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An Observational Study on *Urdwaga Amlapitta* *Nidana* w.s.r. to Diet and Lifestyle

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ABSTRACT

21st century is the era of competition with full of stress having more speed and accuracy are the prime demand to fulfill their need. The needs of the human being are infinite but the availability is less to fulfill the growing needs. So man is trying to utilize his time in fulfillment of such needs without thinking about his health. He is changing his lifestyle, diet pattern and behavioral pattern and inviting many lifestyle disorders like *Amlapitta*. Ayurvedic literature mentions about diseases *Amlapitta* mainly caused because of *Ahitakara Ahara*, *Vihara* and *Manasika Bhava*. So avoiding such *Nidana* can prevent and control the disease. So in this present study importance has been given for *Aharaja* and *Viharaja* *Nidana* in the manifestation of *Urdwaga Amlapitta*. As no considerable works were done w.s.r to *Nidana*, the study was taken up entitled "An Observational Study on *Urdwaga Amlapitta* *Nidana* w.s.r to Diet and Lifestyle".

Key words: *Urdwaga Amlapitta*, Diet and Lifestyle, *Ahara*, *Vihara*.

INTRODUCTION

Ayurveda the science of life is an ancient system of medicine which guided the mankind with various principles to be healthy and stay away from any physical, mental and spiritual illness throughout the life. The main aim of life will be attaining *Dharma*, *Artha*, *Kama* and *Moksha*. Health is the root cause for attaining this Purushartha's.^[1] Health can be achieved by following Ayurvedic principles. So Ayurveda has stressed more upon preventive aspect than curative

to maintain the health of an individual. Modern era is becoming synonymous with sedentary lifestyle. This lifestyle has forced man to restore unhealthy food habits. Earlier, people had much more time and would eat healthy food. But now a day's people tend to prefer a quick meal such as junk food and fast food which renders the man to become victims of various diseases. In present days we don't take care of our health and also our eating habits and lifestyles. Only when we land into trouble we realise the bad effect of the modern lifestyle and diet. So we can consider unhealthy food habits and lifestyles are the main contribution for various diseases. *Swasthavrutta* the health science which mainly emphasises on *Dinacharya*, *Ratricharya* and *Rutucharya* will keep the person in healthy condition^[2] and also by following other principles like *Sadvritta*, *Trayopasthamba*, *Navegandharaneeya*, *Ahara* and *Vihara* one can maintain the health and longevity without having disease. *Amlapitta* is one among the 40 *Nanatmaja Pitta Vikara*^[3] and because of the inappropriate diet and mode of life *Pitta Dosh*a become *Vidagdata* leading to *Shuktapaka* and causing *Amlapitta*.^[4] So the Ayurvedic literature stressed more on faulty food habits and lifestyle as a *Nidana* for the disease

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Amlapitta. Today is the era of urbanization and industrialization a drastic changes taken place in mankind. Man is trying to cope up with that speed and adopted unhealthy diet and lifestyle leading to disease *Amlapitta*.

OBJECTIVES OF THE STUDY

To understand the role of *Aharaja* and *Viharaja Nidana* in the manifestation of *Urdwaga Amlapitta*.

MATERIALS AND METHODS

Source of data

Patients attending the O.P.D. and I.P.D. of S.D.M. Ayurveda Hospital Udupi.

Method of collection of data

50 Patients of diagnosed *Urdwaga Amlapitta* fulfilling the inclusion criteria were selected from the O.P.D. & I.P.D. of S.D.M Ayurveda Hospital Udupi and data was collected based on a detailed self made proforma.

Inclusion and exclusion criteria

Patients in between 17 to 60 years of age with classical signs and symptoms of *Urdhwaga Amlapitta* were included in the trial. Patients who had chronicity for more than five years and suffering with diseases like gastric ulcer, duodenal ulcer, cancer of stomach and having major illness like cardiac diseases, diabetes, etc. were excluded from the trial.

Design of study

This was a retrospective observational study where the study was done by questionnaire method; the data was collected via self-prepared questionnaire. A comprehensive questionnaire was prepared with all possible association relating to *Aharaja Nidana*, *Viharaja Nidana*, *Manasika Nidana* and *Upashaya* in relation to *Amlapitta*. A total of 48 questionnaires given to 30 already diagnosed subjects to collect the data. Data was collected by personal interview method with questionnaire in a single sitting. The data was analysed by SPSS 16 using internal reliability scale and Cronbach's Alpha. And value obtained was 0.710. Based on the Cronbach's Value the questionnaire was reframed with deletion of the question number 20 by that the Cronbach's Value again re-corrected to 0.723.

Then based on reframed questionnaire study was carried out and data was collected. The data extracted was subjected to statistics by Pearson's Chi square test for (p) significance and Crammer's co-efficient test for (v) association analysis using IBM Statistical Package for Social Sciences Version.16 (SPSS Inc. Chicago, IL, USA) application.

Laboratory Investigations

- RBS
- Hb%
- TC
- DC
- ESR

(Investigations were done only if required)

OBSERVATIONS AND RESULTS

Totally among 50 Subjects 88% were female, 60% were between 15-25 years of age, 90% were Hindu, 80% of subjects were unmarried, 80% belonged to Upper-Middle class, maximum of 56% were post-graduates, 90% belonged to the student category, Maximum of 62% were vegetarian, Maximum number of subjects 58% had tea or coffee as addiction, 38% belonged to *Kaphapittaja Prakruti*, whole of 100% of subjects belonged to *Madhyama Sara*, 92% of the subjects belonged to *Madhyama Samhanana*, 76% belonged to *Madhyama Pramana*, 88% of subjects had *Madhyama Satva*, 66% of the subjects had *Madhyama Abhyavarana Shakti*, 90% of subjects had *Madhyama Jarana Shakti*, subjects i.e. 78% had *Madhyama Vyayama Shakti*, 98% belonged to *Madhyama Vaya*.

Observation on Questionnaire: (Out of 48 observations on few questions has been mentioned)

Q 1. Do you feel symptoms like *Tiktamlodgara* (sour belching), *Urakantadaha* (burning sensation in throat and chest), *Shiruruja* (headache), *Vantha* (nausea or vomiting)?

All 100% of subjects feel symptoms like *Tiktamlodgara* (sour belching), *Urakantadaha* (burning sensation in throat and chest), *Shiruruja* (headache), *Vantha* (nausea or vomiting).

Q 2. Since from when you are diagnosed with above said symptoms?

68% of subjects had diagnosed year before.

Q 3. When do you feel the aggravation of the above said symptoms?

60% of subjects feels the aggravation of the symptoms before food.

Q 4. Habit of consuming food irrespective of appetite?

62% of Subjects sometimes consumed food irrespective of appetite.

Q 5. How many times you consume food in a day?

58% of subjects consume food thrice in a day.

Q 6. To which category in the following you belong to?

38% of subjects belong to mixed category.

Q 7. If always which kind of food you eat?

12% of subjects had habit of eating Fried items in between the meals.

Q 8. Habit of adding extra salt and spice to the food what you eat?

36% of subjects sometimes had habit of adding extra salt and spice to the food.

Q 9. Habit of consuming water in the middle/between the food?

44% of subjects always had habit of consuming water in the middle of the food.

Q 10. If always quantity of water?

50% do not consume water in the middle.

Q 11. In which form you eat most of your food?

86% of subjects eat food in Boiled form.

Q 12. Habit of eating fried food items?

42% of subjects had habit of eating fried food items once in a week.

Q 13. After eating which taste you find any of the symptoms?

52% of subjects had symptoms of disease after eating spicy food.

Q 14. Habit of consuming the preparations which is made out of flour (pizza\burger\sandwich\ bread)?

54% of subjects had habit of consuming preparations made out of flour (Pizza/burger/sandwich / bread) once in a week.

Q 15. Do you consume food prepared from hoarse gram?

56% of subjects sometimes consumed food prepared from hoarse gram.

Q 16. Habit of eating curds?

34% of subjects had habit of eating curds more than 3days in a week.

Q 17. Habit of eating outside food or hotel?

52% had habit of eating outside or hotel Once in a week.

Q 18. Do you find relief after eating food prepared out of rice?

50% of subjects sometimes found relief after eating food prepared out of rice not consume stale food.

Q 19. Do you find relief after eating food prepared out of green gram?

Maximum 58% of Subjects do not found any relief.

Q 20. Do you find relief after drinking milk?

42% of subjects sometimes found relief after drinking milk.

Q 21. Do you find relief after drinking water (boiled and cooled)?

50% of subjects always found relief after drinking water.

Q 22. Habit of day sleeping after food?

52% of subjects had habit of day sleeping 1 hour after food.

Q 23. Habit of drinking tea or coffee?

38% of subjects had habit of drinking tea or coffee 2-3 times in a day.

Q 24. Habit of drinking aerated drinks like cola etc.?

54% do not have habit of drinking aerated drinks.

Q 25. Do you find any of the symptoms of the disease following anger?

56% of subjects not found symptoms of the disease following anger.

Q 26. Do you find any of the symptoms of the disease following stress\ stressful condition?

Maximum 74% of subjects found symptoms of the disease following Stress.

Q 27. Do you find any of the symptoms of the disease following anxiety?

56% of subjects found symptoms of the disease following anxiety.

Q 28. Do you find any of the symptoms of disease after consuming food when you are in anger \ stress \ depression \ anxiety?

Maximum 74% of subjects found symptoms of the disease after consuming food when they are in anger, stress, depression and anxiety.

RESULTS

Question Sl no.	Pearson's Chi Square value	P Value	Significance*	Crammer's V value	Association**
Q.1	-	-	-	-	-
Q.2	3.209	0.073	NS	0.253	LA
Q.3	2.020	0.155	NS	0.201	LA
Q.4	1.527	0.466	NS	0.175	LA
Q.4A	0.453	0.929	NS	0.095	LIAA
Q.5	1.134	0.769	NS	0.151	LA
Q.6	3.914	0.141	NS	0.280	LA
Q.7	4.924	0.177	NS	0.314	MA
Q.8	2.919	0.232	NS	0.242	LA
Q.8A	1.497	0.683	NS	0.173	LA
Q.9	7.919	0.048	S	0.398	MA
Q.10	7.912	0.048	S	0.398	MA
Q.11	0.048	0.976	NS	0.031	LIAA
Q11A	0.581	0.748	NS	0.108	LA
Q.12	0.804	0.669	NS	0.127	LA
Q.12A	1.258	0.868	NS	0.159	LA
Q.13	9.416	0.009	S	0.434	MA

Q.14	1.526	0.676	NS	0.175	LA
Q.15	3.019	0.221	NS	0.246	LA
Q.16	6.811	0.078	NS	0.369	MA
Q.17	8.004	0.018	S	0.400	MA
Q.18	12.187	0.007	S	0.494	MA
Q.19	2.025	0.567	NS	0.201	LA
Q.20	1.118	0.572	NS	0.150	LA
Q.20A	1.110	0.775	NS	0.149	LA
Q.21	1.898	0.594	NS	0.195	LA
Q.22	2.378	0.498	NS	0.218	LA
Q.23	1.844	0.398	NS	0.192	LA
Q.24	3.030	0.220	NS	0.246	LA
Q.25	1.382	0.501	NS	0.166	LA
Q.26	1.705	0.426	NS	0.185	LA
Q.27	0.011	0.995	NS	0.015	LIAA
Q.28	0.334	0.846	NS	0.082	LIAA
Q.29	7.483	0.006	S	0.387	MA
Q.29A	7.483	0.006	S	0.387	MA
Q.30	7.483	0.006	S	0.387	MA
Q.31	7.483	0.006	S	0.387	MA
Q.32	8.009	0.046	S	0.400	MA
Q.33	0.397	0.820	NS	0.089	LIAA
Q.33A	0.284	0.594	NS	0.075	LIAA
Q.34	1.923	0.382	NS	0.196	LA
Q.34A	0.139	0.709	NS	0.053	LIAA
Q.35	4.281	0.039	S	0.293	LA
Q.36	0.191	0.662	NS	0.062	LIAA
Q.37	0.315	0.575	NS	0.079	LIAA
Q.38	2.020	0.155	NS	0.201	LA
Q.39	2.396	0.122	NS	0.219	LA

P value*: ≤ 0.05 significant (S), <0.001 highly significant (HS), >0.05 not significant (NS).

V value:** >0.5: high association (HA), 0.3- 0.5: Moderate association (MA), 0.1- 0.3: Low association (LA), 0- 0.1: Little if any association (LIAA)

Based on the *Nidana* and *Upashaya* mentioned in the different classics questionnaire was framed. A total of

48 questionnaires were given to 30 subjects to collect the data. The data was analyzed by SPSS 16 using internal reliability scale and Cronbach's Alpha.

Rule of thumb for reliability statistics value is as follows,

- Excellent - > 0.9
- Good - > 0.8
- Acceptable - > 0.7
- Questionable - > 0.6
- Poor - > 0.5
- Unacceptable - < 0.5

An alpha of 0.8 is probably a reason for goal. A high value of Cronbach's alpha indicates good internal consistency of all items in this scale. The low value of Cronbach's alpha could be due to low number of questionnaire, poor interrelatedness between items or heterogeneous constructs.

Case Processing Summary

Cases	N	%
Valid	30	100.0
Excluded	0	0
Total	30	100.0

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on standardized Items	No of Items
0.710	0.611	45

Based on the Cronbach's value the questionnaire were reframed with deletion of question number 20 by that the Cronbachs value were again re-correlated to 0.723. Then based on reframed questionnaire study was carried out and data was collected. The data extracted was subjected to statistics by Pearson's Chi square test for (p) significance and Crammer's co-efficient test for (v) association analysis using IBM

Statistical Package for Social Sciences Version.16 (SPSS Inc. Chicago, IL, USA) application.

DISCUSSION

The discussion on the results can be categorized into different headings *Aharaja*, *Viharaja*, *Manasika* and *Upashaya* for better understanding.

Aharaja Nidana like consumption of Non- vegetarian food with p value 0.048 and v value 0.398, *Viruddhahara* i.e. Non- Vegetarian food followed by milk or curd with p value 0.048 and v value 0.398, Habit of fasting with p value 0.009 and v value 0.434, *Rasa* which aggravates the symptoms with p value 0.018 and v value 0.400, *Amla Rasa Ahara Sevana* with p value 0.007 and v value 0.494 are Statistically Significant with Moderate Association. Question number 7 on *Aharaja Nidana* about the category of food having p value 0.177 and v value 0.314 and habit of fried food items with p value 0.078 and v value 0.369 are Statistically Not Significant with Moderate Association. *Aharaja Nidana* like time of aggravation of symptoms before or after food with p value 0.155 and v value 0.201, Habit of consuming irrespective of appetite with p value 0.466 and v value 0.175, how many times consuming food in a day with p value 0.769 and v value 0.151, Quantity of food with p value 0.141 and v value 0.280, Habit of eating between the meals with p value 0.232 and v value 0.242, Kind of food in between meals with p value 0.683 and v value 0.173, Duration of extra salt and spice with p value 0.748 and v value 0.108, Consuming water in the middle of intake of food with p value 0.669 and v value 0.127, Quantity of water consumption between the meal with p value 0.868 and v value 0.159, Habit of skipping meals with p value 0.676 and v value 0.175, Form/kind of food with p value 0.221 and v value 0.246, *Pishtannasevana* with p value 0.567 and v value 0.201, *Kulathasevana* with p value 0.572 and v value 0.150, Duration of *Kulathasevana* with p value 0.775 and v value 0.149, Eating Curds with p value 0.594 and v value 0.195, Eating outside or hotel with p value 0.498 and v value 0.218, *Paryushita Bhojana* with p value 0.398 and v value 0.192, *Upashaya* after eating *Shali* with p value 0.220 and v value 0.246, *Upashaya* after eating *Mudga* p value 0.501 and V value 0.166 are Statistically Not Significant with Low Association. *Aharaja Nidana* like duration of

consuming of food irrespective of appetite with p value 0.929 and v value 0.095, Habit of adding salt and spice with p value 0.976 and v value 0.031, *Upashaya* after drinking water with p value 0.995 and v value 0.015 are Statistically Not Significant with little if any Association.

Non- vegetarian food as it is heavy to digest it stay long in stomach and produce *Vidahi* causing *Amlapitta* and also it requires more gastric secretion for its digestion. As non-vegetarian food contains spice as its main ingredient it will irritates the gastric mucosa and there will be more secretion of gastric juice that will leads into *Amlapitta*. *Viruddhara* i.e. drinking milk or milk products after intake of non-vegetarian food is considered as *Amadoshakara*. By nature itself is *Guru* and will not get digest easily and stay for longer duration in *Amashaya* and producing *Shuktapaka* there by increases the *Amla* and *Tikta Rasa* of pitta leading to the disease *Amlapitta*. Habit of fasting again there will be secretion of gastric juice leading to *Amlapitta*. As stomach does not contain any food for digestion it will irritates the gastric flora and produce many other complications and also in empty stomach *Vata* is in *Prakupita Avastha* which inturn increase the *Agni* there by *Pitta*. *Rasa* like *Amla* and *Katu* are *Pitta Prakopaka*, excessive consumption of this *Rasa* leading into *Amlapitta*. Some of the *Aharaja Nidana* even though it is statistically not significant with low association may be because of small sample size but we should consider as causative factor in the production of *Amlapitta* like *Kulatha*, *Pishtanna*, *Paryushitha*, *Bhrista*, *Akalabhojana*, *Alpabhojana*, *Abhishyandi Ahara*. Also *Ahara* which are used as *Upashaya* like *Dugdha*, *Taptasheetajala*, *Shali* and *Mudga* are statistically not significant because of small sample size but it can be used as *Pathya*.

Viharaja Nidana like habit of consuming alcohol with p value 0.006 and v value 0.387, Quantity of alcohol with p value 0.006 and v value 0.387, Habit of smoking with p value 0.006 and v value 0.387, Habit of tobacco chewing with p value 0.006 and v value 0.387, Habit of drinking tea and coffee with p value 0.046 and v value 0.400 are Statistically Significant with Moderate Association. *Viharaja Nidana* like Habit of taking bath immediately after food with p value 0.382 and v value 0.196 are Statistically Not Significant with Low Association. *Viharaja Nidana* like

Habit of day sleeping after food with p Value 0.846 and v value 0.082, Habit of drinking aerated drinks with p Value 0.820 and v value 0.089, Duration of drinking aerated drinks with p value 0.594 and v value 0.075, Duration of taking bath immediately after food with p value 0.709 and v value 0.053 are Statistically Not Significant with Little if any Association. Alcohol consumption erodes the mucosal lining of the stomach and it stimulates the hydrochloric acid secretion. Some research showing that smoking can also cause gastritis but there is no relevant reason was given. Tobacco chewing will increase the hydrochloric acid secretion causing gastritis. Tea or Coffee contains the caffeine stimulates the production of acid secretion which irritate the mucosal membrane of the gastro intestinal tract producing the disease. Taking bath immediately after food may hamper the digestion by increasing circulation towards periphery. As there is less circulation in abdominal region decreases the gastric juice secretion causing *Ajeerna* in turn leading to *Amlapitta*. Habit of sleeping after food will increases the kapha leading to formation of *Ama*.

Manasika Nidana like appearance of symptoms following anger with p value 0.039 and v value 0.293 are Statistically Significant with Low Association. *Manasika Nidana* like appearance of symptoms following depression with p value 0.155 and v value 0.201, symptoms of disease after consuming food when in anger, stress, anxiety with p value 0.122 and v value 0.219 are Statistically Not Significant with Low Association. *Manasika Nidana* like appearance of symptoms following stress with p value 0.662 and v value 0.062, appearance of symptoms following anxiety with p value 0.575 and v value 0.079 are Statistically Not Significant with little if any Association.

Psychological factors like mental stress, anxiety, depression are lead to the acid peptic diseases. Due to this, the secretary and motor functions of the gastro intestinal tract are disturbed.

Considering the *Desha*, on the basis of the literary review and results we prepared a probable diet and lifestyle chart. And the discussion on the diet and lifestyle chart is as follows-

Early morning intake of the *Mudga Yusha / Yavapanaka / Taptasheetajala* has been suggested as all this having the property of *Madhura Rasa, Sheeta Veerya, Laghu Guna* helpful in *Pittashamana* and also does the *Agnideepana*. Based on the available staple food, the diet chart for breakfast, lunch and dinner has been prepared. All the *Dhanya, Shaka, Phala* and preparations which are listed, are having the properties like *Madhura Tikta Rasa, Sheeta Veerya, Laghu Guna, Agnivardhana, Pittashamana, Deepana* and *Pachana*. Based on the palatability and easy methods of preparation different recipes are made. Addition of *Ghritha* to the food will enhance the *Agni*, does *Pitta Shamana* and increase the palatability too. *Dugdha* as it is having *Madhura Rasa, Madhura Vipaka, Sheeta Veerya* and it is also mentioned in *Pathya* of *Amlapitta*, so it has been added in the diet chart as it facilitates the *Pittashamana Karma*. Combination of all the *Dhanya, Shaka* and *Ghritha* for the preparation of the food will have the synergetic effect. Based on the data generated the *Aharaja* and *Viharaja Apathya's* are listed under the heading of things to be avoided.

CONCLUSION

Amlapitta occurs when *Prakrutha Pitta* attains *Vidagdata* by the *Aharaja, Viharaja* and *Manasika Nidana*. It has been observed that maximum number of patients exhibits the *Prathyatma Amlapitta Lakshana* with *Urdwaga Amlapitta Samanya Lakshana*. The highest incidence was seen in age group of 17- 25 years. High prevalence rate of *Amlapitta* is due to indulgence in *Ahitakara Ahara, Vihara* and *Manasika Bhavas*. *Aharaja Nidana* like intake of Non-vegetarian food, *Viruddhahara*, Habit of fasting, *Katu* and *Amla Rasa Sevana, Viharaja Nidana* like Habit of Smoking, Tobacco chewing and habit of drinking Tea, Coffee, Alcohol and *Manasika Nidana* like anger by the patient was found. Chronic stages of *Amlapitta* again influenced by vitiation of *Doshas* leads to other

conditions like *Jwara, Atisara, Shotha, Pandhutha* etc. From the above study we could able to identify the important causative factor for *Amlapitta* and positive step taken towards correcting those causative factors i.e. to avoid the *Ahitakara Ahara* and *Vihara Sevana*. From the present study we could able to identify the *Pathya* like *Taptasheetajala Sevana* which shown a significant effect in the prevention and management of *Amlapitta*.

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