

Comparative Study of *Urdhwaga Amlapitta* (Hyperacidity) in Alcoholic and Non-Alcoholic Patients

Dr. Madhuri Rao¹, Dr. Vihar Bidwai², Dr. Ramchandra Rathod³

¹Principal HOD, Professor, Department of *Kayachikitsa*, GMS Ayurved Mahavidyalaya Pusad, India

²Vice Principal, HOD and Associate Professor, Department of *Shalyatantra*, GMS Ayurved Mahavidyalaya Pusad, India

³HOD and Associate Professor, Department of *Shalyatantra*, GMS Ayurved Mahavidyalaya Pusad, India

Abstract: Stomach has gastric juice to digest our eaten food. But if gastric juice doesn't get any food to digest that time stomach in a condition where gastric juice level is high than the normal level is called as Hyperacidity. Here, the aim of the study is to the comparative study of Hyperacidity in alcoholic and non-alcoholic patients without any medication. It is to be seen as the conclusion, the hyperacidity were seen in Alcoholic patients as compared to Non-alcoholic Patients.

Keywords: Non-Alcoholics, *Urdhwaga Amlapitta*, Hyperacidity, Alcoholic, teenagers or youngsters

1. Introduction

In the current century i.e. 21st century, people try to acquire a new lifestyle and adapt themselves to fit in the higher standards. The word "Standard" matters a lot for everyone because everyone wants to be perfect and wants to lead towards a higher lifestyle. What does a higher lifestyle mean? Higher lifestyle is none other than fashions, acquiring higher wages jobs. It also contains consumption of Alcohol, Nicotine (smoking) and the most harmful is fast food^[1].

Although the recorded alcohol consumption per capita has risen steadily in developing countries, alarmingly so in India. The per capita consumption of alcohol by adults^[2] in India increased by 106.7% between 1970-72 & 1994-96^[3]. Today consumption of alcohol has become a trend or you may say it has become fashion & common purpose is to get drunk^[4]. Estimated worldwide per capita alcohol consumption in India, mostly spirits 2.0 per drinker-12.9, in that Males-26% & Females-4% (WHO-1996) but 5th of this group about 14 million peoples are dependent drinkers requiring 'HELP'. A Non-Governmental Organization (NGO) & Alcohol and Drug Information center India alarmingly the study found that the "average age of initiation" had dropped from 19yrs to 13yrs in the past decades & even "Drinking water & Apple juice is packaged by alcohol companies which are responsible to attracts the youngsters towards them"^[5,6].

Based on WHO, NGO, IWSR, CDC, etc. based results indicate that alcohol is a very abusive substance & has led to many diseases in which some are very severe or major like gastritis, acid peptic disease, liver cirrhosis, chronic liver disease, cancer, hypertension- progressing to a heart attack. Some diseases are minor or in other words which are the symptoms of the primary stage of any other major disease and indicates us something is going wrong in our body, Such as, Hyperacidity (hyperchlorhydria)^[7].

In Ayurveda, this is known as *Urdhwaga Amlapitta* which is the type of *Amlapitta Vyadhi* and arises from "Annavaha

Strotas". *Urdhwaga Amlapitta* has become most common in this fast lifestyle. One-third of 75% of the population is suffering from this disease. *Urdhwaga Amlapitta* (hyperacidity) is not only seen in alcoholics but also non-alcoholics. Because of a more hectic and stressful lifestyle which affects general health, excessive intake of *amla*, *katu*, *tikshna*, *ahara* i.e faulty dietary habits, junk food, fast food, packed food, cold drinks which has now become very common. Acharya Madhavkar and Acharya Kashyap Dealt with the study of *Amlapitta* extensively in their *samhitas*, from their observations it can be said that *Madyapana* is one of the *hetu* of *pitta prakop*. If *madya* (alcohol) turns out to be the main cause of *Urdhwaga Amlapitta* preventive majors can be adopted through education and counseling^[8]. The first line of treatment in Ayurveda is "Nidana Parivarjanam". Hence in this study, an attempt is made to evaluate the role of alcohol in the causation of *Urdhwaga Amlapitta* (Hyperacidity).

2. Material and Methods

Diagnosed '*Urdhwaga Amlapitta*' patients were selected for the study.

2.1 Methodology

a) **Place ofwork:** GMS Ayurved Mahavidyalaya Pusad, India.

b) **Plan ofwork:**

Selection of patient

Minimum 100 patients were included in the study, and divided into two groups,

Alcoholic = 50 Patients

Non-Alcoholic = 50Patients

c) **Inclusive criteria**

- Age group 18-70years
- Sex-Male
- Diagnosed *Urdhwaga Amlapitta* patient.
- Patients who will give written consent

d) Exclusive criteria

- The patients of age group below 18 years and above 70years.
- Old age, pregnancy, GIT operativecases.
- Patient of Malignancy of GITract.
- Patient of any infectiousdiseases.
- Patients who are under the treatment of antibiotics, anti-inflammatory & analgesictreatment.

Note-This is a survey-based study and no medication was given to any of the patients and hence in the course of the study, no bio-medical hazards were caused to thepatients.

e) Criteria forAssessments:

Subjective Criteria

As per text symptoms will be considered

Utklesha	Kukshidaha	Ushnata
Tiktodgara	Aruchi	Mandal
Amlodgara	Amlahikka	Pidaka
Katukodgara	Vamana	Bhrama
Gaurava	Shiroruja	Praseka
Hritadaha	Karadaha	Alasya
Kanthadaha	Charanadaha	Swedanam

Objective Criteria

- Epigastric tenderness in Alcoholic and Non-Alcoholics
- Halitosis (Bad breath) in Alcoholics
- Alcoholic tremors in Alcoholics

f) Sample Size: Minimum 100 patients were selected.

Observations

Observations of Subjective Criteria **Utklesha**

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	1.52	1.344	0.19	<0.0001
Non Alcoholic	0.44	0.5014	0.07091	

Tiktodgara

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	1.84	1.184	0.1675	<0.0001
Non Alcoholic	0.42	0.4986	0.07051	

Amlodgara

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	2.2	0.7559	0.1069	<0.0001
Non Alcoholic	0.72	0.4536	0.06414	

Katukodgara

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	1.94	1.236	0.1748	<0.0001
Non Alcoholic	0.44	0.5014	0.07091	

Gaurava

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	1.02	1.253	0.1773	<0.0001
Non Alcoholic	0.2	0.4041	0.05714	

Hritadaha

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	2.56	0.7329	0.1036	<0.0001
Non Alcoholic	0.88	0.8241	0.1165	

Kanthadaha

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	2.42	0.4986	0.07051	<0.0001
Non Alcoholic	0.74	0.4431	0.06266	

Kukshidaha

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	0.7	1.055	0.1491	0.1556
Non Alcoholic	0.44	0.5014	0.07091	

Aruchi

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	1.84	1.017	0.1439	<0.0001
Non Alcoholic	0.72	0.4536	0.06414	

Amlahikka

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	1.76	1.135	0.1605	<0.0001
Non Alcoholic	0.64	0.4849	0.06857	

Vamana

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	2.1	0.9091	0.1286	<0.0001
Non Alcoholic	0.6	0.4949	0.06999	

Shiroruja

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	2	0.9897	0.14	<0.0001
Non Alcoholic	0.66	0.4785	0.06767	

Karadaha

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	1	1.278	0.1807	0.0021
Non Alcoholic	0.36	0.4849	0.06857	

Charana daha

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	1.3	1.313	0.1857	<0.0001
Non Alcoholic	0.36	0.4849	0.06857	

Ushnata

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	1.84	1.076	0.1522	<0.0001
Non Alcoholic	0.2	0.4041	0.05714	

Mandal

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	1.64	1.064	0.1505	0.0003
Non Alcoholic	0.08	0.274	0.03876	

Pidaka

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	1.54	1.164	0.1647	0.0049
Non Alcoholic	0.04	0.1979	0.02799	

Bhrama

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	0.26	0.7231	0.1023	0.0269
Non Alcoholic	0.02	0.1414	0.02	

Praseka

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	2	0.9897	0.14	<0.0001
Non Alcoholic	0.4	0.4949	0.06999	

Alasya

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	1.94	1.236	0.1748	<0.0001
Non Alcoholic	0.24	0.4314	0.06101	

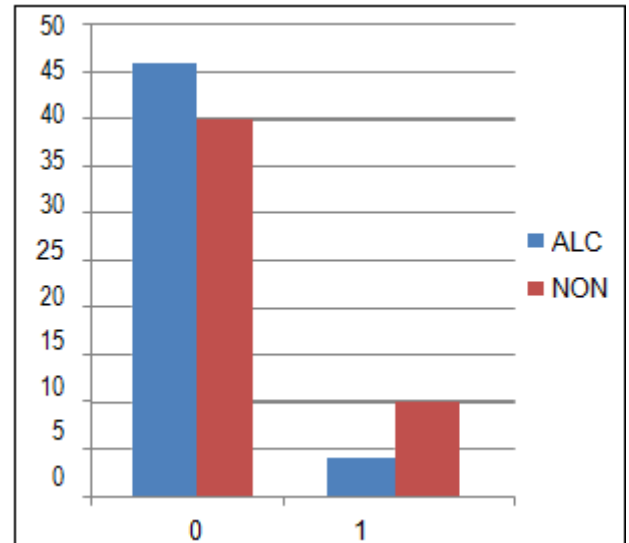
Swedanam

	Mean	Std. Deviation	Std. Error	p-value
Alcoholic	1.94	1.236	0.1748	<0.0001
Non Alcoholic	0.62	0.5303	0.075	

Observations on Objective criteria

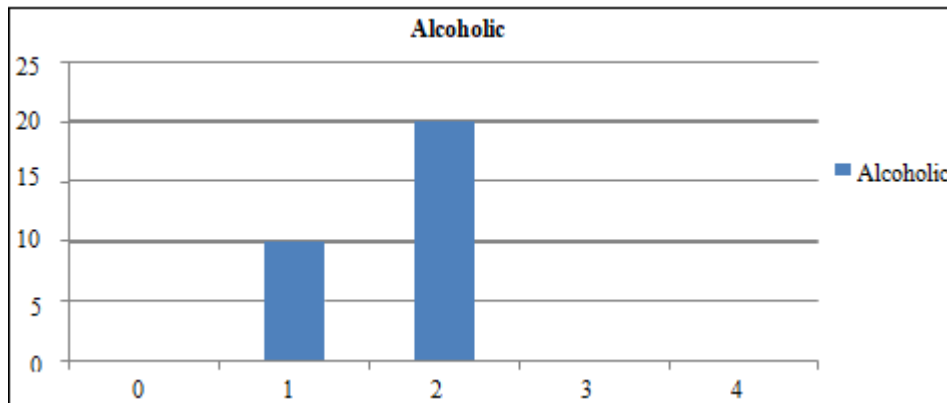
Epigastric Tenderness

Grade	ALC	NON ALC
0	46	40
1	4	10



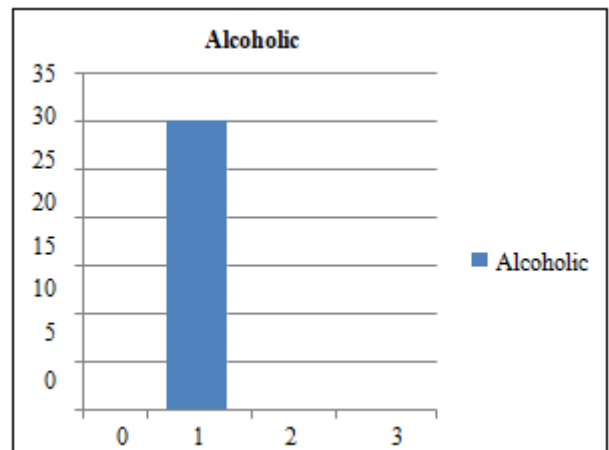
Halitosis

Grade	Alcoholic
0	0
1	10
2	20
3	0
4	0



Alcoholic Tremors

Grade	Alcoholic
0	0
1	30
2	0
3	0



3. Discussion

As per the subject is concerned 100 patients related to *Urdhwaga Amlapitta* vyadhi were studied, in between the 50 patients were Alcoholic and 50 patients were Non-Alcoholic.

Discussion on Symptoms in both the groups

The mean of Utklesha in the Alcoholic group is 1.52 which is significant as compared to the Non-Alcoholics group i.e 0.44.

The mean of Tiktodgara in the Alcoholic group is 1.84 which is significant as compared to the Non-Alcoholics group 0.42.

The mean of Amlodgara in the Alcoholic group is 2.2 which is significant as compared to the Non-Alcoholics group 0.72.

The mean of Katukodgara in the Alcoholic group is 1.94 which is significant as compared to the Non-Alcoholics group 0.44.

The mean of Hritadaha in Alcoholic group is 2.56 which is significant as compared to Non-Alcoholics group 0.56.

The mean of Kanthadaha in Alcoholic group is 2.42 which is significant as compared to Non-Alcoholics group 0.75.

The mean of Amlahikka in Alcoholic group is 1.76 which is significant as compared to Non-Alcoholics group 0.64.

The mean of Vamana in Alcoholic group is 2.1 which is significant as compared to Non-Alcoholics group of 0.6.

The mean of Shiroruja in Alcoholic group is 2 which is significant as compared to Non-Alcoholics group 0.66.

The mean of Ushnata in Alcoholic group is 1.84 which is significant as compared to Non-Alcoholics group 0.2.

The mean of Praseka in Alcoholic group is 2.08 which is significant as compared to Non-Alcoholics group 0.4.

The mean of Alasya in Alcoholic group is 1.94 which is significant as compared to Non-Alcoholics group 0.24.

The mean of Swedanam in Alcoholic group is 1.94 which is significant as compared to Non-Alcoholics group 0.62.

Out of the mentioned 21 symptoms of *Urdhwaga Amlapitta* vyadhi above mentioned 13 symptoms were more significantly seen during the study. Because of the similar guna of Madya – Pitta and viruddha ahara, vihara sevana janya pitta prakopa.

Discussion on demographic data

Age group 18-30 mostly and then 30-40 were more prone to the *Urdhwaga Amlapitta* in alcoholics and non-alcoholics also. Due to Tarunyavastha or madhyamavastha of vaya which is the Pitta Pradhana Avastha of Vaya.

Most groups of students were affected by the symptoms of *Urdhwaga Amlapitta* Vyadhi. In the present study, 50 alcoholics out of 19 patients were students and in non-alcoholics, 50 out of 21 patients are a student. This means it is most significant in youngsters. Because of adopted foreign culture, fast life, excessive competition, addiction, etc. This study also suggests that students are more prone to Alcoholism.

According to the Socio-economical Status of patients in Alcoholic's group, the mostly middle-class population were affected or having the severity of symptoms, the secondarily lower class were affected, because of Whisky and Country alcohol beverage mainly i.e. Middle class 22 out of 50

patients and Lower class 16 patients out of 50 patients and lastly the Higherclass.

In Non-Alcoholics middle class was found mostly affected i.e. 21 patients out of 50 patients and the higher class were secondarily affected i.e. 20 out of 50 patients.

In Alcoholic type of Alcoholic beverage

The 4 types of alcoholic beverages were included in the study Whisky, Beer, Rum, Country alcohol, in between them out of 50 patients 27 patients consuming Whisky and secondarily found was Country alcohol with 11 patients out of 50. Means who are taking Whisky and country alcohol beverage they were having most exacerbated symptoms as compared to the others. Because Whisky is having up to 43% of Alcohol and Country.

Alcohol having more than approximate 43% Alcohol. That's why they were highly concentrated in nature. According to a study Alcoholics are more prone to the *Urdhwaga Amlapitta* vyadhi as compared to Non-Alcoholics or the severity of Laxana's of *Urdhwaga Amlapitta* vyadhi were seen in Alcoholics as compared to Non-Alcoholics.

4. Conclusion

- 1) As compared to the Non-Alcoholics Alcoholics group were more prone to the *Urdhwaga Amlapitta* vyadhi.
- 2) Tendencies of excessive Alcohol consumption were most frequent in teenagers or youngsters as age group mostly suffered from *Urdhwaga Amlapitta* were 18-30 and 30-40.
- 3) The acute exacerbation of *Urdhwaga Amlapitta* symptoms was seen in Alcoholics as compared to Non-Alcoholics.
- 4) The severity of symptoms of *Urdhwaga Amlapitta* was seen in the Alcoholic's group.
- 5) *Urdhwaga Amlapitta* is a disease that is seen in both the groups Alcoholic and Non-Alcoholic. In Alcoholic's, the Alcohol is responsible for the Pitta Prakopa and concurrently Prakupita Pitta is responsible for the etiopathogenesis of *Urdhwaga Amlapitta* and Non-Alcoholic's viruddha ahara, vihara caused Pitta Prakopa which produces *Urdhwaga Amlapitta* vyadhi, only the difference is that severity and short duration for Laxana utpatti of *Urdhwaga Amlapitta* vyadhi is more in Alcoholic's than Non-Alcoholics

References

- [1] Moodie R, Stuckler D, Monteiro C, Sheron N, Neal B, Thamarangsi T, Lincoln P, Casswell S, Lancet NCD Action Group. Profits and pandemics: prevention of harmful effects of tobacco, alcohol, and ultra-processed food and drink industries. *The lancet*. 2013 Feb 23;381(9867):670-9.
- [2] Murray CJ, Lopez AD. Global mortality, disability & the contribution of risk factors: Global burden of disease study. *Lancet* 1997.
- [3] Rajendra SD. Community health cell, for the asia social forum, 2-7 Jan 2003. 3. WHO 2001:103-14.
- [4] Mattice S. Drinking to Get Drunk: Pleasure, Creativity,

- and Social Harmony in Greece and China. *Comparative and Continental Philosophy*. 2011 Feb 13;3(2):243-53.
- [5] Purves R, Stead M, Eadie D. "What are you meant to do when you see it everywhere?": Young people, alcohol packaging and digital media.
- [6] Pickard M, Bates L, Dorian M, Greig H, Saint D. Alcohol and drug use in second-year medical students at the University of Leeds. *Medical education*. 2000 Feb;34(2):148-50.
- [7] Song Y, Salinas D, Nielson DW, Verkman AS. Hyperacidity of secreted fluid from submucosal glands in early cystic fibrosis. *American Journal of Physiology-Cell Physiology*. 2006 Mar;290(3):C741-9.
- [8] Meenakshi K, Vinteshwari N, Minaxi J, Vartika S. Effectiveness of Ayurveda treatment in *Urdhwaga Amlapitta*: A clinical evaluation. *Journal of Ayurveda and integrative medicine*. 2021 Jan 1;12(1):87-92.