety, or a somatisation disorder. Epidemiological studies suggest there is an association between functional dyspepsia and psychological disorders. Symptoms of neurosis, anxiety, hypo-chondriasis, and depression are more common in patients being evaluated for unexplained gastrointestinal complaints than in healthy controls. Comparisons of functional and organic dyspepsia have demonstrated that patients with functional dyspepsia are less likely to have decreased stress or anxiety at 1-year follow-up after being reassured of having no serious disease. This suggests that functional dyspepsia symptoms are long-lasting, compared with those of organic dyspepsia, and that the emotional ties are strong²². [Anxiety](#) is also associated with functional dyspepsia. In some people, it

appears before the onset of gut symptoms; in other cases, anxiety develops after onset of the disorder, which suggests that a [gut-driven brain](#) disorder may be a possible cause. Although benign, these symptoms may be chronic and difficult to treat²³.

AgantujaHetu: *Amlapittais* definitely caused by over use of certain drugs. Over use of NSAIDs and anticoagulants cure one disease but it can produce gastritis. Ayurvedic drugs, especially *Ashodhita* and faulty *Rasa Aushadhi* may cause *Amlapitta*. Even *Ushna, Tikshnadrug* if used excessively, without proper assessment of disease for along period may produce *Amlapitta*. Similarly *Panchakarmas* with *Hinayoga* or *Mithyayoga* or *Atiyoga* lead towards many diseases by attacking on *Agni*, hence *Amlapitta* also can be seen as an *Upadrava* of some other diseases like chronic *Vibandha, Arsha, Ajirna* and *Pandu*. In this group constant and excessive consumption of alcohol, tobacco, beverages, smoking, or other irritant stuffs etc. are taken²⁴. These substances cause local irritation in the stomach, which in turn secretes more gastric juices, and infection of the stomach, which may be grouped under this category.

Other causes: Also *Desha, Kala, Ritu* takes a great extent in the causation of *Amlapitta*. **Deshaprabhava:** According to *Acharya Kashyap* the disease is more predominant in *Anupa Desha* comparing to other *Desha*, because of *Kapha* provoking nature²⁵. In the line of treatment he gives its importance to change the place in untreated cases²⁶.

Kalaprabhava [Influence of Time]: *Amlapittais*

a *Chirakari Vyadhi*. This *Kala* or time factor is responsible for physiological/anatomical structure of the body i.e. *Balyavastha, Madhya* and *Vridhdhavastha*. The disease is more prevalent in middle age due to dominance of *Pitta*²⁷. Also *Paittikadisorders* are more prevalent during *Pitta* provocation time that is during mid-day and mid-night.

RituPrabhava [Seasonal

Flutuations]²⁸: This group includes disease which is caused by the meteorological changes such as variations in atmospheric temperature, hot or cold, humidity or dryness, rain and winter, incidental to changes in the seasons. Rainy season is responsible for *Amlavipaka* of water (due to weakened digestion power and vitiation of *Vata* and other *Doshas*) and eatables, which in turn vitiates *Pitta* and *Kapha*.

Genetic Factors: Acidity is seen mostly in persons with blood group 'O'²⁹ and families with such blood group prove relations of genetic factor, probably the blood group modifies the oxyntic cell population.

In *Ayurveda*, *Pitta Prakriti* persons are also more susceptible for the process of aggravation of the diseases.

Trauma: Certain things in diet can damage the gastric mucosa. The intake of spicy food, solid matter, alcohol and other irritating things may damage the pyloric antrum and lesser curvature of stomach.

Drugs: Many medications cause dyspepsia, including aspirin, non-steroidal anti-inflammatory drugs (NSAIDs)³⁰, antibiotics (metronidazole, macrolides), diabetes drugs (metformin, Alpha-glucosidase inhibitor, amylin analogs, GLP-1 receptor antagonists), antihypertensive medications (angiotensin converting enzyme [ACE] inhibitors, Angiotensin II receptor antagonist), cholesterol-lowering agents (niacin, fibrates), neuropsychiatric medications (cholinesterase inhibitors [donepezil, rivastigmine]), SSRIs (fluoxetine, sertraline), serotonin-norepinephrine-reuptake inhibitors

(venlafaxine, duloxetine), Parkinson's drugs (dopamine agonist etc.) corticosteroids, estrogens, dioxin, iron, and opioids³¹.

Smoking and Alcohol³²: Alcohol consumption and cigarette smoking both have a close relationship with peptic ulcer diseases. Chronic active gastritis is reportedly associated with chronic alcohol ingestion. Alcohol can damage the gastric mucosa and produces ulcer. Smoking (Nicotine) has been responsible to produce the amount of prostaglandin E₂ in gastric mucosa. The reduction of mucus secretion, increase in leukotriene B₄ level, increased activities of inducible nitric oxide synthase, xanthine oxidase and myeloperoxidase, and the expression of adhesion molecules in the gastric mucosa accompanied such potentiating effects. Substances other than nicotine in cigarette smoke may also contribute to the above effects.

Predisposing factors: Energetic and ambitious young men are more prone to duodenal ulcer formation due to irregular and hurried meals and they tend to over work. Emotional stresses and acute anxiety leads to predispose duodenal ulcer. Such types of predisposing factors are found in certain occupations like in bus drivers,

waiters, business executives and medical practitioners etc.

Endocrine factors: Since peptic ulceration is more common in males it has been suggested that estrogenic hormones may protect against the development of ulcer. The effect of emotional and other stress factors are also transmitted to the stomach by way of the pituitary adrenocortical axis. Moreover, specific endocrine diseases or conditions have been proved to be associated with peptic ulcerations e.g. excessive adrenocortical activity, hyperparathyroidism, Zollinger Ellison syndrome, multiple adenoma syndromes.

Infection: *Helicobacter pylori* play a significant role in the pathogenesis of peptic ulcer disease. Indeed, infection with *H. pylori* is associated with a greatly increased risk of duodenal and gastric ulceration, from 95 to 100% of patients with duodenal ulcer and 75 to 85% of patients with Gastric ulcer harbour the organism. The infection of the stomach also may be grouped under this category. Up to 85% of people infected with *H. pylori* never experience symptoms or complications³³. Acute infection may appear as an acute gastritis with abdominal pain (stomach ache) or nausea. Colonization of the stomach by *H. pylori* can result in

chronic gastritis, an inflammation of the stomach lining, at the site of infection. *Helicobacter* cysteine-rich proteins (Hcp), particularly HcpA (hp0211), are known to trigger an immune response, causing inflammation³⁴. Chronic gastritis is likely to underlie *H. pylori*-related diseases³⁵.

The comprehensive list of these etiological factors with the references is being presented here under. In *Ayurveda Paryushitanna*, *Dushtannasevana* is given as the causative factor of *Amlapitta*. This type of *Dushtanna* may have an infected property.

Gastritis syndrome³⁶:

Gastritis is inflammation of the gastric mucosa of the stomach. Depending on the cause, gastritis may persist acutely or chronically and may coincide with more serious conditions such as atrophy of the stomach.

Causes: Bacterial infection (most often by *Helicobacter pylori* and other *Helicobacter* spp.)

Fungal infection (most often in people with immunodeficiency), Parasitic infection, Bile reflux, NSAIDs, Cigarette smoke, Autoimmune disorders, Excessive alcohol consumption, Excessive caffeine

consumption, Certain allergens, Certain types of radiation and stomach injury and stress.

Hyperacidity³⁷: Hyperacidity or acid dyspepsia simply means increase of acidity in the stomach. The human stomach secretes hydrochloric acid which is necessary for the digestion of food. When the stomach contains an excessive amount of hydrochloric acid, then the condition is called as hyperacidity or acid dyspepsia.

Triggering factors for Hyperacidity:

Excessive intake of oily, spicy and salty

food , Excessive intake of sour foods that contain high acid content, going to bed immediately after a heavy meal, too much mental stress and worries, taxing the mind excessively consumption of alcohol smoking and drug addiction addictive consumption of coffee too much intake of therapeutic drugs like aspirin diseases of the digestive organs such as the stomach, intestines, gallbladder or the pancreas peptic ulcer and Spinal lesions.

Correlation between Hyperacidity, Gastritis, Dyspepsia and Amlapitta:

Amlapitta	Hyperacidity	Gastritis	Dyspepsia
Hritdaha	Heart Burn	Heart Burn	Heart Burn
HritShoola	Chest pain		
Udaradhmana	Abdominal distension	upperabdominal discomfort	Upper abdominal pain.
Amlodgara	Sour belching	Belching	Belching
Amlotklesha	Acid refluxes of the food taken		upper abdominal fullness
Utklesha	Nausea	Nausea	Nausea
Aruchi	Loss of appetite	Anorexia	Loss of appetite
Chhardi	Vomiting	Vomiting	

From the above table similarity between Hyperacidity, Gastritis, Dyspepsia and *Amlapitta* can be illustrated. It is very much essential to co-relate the diseases which are mentioned in classics with the recent disease of Modern medicine for a better

comprehension of the pathogenesis. In modern medical literature, some technical terms have been used to indicate an abnormal condition resembling to *Amlapitta*. These terms either explain the pathological

condition of the disease or explain the characteristics of the disease.

It is very difficult to correlate *Amlapitta* with a single disease of Modern science.

Following is the opinion of scholars.

Table 2

Year	Scholar	Disease correlated
1962	Tripathi	Gastritis Syndrome
1968	Fourth National Seminar on Ayurveda a) Sri PurushottamVaidya b) Vd. VishwanathDwivedi	Acute Gastritis Chronic Gastritis
1982	Tripathi	Non-ulcer dyspepsia
1986	HarinathJha	Hyperacidity

A conference of vaidyas held at Hrishikesh, has decided the conditions like Hyperacidity, Gastritis, Gastric atropy, Gastric and Peptic ulcer, Gastric carcinoma etc., can be included in *Amlapitta* (UtkaliniNaik et. al 2006).

Conclusion: The conclusion of this article is that many digestive disorders are included in *Amlapitta*. To prevent from *Amlapittachange* in diets habits & life style.

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