

Excess consumption of *Lavana Rasa* (Salty taste) – A cause of *Amlapitta* (Hyperacidity)

Research Article

Joshi Mrudula Vinayak^{1*}, Shendye Hemangi Vasudeo², Bhole Nilima³, Joshi Vinayak⁴

1. Professor and HOD, 2. Assistant Professor, Department of Ayurved Samhita Siddhanta,
4. Professor and HOD, Department of Rognidan evam Vikrutvignyan
Dr D.Y.Patil college of Ayurved and Research centre, Pimpri, Pune. India.
Dr. D.Y. Patil Vidyapeeth (Deemed to be University), Pune, Maharashtra, India.
3. Ayurveda practitioner, Nerul, Navi Mumbai. India.

Abstract

Amlapitta (Hyperacidity) is one of the ever growing diseases observed in society. Intake of salt in excess can lead into *Amlapitta* due to its *Vidahi* and *Agneya* property. Foods like cheese, chips, sauces, buttermilk, etc. contains variety of salts including common salt. The disease *Amlapitta/ Amlika* can be interpreted as Hyperacidity; is not separately described in *Samhita*, but mentioned as *Lakshana* (symptom) of *Atiyoga* (excessive intake) of *Lavana Rasa*. Hence an observational study was designed. Aim: To examine whether *Atiyoga* of *Lavana Rasa* (common salt) can be a *Hetu* (causative factor) of *Amlapitta*. Methodology: Study included 100 identified patients of *Amlapitta*; both males and females from the age group of 20-60 years suffering from *Amlodgar* (sour blenching) as the predominant symptom. A structured, pilot tested 6 item questionnaire was used to collect data. Statistical Analysis: Descriptive data was analyzed using number and percentage. Results: Maximum patients were from 20-29 years age group; with *Kapha-Pittaja Prakruti* (77.78 %) and *Pitta-Kaphaja Prakruti* (68.75%) who used to consume *Lavana rasa* in variety of type and in excess quantity. Family history of the disease *Amlapitta* showed maximum % in female patients as 31.03% whereas only 4.76% males suffered from the disease. Liking towards *Lavana*, *Katu* and *Amla rasa* in population was found to be 36%, 28%, 16% respectively. In causative factors of *Amlapitta*, *Lavana Rasadhikya* was noted in 62 patients whereas *Vidahi Anna* followed by spicy food and oily food was found in 60, 58, 56 number of patients respectively. Conclusion: From the study, it is observed that there is proneness of *Amlapitta* mostly in age group 20-29 years having liking towards salty, spicy and *Katu Rasa*. Maximum (58) female patients, with 31.03% who had family history of *Amlapitta* and 77.78% patients found to have *Kapha-Pitta* dominant *Prakruti* which indicate towards importance of *Prakruti* and family history of an individual in disease manifestation.

Key Words: *Amlapitta*, Hyperacidity, *Atiyoga* of *Lavana Rasa*, salts, common salt, causative factor

Introduction

Person consumes various tasty foods in daily routine. Salt is one of the main ingredients which maintains taste and enhances flavor of food. Common salt i.e. *Samudra Lavan*(1) out of different types of salt being universal, is more used for cooking. Use of salts for preservation is significantly seen as it helps to retain flavor of food. It is observed that food items like cheese, chips, sauces, buttermilk, etc. contains variety of salts(2).

Garlic salts (3) are used in salads and Italian dishes like pasta, etc. and also to weaken the meaty smell. But when consumed in excess, it can cause flatulence, heartburn, body odor, burning sensation in throat and mouth. Celery salt (4), a mixture of grounded seeds and table salt or sea salt, is used as a

food seasoning for stews, salads and potato chips etc. It is often used to prevent food spoilage but it has carcinogenic effects. In excess, it may cause mild allergic reaction to severe effects as anaphylaxis. It can also cause sensitivity to sun. Butter salts (5) is used to give artificial buttery flavor and yellow coloring to popcorns. *Kala Namak*(6) is mainly used in South Asian countries and useful in treatment of gastro-intestinal diseases and heartburns.

Also in Indian Sciences, *Ayurvedic* compendia have enlisted different salts i.e., *Lavanas* under groups *Pancha Lavan*(7) etc. with their specific properties and therapeutic uses. *Saindhava Lavana*(8) is best amongst all. It has properties like *Laghu*, *Teekshna*, *Snigdha*, *Ruchya*. Hence it is useful in treatment of *Agni* (digestive system), also for *Vajikaran*. *Sauvachala Lavana* is *Ushna*, *Laghu*, *Ruchya* and *Vata Anulomaka*. Hence it is useful for *Pachana*, *Agni Vardhan*, also to alleviate *Vata Dosha*. *Beed Lavana* having *Laghu*, *Ushna*, *Teekshna* properties helps in conditions like *Ajeerna* (indigestion), *Shoola* (pain). *Samudra Lavana* is *Guru*, *Avidahi* and having *Na Ati Ushna Veerya*. *Romak Lavana* has *Laghu*, *Ushna*, *Teekshna* and *Bhedana* properties. *Audbhika Lavana* and *Panshuja Lavana* have *Tikta*, *Katu Rasa* (taste). *Katu Lavana* is

* Corresponding Author:

Joshi Mrudula Vinayak

Professor and HOD, Department of Ayurved Samhita Siddhanta, Dr D.Y.Patil college of Ayurved and Research centre, Pimpri, Dr D.Y. Patil Vidyapeeth (Deemed to be University), Pune, Maharashtra, India. Email Id: mrudula.joshi@dpu.edu.in

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a group of 3 types of *Lavana* having *Katu* and *Chedan* property.

Nowadays *Amlapitta* is one of the common diseases observed in individuals. *Vidahi* and *Pitta-Prakopi Ahara* is mentioned as the *Hetu* of *Amlapitta*. *Lavana Rasa* is described as *Vidahi* and also due to *Tikshna*, *Ushna* and *Agneya Guna* it causes *Pitta-Prakopa*. So ultimately *Lavana Rasa* causes *Amlapitta* if it is taken in excess quantity.

In *Charak Samhita*, it is specifically advised to not to use *Lavana* and *Kshara*(9) in *Atimatra* i.e., excess quantity as it causes vitiation of *Pitta* and *Rakta*. There occurs *Kleennata* of *Dosha* and *Dhatus*. Also symptoms and side effects of consumption of *Lavana* in *Atimatra* is explained. Intake of salt in excess can lead into *Amlapitta*(10). Hence, this study was conducted to observe the relation between *Atiyog* of *Lavana Rasa* as a *Hetu* of *Amlapitta*. In a previous observational study similar observation i.e. *atiyog* of *Lavana rasa* was noted as one of the cause of *Amlapitta* in 50% (n=1000) of total patients (11).

Aim

To examine whether *Atiyoga* of *Lavana Rasa* (common salt) can be a *Hetu* (causative factor) of *Amlapitta*.

Methodology

Total 100 volunteers suffering from *Amlodgar*; a major symptom of *Amlapitta* disease, of age group 20-60 years were selected regardless of gender. A structured, pilot tested and validated, 6 item questionnaire prepared for the present work, was used to collect the data. Complete questionnaire was filled by investigator to rule out excess consumption of *Lavana Rasa* by patients. Patients of *Amlapitta* not having history of consuming excess *Lavana rasa*, are not included in the study. It included questions like daily salt intake of individuals, intake of salts on table >, < 1 teaspoon (5gms), the frequency of certain substances in diet like pickle, papad, salty chilies. Occasional salty food intake with details- Food items, Frequency, Quantity, Liking of *Rasa*. Statistical assessment was done on the basis of observed numbers and percentage.

Observations

Table1-Distribution of 100 patients of Amlapitta according to age and excess consumption of Lavana Rasa

Sr.No	Age in Years	No.of Amlapitta patients N=100	No. of patients consuming excess Lavana rasa N=62	Percentage of patients consuming excess Lavana Rasa N=62
1	20-29	22	18	81.81
2	30-39	35	22	62.86
3	40-49	25	12	48.00
4	50-59	18	10	55.55

Table 2-Distribution of 100 patients of Amlapitta according to Prakruti and excess consumption of Lavana Rasa

Sr. No	Prakruti	No. of patients N=100	No. of patients consuming excess Lavana rasa N=62	Total Percent age N=62
1	Vata-Pitta	30	19	63.33
2	Pitta-Kapha	16	11	68.75
3	Kapha-Vata	10	4	40.00
4	Pitta-Vata	21	13	61.90
5	Kapha-Pitta	9	7	77.78
6	Vata-Kapha	14	8	57.14

Table 3- Distribution of 100 patients of Amlpitta according to Gender and family history

Gender	No. of Patients	Family history			
		Positive	Percentage	Negative	Percentage
Male	42	2	4.76	40	95.24
Female	58	18	31.03	40	68.97
Total	100	20	20	80	80

Table 4-Distribution of patients of Amlapitta according to Aharaja Hetu

Sr. No.	Type of Aharaj Hetu	No. of patients	Total percent age
1	Lavana Rasadhikya	62	62
2	Katu Rasadhikya	56	56
3	Amla Rasadhikya	16	16
4	Spicy food (Katu+ Lavana)	58	58
5	Vidahi Anna(Katu+ Lavana+oil)	60	60
6	Ati Ruksha –Chat masala (Lavana+ Katu)	30	30
7	Ati Snigdha- Oily (Katu+ Lavana)	56	56
8	Paryushitanna sevan	22	22
9	Milk products, Dahi	26	26
10	Ati Guru	34	34

Table 5 - Distribution of 100 patients of Amlpitta according to Rasa priti

Sr.No.	Type of	No. of	Total %
1	Amla	16	16
2	Lavana	28	28
3	Katu	36	36
4	Other	20	20

Discussion

The number of *Amlapitta* patients who consumed *Lavana Rasa* in excess according to the age group showed maximum number of patients i.e. 81.81% in age group 20-29 years. This shows the indulgence of this age group population towards food items having variety of salts. The percentage was less in age group 40-49 years as there is less addiction towards salty food.

Observation regarding the dominance of *Dosha* in *Prakruti* as per table 2- out of 100 patients of *Amlapitta*, maximum 30 patients had *Vata-Pitta* dominant *Prakruti* and 21 patients had *Pitta-Vata*

dominance. While 7 out of 9 patients, i.e.77.78% patients found to have *Kapha-Pitta* dominant *Prakruti* who suffered from *Amlapitta* due to excess consumption of *Lavana rasa*. This indicates towards the dominance of *Drava Guna* in *Lavana Rasa* and its implication on *Prakruti*.

The quest of gender and family history (table3), expressed maximum (58)female patients, with 31.03% who had family history of *Amlapitta*; whereas only in 4.76% out of 42 male patients, family history was found.

Out of 100 patients of *Amlapitta*, causative factors to be noted are *Lavana Rasadhikya* in 62 patients whereas *Vidahi Anna* followed by spicy food and oily food were found in 60, 58, 56 number of patients respectively. Here *Vidahi*, spicy and oily food is combination of *Lavana*, *Katu Rasa* and oil. It is really difficult to actually count the amount of any particular *Rasa* in diet. Still the combinations studied in present work are textually defined as causative factors and observed in this cross sectional study.

In 100 patients of *Amlapitta*, 36% patients had temptation towards *Katu Rasa* which was observed as maximum; followed by 28% patients liked *Lavana Rasa*, 16% patients *Amla Rasa* which was found to be minimum. In remaining 20% patients, liking towards *Rasa* other than mentioned above i.e. *Madhura*, *Tikta*, *Kashya* was observed.

In a previous observational survey study on *Rasa-Atiyoga* similar observation i.e. *Atiyoga* of *Lavana rasa* was noted as important cause of *Amlapitta* in 50% (n=1000) of total patients (11). This supports the present work observation.

Conclusion

From the present cross sectional study, it can be concluded that even though the disease *Amlapitta/Amlika* is not separately described in special chapter in *Charak* and *Sushrut Samhita*, but mentioned as *Lakshana* (symptom) of *Atiyoga* (excessive intake) of *Lavana Rasa*. Features of *Amlika* are similar to that of *Amlapitta* which can interpret as Hyperacidity according to modern sciences. There is proneness of *Amlapitta* mostly in age group 20-29 years due to liking towards salty, spicy food and *Katu Rasa*. Maximum (58) female patients, with 31.03% who had family history of *Amlapitta* and 77.78% patients found to have *Kapha-Pitta* dominant *Prakruti* which indicate towards importance of *Prakruti* and family history of an individual in disease manifestation. Younger generation seems to have more liking towards cheese, chips, sauces, etc. They become prone for ill effects of excess consumption of *Lavana Rasa* like *Amlapitta*, *Khalitya*, etc. For the sake of prevention awareness programs and studies can be designed.

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