

“Study of Correlation of *Viruddhahara* in the causation of *Amlapitta* among Wardha District population- A Case control Survey Study”

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Abstract

Background: According to *Charak Acharya*, *Viruddhahara* is described as foods and remedies that disrupts the *Doshas* from its regular seat but do not evict it from the body.

In present era, due to less time and excessive work load people moving towards fast life style and consuming *Viruddhahara*, which lead to manifestation of *Amlapitta*. *Amlapitta* is one of the commonest *vyadhi* of *Annavahasrotas* (Gastrointestinal track disorder). Based on this study, we can conduct community based study to educate them to adopt the healthy dietary pattern in a preventive manner. Due to today's modern lifestyle & food people face these problems and the incidence of the *Amlapitta* disease increases dramatically everywhere.

Aim and Objectives:- To evaluate the correlation of *Viruddhahara sevana* in the causation of *Amlapitta* in Wardha district population & to study the etiology of *Amlapitta* among Wardha district population.

Methodology: The proposed Case control study, 300 subjects will be divided into two groups. In Group A (Case): Subjects with the signs and symptoms of *Amlapitta*. In Group B (control): Subjects are clinically normal (healthy) and taking *Viruddhahara*. The data based on the objectives will be collected by conducting survey based on the questionnaire framed.

Results: The data will be analyzed to elicit correlation between *Viruddhahara* in the causation of *Amlapitta*.

Conclusion: It may conclude that there is a correlation between *Viruddhahara* in the causation of *Amlapitta*. Avoiding *Viruddhahara* consumption is essential for disease prevention.

Keywords: *Viruddhahara*, Incompatible diet, *Amlapitta*, *Dosha*,

Introduction

Ahara is one of the important *Upastambha* (sub-pillars) for a healthy living being among the *Trividh Upastambha* (sub-pillars) of the body¹.

यत्किञ्चिद्दोषमासाव्यननिर्हरतिकायतः|

आहारजातं तत्सर्वमहितायोपपद्यते|| (Ch.Su. 26/85)

According to *Charak Acharya*, *Viruddhahara* is described as foods (incompatible diet) and remedies (medicines) that disrupt the *doshas* from its regular seat but do not evict it from the body². *Viruddhahara* may result from consuming the improper combination of foods that have undergone that have undergone the wrong processing, are being ingested in the wrong dose, at the wrong time of day, or during the wrong season³. *Viruddhahara* (incompatible diet) classification according to the *Ayurvedic* literature, the following 18 categories of foods are considered contradictory.⁴

1. *Desha Viruddha* (Place)- To have dry and sharp substances in dry region, unctuous substances in marshy land.⁵

2. *Kala Viruddha* (time)- Intake of cold and dry substances in winter, pungent and hot substances in summer⁶.

3. *Agni Viruddha* (digestive fire)- Intake of heavy food when the power of digestion is low, intake of light food when the power of digestion is sharp and intake of food at variance with irregular and normal power of digestion.

4. *Matra Viruddha* (quantity)- Intake of honey and ghee in equal quantity. In Trividh kukshiya chapter, *Acharya Charak* clearly mentions that one should eat food only upto one third part of stomach. Overeating leads to *Agnivaishamyā* and several diseases.⁷

5. *Satmya Viruddha* (habit)- Intake of sweet and cold substance by person accustomed to pungent substance. In such situations body is in defensive mode, leads to indigestion and considers the food item as a foreign material and try to expel it from the body.

6. *Dosha Viruddha* (body humors)- Utilization of drugs, diets and regimen having similar qualities with *dosha*, but at variance with the habit of the individual.⁸

7. *Sanskar Viruddha* (mode of preparation)- Drugs and diets which, when prepared in particular way produced poisonous effects. Eg. Meat of peacock roasted on a castor spit.⁹

8. *Veerya Viruddha* (potency)- Substance having cold potency in combination with those of hot potency.¹⁰

9. *Koshtha Viruddha* (bowel tendency)- To give less quantity with less potency and less forming food to a person of costive bowel. Administration of more quantity heavy and more stool forming food to a person having laxated bowel.¹¹

10. *Avastha Viruddha* (state of health)- Intake of *Vata* aggravating food by a person after exertion physical exertion or after sleep or drowsiness.¹²

11. *Krama Viruddha* (sequence)- If a person takes food before his bowel and urination or when he doesnot have appetite or after his hunger have been aggravating.¹³ There is specific sequence of intake of food explained in *Aharvidhividhana*. *Madhura amla lavana katu tikta kashaya* is the *krama* of *Rasa* to be taken while eating.

12. *Parihara Viruddha* (contraindication)- Intake of hot things after taking pork.

13. *Upachara Viruddha* (treatment)- cold things after taking ghee.¹⁴

14. *Paaka Viruddha* (cooking)- Preparation of food with bad or rooten fuel and under cooking, over cooking or burning.

15. *Samyoga Viruddha* (combination)- Intake of sour substance with milk.

16. *Hridaya Viruddha* (interest)- Intake of unpleasant food.¹⁵

17. *Sampad Viruddha* (quality)- Intake of substances that are not mature, over matured or purified.¹⁶

18. *Vidhi Viruddha* (codes)- Taking meals in public place¹⁷.

Charak Acharya, mentioned so many disease due to *Viruddhahara*, one of them is *Amlapitta*.¹⁸ Heartburn, food reactions, appetite loss, gastrointestinal pain, sour belching, nausea, and other symptoms have increased in frequency in recent years, and all of these conditions can be categorized as *Amlapitta*.¹⁹

Need of the study: In present era, due to less time and excessive work load people moving towards fast life style and consuming *Viruddhahara*, which lead to manifestation of *Amlapitta*. We blindly

follow the wrong dietary habits and suffer from many diseases. By means of this study, we will evaluate the role of *Viruddhahara* in *Amlapitta*. To generate an awareness regarding the *Viruddhahara* (improper food habits).It's easy to prevent *Viruddhaharajanya* disease which are commonly found in association ie. *Amlapitta*.

Research Question: Whether there is any positive correlation between *Viruddhahara* and in the causation of *Amlapitta*?

Hypothesis:

Alternate Hypothesis(H₁) : There is positive correlation between *Viruddhahara* and in the causation of *Amlapitta*.

Null Hypothesis (H₀) : There is NO positive correlation between *Viruddhahara* and in the causation of *Amlapitta*.

Aims: To evaluate the correlation of *Viruddhahara* sevana in the causation of *Amlapitta* in Wardha district population.

Objectives:

To study the etiology of *Amlapitta* & to study the types of *Viruddhahara* sevana among Wardha district population.

To evaluate the correlation of *Viruddhahara* sevana in the causation of *Amlapitta* among Wardha district population.

RESEARCH GAP ANALYSIS

Thesis (previous work done)

Sr.No.	Name Of Research	Name Of Researcher	Conclusion Of Author	Time (In Year)	Remark Of Scholar

1.	Critical study of Charakokta sanyogViruddha and Vishamashna in an etiology of vicharchika ie.Eczema,Tilak Maharashtra Vidyapeeth Pune	Vd. Madhuri hushey pachghare	<i>Viruddhahara &Vishamashana</i> are an etiological factors in genesis and aggravation of <i>Vicharchika</i> i.e. Eczema	2009-2012	No Clinical study done
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List of published articles with brief conclusions:

Sr.No	Name Of Article	Year	Remark of Scholar
1.	Talekar Manisha, Prevalence of <i>Viruddha Ahara</i> in Patients Attending Arogyashala of N.I.A and Its Effects on Health	2015	Not focussed on which type of Viruddahara responsible and its etiopathology
2.	Meghana Kulkarni,A cross-sectional study to assess the incompatible dietary behavior of patients	2016	Sample size is less and which types of viruddahara consumption affects the occurrence of the skin diseases is not

	suffering from skin diseases: A pilot study		clear.
3.	Parvathy Ravikumar, Effect Of <i>Viruddhahara</i> as Dooshivisha In The Manifestation of Twakvikaras-A Survey Study	2017	Sample size less. Not focussed on types of <i>Viruddhahara</i> .
4.	Sudhir M. Kandekar, Effects Of <i>Viruddha Aahar</i> (Fast Food) On <i>Twacha</i> (Skin) - A Survey Study.	2020	Only setup relationship between <i>Viruddhahara</i> and <i>Twak rog</i> (skin diseases) on the basis of frequency of <i>viruddhahara</i> . Not focus on which type is more prone.

There is no research found that show relation between “*Viruddhahara* and *Amlapitta*”. So this is grey area to rule out the exact correlation between *Viruddhahara* and *Amlapitta*. To establish the correlation between *Viruddhahara* and *Amlapitta*. This current observational study will fulfill the research gap. However, comparative studies between the diseased and healthy subjects regarding the *Viruddhahara* and *Amlapitta* diseases have never been studied. Moreover, the concept of *Viruddhahara* has not been explored in modern medicine. This study was conducted to find out the prevalence of presence of consumption of types of *Viruddhahara* (Incompatible dietary behavior), among the people with *Amlapitta* diseases in comparison to healthy controls in Wardha district population.

Materials & Methods: Source of data: Subjects with the clinical signs & symptoms of *Amlapitta* will be selected from IPD & OPD of MGAC Hospital & RC and camps conducted by MGACH, Salod (Hirapur), Wardha.

Total sample size (n): - 300

Group A: Case Group (Disease) -150

Group B: Control Group (Healthy) -150

Sampling Procedure: Simple stratified sampling

Type of Study: Observational study

Study design: Case Control study

Study duration: 1.8 year

Case Definition:

- For case group: The subjects with the signs and symptoms of *Amlapitta*. Heartburn, regurgitation, the feeling of food caught in your throat, coughing, chest pain, Problem swallowing, vomiting, sore throat and hoarseness taking *Viruddhahara*.
- For control group: The subjects are clinically normal (healthy) and taking *Viruddhahara*.

Data collection tools & process

Inclusion criteria: Criteria for selection

Group A:

1. Subjects with typical signs and symptoms of *Amlapitta*. [Sample size (n)=150]
2. Subjects who are willing to give consent.
3. Subjects with Age group of 17 to 60 years.

- Subjects irrespective of Gender, religion, socio-economic status will be taken for the study

Group B:

- Subjects with Healthy condition [Sample size (n)=150]
- Subjects who are willing to give consent.
- Subjects with Age group of 17 to 60 years.
- Individuals irrespective of Gender, religion, socio-economic status will be taken for the study.

Exclusion criteria:

- Subjects who are not willing to give consent.
- Age of Subjects less than 17 years and above 60 years.
- Pregnant and lactating women will be excluded.
- Subjects on NSAID, steroids and other such drug persons with history of smoking, tobacco, alcohol and habitual addiction.
- Subjects with Z.E. (Zollinger-Ellison Syndrome) will be excluded.
- Subjects with Congenital abnormalities of GI tract will be excluded.

Assessment criteria

Subjective criteria

For the case group	For the Control group (Healthy Subjects)
1. <i>Amlodgara,</i>	Without sign and symptoms of any disease taking <i>Viruddhahara</i>
2. <i>Hriddaha,</i>	
3. <i>Kanthadaha,</i>	
4. <i>Udarashoola,</i>	

5. <i>Utklesha</i> ,
6. <i>Shoola</i> ,
7. <i>Klama</i> ,
8. <i>Aruchi</i> ,
9. <i>Avipaka</i>

Objective parameters:

1. Validated Questionnaire of *Viruddhahara*.
2. The Reflux Disease Questionnaire (RESQ-7)

Analysis Plan: -Appropriate statistical tests will be applied.

Method: Literature review search, plan of work, Blue print in the form of flow chart, Questionnaire framed, Data collection, and etiopathological evaluation of correlation between *Virruddhahara* & *Amlapitta* will be observe and statistical analysis.

Data collection method : Simple stratified sampling.

Data Management: The data coding will be done by principle investigator.

Statistical Method: Appropriate statistical test will be applied, after analyzing the data.

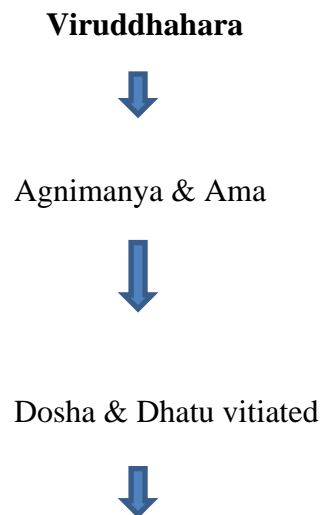
Primary outcomes: We will observe positive correlation between *Viruddhahara* & *amlapitta*. Higher association will found in cases compared to control group.

Secondary outcomes: Our study will create awareness about *Virruddhahara* in Wardha district population.

Discussion :-In present era , due to changing life, urbanization and fascination of western culture, food habits of society are changing. But there is a big gap between tasty and healthy. If we make a balance between two, then it is fine otherwise not.

Description available in *Charak Samhita* explains *Amlapitta* as one of the diseases which is the outcome of *Viruddhahara* (incompatible diet). *Ama visha* (undigested food) produced due to *ajirna* (indigestion) enters in *amashaya* mixes with *pitta dosha* produces *Amlapitta vyadhi*. Though it is stated that regular consumption of *Viruddhahara* causes several diseases, in day to day life. It will observed that many people who consume *Viruddhahara* remain unaffected. *Acharya Charak*, has explained this condition too. He described that a person who is young in age and performs regular exercise, who is habitual to *Viruddhahara*, whose *Agni* (digestive power) is high & has consumed *Viruddhahara* in less quantity remains unaffected of it²⁰.

Flow chart of Viruddhahara



Amlapitta

At last it will be concluded that individuals consuming *Virruddhahara*, regularly suffering from *Amlapitta* & from 18 types of *Virruddhahara* some factor will more prone to *Amlapitta*.

Scope and Implications of the proposed study-

1. If there is positive association found between *Viruddhahara* and *Amlapitta*.
2. This study will give a picture about the prevalence of different types of *Viruddhahara* among *Amlapitta* patients of Wardha district population. Based on that, we can conduct community based study to educate them to adopt the healthy dietary pattern in a preventive manner.
3. This kind of observational study helps to revalidate the concept of *Viruddhahara* and establishes its association with the causation of *Amlapitta* with a robust evidence.
4. Early prevention of *Amlapitta* by only evaluating the type of incompatible diet may prevent future Gastro Intestinal Complications (Upadrava).

Ethics and Dissemination: Research ethical approval: After critical evaluation and presentation the ethical committee has approved the research topic reference No.- MGACH/IEC/July-2022/565

Consent assent: Patient will be given detail information regarding *Virruddhahara* & *Amlapitta* in his own language.

Conclusion: Conclusion will be mentioned after the deliberate and analyzing data.

Ethical Clearance: Taken from institutional ethics committee.

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