

CONCEPTUAL STUDY OF GARA VISHA, RELATION WITH FOOD POISONING

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ABSTRACT

In *Ayurveda* the *Gara visha* is considered to be as one of the form of *Kritrim visha*. It is formed by combination of two or more than two poisonous or non-poisonous drugs, which ultimately affects the whole body by vitiating all the *doshas*, *dhatu*s and *srotas* in the body. *Agad tantra* which is a branch of *Ashtang Ayurveda* has given more emphasis over *Garavisha* (Artificial poisons) as well as natural poisons i.e. *Sthavar* and *Jangam visha*. Detailed explanation of the *Garavish*, its definition, sign and symptoms, mode of administration and treatment has been described in our *samhitas*. Food poisoning is the resulting from ingestion of contaminated bacterial and non-bacterial products, can be co-relate with *Gara visha*. It is caused due to bacterial infection of food or drink. The non-bacterial product includes poisons like plants, animal derivatives, chemically inter reaction of food from packing materials etc. *Gara vish* is nothing but *samyogaj vish* when two compounds react with each other and it may form toxin which lead to food poisoning. foods and drinks as a additives or adulterants which causes chronic poisoning and this *gara vish* also induces food poisoning, if consume persistently since prolong period. This article review base on the concept of *Gara visha* which has significant role in causing toxic symptoms and also it can called food poisoning in contemporary science due to its various uses in present society and *Ayurveda* offers effective management also.

KEYWORDS: *Garavish*, *Samyogajvish*, *Ayurveda*, Food poisoning, etc.

INTRODUCTION

Agad tantra is the science which deals with the study of poisons, their action, detection and treatment. *Agad tantra* is one of the branch of *Ashtanga Ayurveda*, which deals with natural poison as well as artificial toxins, their harmful effects and treatment also. Natural toxins which are *Sthavara*, *Jangama visha*, and artificial toxin as *Gara visha* are explained in *Agad tantra*. *Gara visha* is prepared artificially by mixture of various substances to produce various disease. *Kritrim visha* is called as *gara vish* according to *vagbhata*.^[1] *Gara Visha* means the *Dravya* (substance) which causes *Vishaad* (sorrow or depression) is also known as *Visha*. *Laghu*, *ruksha*, *aashu*, *vishad*, *vyavayi*, *tikshna*, *vikaashi*, *sookshma*, *ushna*, *anirdeshya rasa* are the ten qualities of poisonous drugs.^[2] Poison is a substance which when administered, inhaled or ingested capable of acting deleteriously on human body and produces ill health. Poison may be synthetic, mineral, vegetable or of animal origin,^[3] *gara visha* is one of them.

Gara visha may be given by *Anna* (food), *Pana* (drinks), *Anulepana* (application), *Ustadana* (massage), *Pariṣeka* (bath), *Anjana* (eye lid application) etc several method

mentioned in *samhita*.^[4] Out of these methods, the first one is *Anna* (food). *Anna* is very easy to get adulterated with non-poisonous or poisonous substances and produce hazard effect. *Ayurveda* has mentioned that the various human waste like *raj*, *artav*, (menstrual blood), the powder of insects and *virudha aushad bhashma* used to produce *gara visha* along with food. Since ancient time *Anna* is used as media. Today's scenario is also like that, but this etiological factor of *gara visha* are not being used now a days because of its weird odour and taste and chances to expose. Today's era, there are so many food additives such as colouring agents, preservatives, sweeteners, soft drinks, and additives milk adulterant has been used by continuously in the form of junk foods/ fast food since many years. There are so many toxic substance has been taken by human being which act equally as *gara visha* along with foods and drinks as a additives or adulterants which causes chronic poisoning and this *gara vish* also induces food poisoning, if consume persistently for prolong period.^[5] Most of the carbonated and soft drinks require additives and preservatives having chemical substances which are harmful to human body. Drinking water also having many types of microorganisms, pesticides, heavy metals.

Food additives and preservatives which are present in our common foods that may cause food poisoning.^[6]

AIM AND OBJECTIVES

1. To study the concept of *Gara visha* according to *Ayurveda*.
2. To study the relation between *Gara vish* and food poisoning.

Derivation/Nirukti

The 'Gara' word is derived from the root word "gru" with suffix "ach" which means to digluted or could be degluted which generally indicates the liquid form. From one aspect this word (*Gara*) meaning also come as poison.^[7,8]

Definition *Brihatry* and *laghutry* has been mentioned about *Garavisha*.

Charak Samhita: *Gara visha* is a *samyogaja visha* (artificial poison) which exerts toxic effect after interval of sometime and as such does not kill the patient instantly. It produces many disease. *Gara visha* is *Kalantara-avipaki*; it means *Gara visha* is not to digested early it takes long time to digest and it's not fatal.^[2]

Shushrut Samhita: The pulverized bodies of insect poisoning, as they do, the characteristic features of *Dushi visha* (enfeebled poison) which is laying inherent in human body; is turned into a *Gara* or chemical poison if administrated internally with anymedicine or externally with any plaster/*lepa*.^[9]

Vagbhatta Samhita: Combination of parts of the body and excreta of different animals, incompatible drugs, ashes and poisonous substance which having mild potency; is known as *Garvisha*,^[1] *Vagbhatta* is classified the poison into two types. One is the *Akritrim visha*

(natural poison) which is subdivided into two i.e. *sthavaram* and *jangam visha*. The other one is the *kritrim visha* which is called as *Garvisha* (unnatural or chemically prepared poison).

According to *Laghutry Bhavprakash*, *Yogratmakar*, *Sharangdhar Samhita*, *kritrim visha* is two; one which is prepared by combination of two poisonous substances called *dushi visha*. Another one which is prepared by combination of two non-poisonous substances called as *Garvisha*.^[10,11,12] *Chakrapani*, *Kashyap Samhita* and *Madhav Nidana* described the *samyogaj visha* is one of two types one which is prepared by non-poisonous substance called as *Gara visha* and another one which is prepared by poisonous substance called as *kritrim visha*.^[13,7,14]

Gara Visha Adhithana^[4] Describe in *sushrut samhita* as the method is given to poison may be considered as *Gara visha Adhithana*, these are *Anna* (food), *Pana* (drinks), *Dantakastha* (tooth brush), *Kasaya* (decoction), *Nasya* (nasal drops), *Dhuma* (fumigation), *Abharana* (ornaments), *Anulepana* (application), *Ustadana* (massage), *Parisheka* (bath), *Anjana* (eye lid application), *Vastra* (clothes), *Sayya* (beds), *Paduka* (foot-wears).

Methods of Administration

Some women, who wish to keep their husbands under their control and women who are intimate with the king administer *gara visha* (artificial poison) mixed with food. Administration is by the combination of parts of the body and excreta of different animals, in compatible drugs, ashes and poisonous substance of mild potency is known as *gara visha*.^[1] or mixing the food with sweat, menstrual blood, and different kind of excreta of their body.^[2] As a result the person who consumes this *gara vish* becomes emaciated day by day and suffers from many diseases.

Symptoms / Lakshana of Garvisha

Acharya charak ^[2]	Vagbhatta ^[15]	Yogratnakar ^[11]
-Pandu (pallor skin) -Krisha -Poor digestion -Flatulence -Udarrog -Edema on hands and feet -Grahani -Rajyakshma -Gulma -Wasting -Fever -In dreams he mostly sees cats, jackals, moongoos, monkey, dried rives and trees. -In dreams having lost his sense organs, he sees himself as fair complexion or devoid of ears and nose.	-Pandurog - Udarrog -Mandagni -kaas, shwas -fever -Adhman - Edema -Increase the length of lever stomach& spleen -Dhatu kshaya	-Pandu -Krisha -Mandagni -Laziness -Heaviness -Cough -Dysponea -Loss of strength -Hemorrhage -Edema -Yellow discoloration of eyes

Diagnosis^[2] *Gara visha* is often eaten mistakenly then the patient does not feel anything wrong, immediately and can be treated at the onset of symptoms. If doctor suspect poisoning before starting the treatment the

physician should examine and should ask as to what when and with whom he has eaten. After obtaining the information he should start a treatment as soon as possible by emesis.

Treatment/ *Gara Vish Chikitsa*

Acharya charak ^[2]	Vagbhatta ^[15]	Yogratnakar ^[11]
<p>1. Vaman- administrate fine powder of copper along with honey for cleansing the heart. (<i>hrudaya shuddhi</i>)</p> <p>2. Suvarnaprash-patient should be given one <i>shana</i> of the powder of <i>suvarna</i> [gold]. <i>Suvarna</i> controls all poisons and poisonous combinations. Poison does not stay in the body on taking <i>suvarna</i> like water on lotus leaf.</p> <p>3. Agadpana- buffalo ghee cooked with <i>nagdanti</i>, <i>trivittit</i>, <i>danti dravanti</i>, milk latex of <i>snuhi</i> and <i>madanfala</i> along with one <i>adaka</i> of cow's urine is useful in curing patients suffering from the poisons of snake's bite, insects and from <i>gara</i>.</p>	<p>1. Vaman</p> <p>2. Sharkara-suvarnadi leha</p> <p>3. Suwarnamakshika and <i>suwarnabhasma</i> when given with sugar and honey cure <i>garvisha</i>.</p> <p>4. Treatment of mandagni The powder of <i>murva</i>, <i>amruta</i>, <i>tagar</i>, <i>pipli</i>, <i>patol</i>, <i>chavya</i>, <i>chitrak</i>, <i>vacha</i>, <i>musta</i>, <i>vidanga</i> mixed with either butter milk, warm water, water of curds, meat soup or sour liquid should be consumed by the patient having <i>Mandagni</i>, destroyed by artificial poisoning.</p> <p>5. Treatment of pain, <i>trishna</i>, <i>kas</i>, <i>shwas</i>, <i>hikka</i>, <i>jwar updrava-ghrita</i> and <i>trifala</i> juice with <i>makoy</i> shake- <i>shwas kas nashak</i>. -decoction prepared from the meat of the pigeon, <i>shathi</i> and <i>pushkarmul</i> cooled and consume.³¹</p> <p>6. Treatment in damaged skin Apply <i>lepaof renuka</i>, <i>chandan</i>, <i>priyangu</i>, <i>khason</i> skin.</p> <p>7. Treatment of ojkhaya <i>Ubtan</i> of <i>manjishta</i>, <i>apamarg</i>, <i>neem</i>, <i>haldi</i>, <i>papal</i> and <i>chandan</i>.</p> <p>8. Milk and ghee is supposed to be the best diet in <i>gara visha</i>.</p> <p>9. Nagdantiyadi ghrut</p>	<p>1. sharkarasuvarnadi leha.</p> <p>2. Putrajivmajja Yog.</p> <p>3. Grihdhumadi grita.</p> <p>4. Paravatadi hima.</p> <p>5. Garnashan ras.</p>

A MODERN REVIEW

According to modern *Gara visha* can be co-relate with food poisoning, *gara visha* can be one of cause which produces food poisoning.

Food Poisoning^[16]

Food poisoning is administration of toxic substance in body with food because of improper handling, cooking and packing of food articles. Food poisoning, also called food borne illness, which is caused by eating contaminated food. Food poisoning caused by infectious

organisms including bacteria, viruses and parasites or their toxins are the most common causes and is restricted to poisoning by articles of food due to contaminated toxic principle, metallic contamination and food allergy. This poisoning is caused by salmonella group of organisms, enterotoxins formed by staphylococcus. Another type of food poisoning is botulinism caused by *clostridium botulinum*; multiplies in food and produces exotoxin before it is consumed. This toxin are produced in stomach along with food it can be considered as *Gara visha*.

Causes of Food Poisoning^[17]

Microbial Contamination

Bacteria	Viruses	Protozoa	Fungi
<ul style="list-style-type: none"> -Bacillus cereus -Staphylococcus aureus -Salmonella group (except S. typhi) -Shigella -Vibrio -Escherichia coli -Campylobacter -Yersinia enterocolitis -Clostridium 	<ul style="list-style-type: none"> -Rotavirus -Adenovirus -Parvovirus 	<ul style="list-style-type: none"> -Giardia lamblia 	<ul style="list-style-type: none"> -Aspergillus flavus -Fusarium roseum

Nonmicrobial Contamination

Vegetable origin	Animal sources	Chemicals
-Lathyrus sativus -Mushrooms -Argemone Mexicana	-Poisonous fish like shell fish etc. -Mussel	-Flavouring agents -Colouring agents -Preservatives

Commonly Symptoms- Commonly symptoms are seen in food poisoning as mention below, symptoms may be differ cause it depends on the causative factors.^[18] Common cases of food poisoning will typically include at least three of the following symptoms:

Commonly symptoms	Life-threatening food poisoning symptoms
abdominal cramps	difficulty in seeing or speaking
Diarrhoea	diarrhoea persisting for more than three days
Nausea, Vomiting	symptoms of severe dehydration, which may include dry mouth, passing little to no urine, and difficulty keeping fluids down
Loss of appetite	bloody urine
Mild fever	a fever higher than 101.5°F
Headache	

DISCUSSION

The concept of *Gara visha* explained in *Agada tantra* and it has wide application. Today's life style is changed, prolonged uses of adulterated food or incompatible food and people who are following bad habits are effected by *Gara visha*. It is mainly classified two types, 1. Nirviṣha dravya samayogaja viṣha- which is combination of two non-poisonous substance, 2. Saviṣha dravya samayogaja viṣha- it is combination of two or more than two poisonous substance. Hence *Gara visha* is mixture of various artificial substances which produces toxic effect on human body. *Gara visha* is prepared artificially by the mixture of various substances to produce various diseases. *Garavisha* is classified under *kritrima* or *samyogaja visha* by *Acharyas*. *Acharya Charaka* has told that *gara visha* is *Kalantara-avipaki* (delayed absorption of digestive substance) and produces chronic toxicity. The toxicogenesis of food, milk and drink additives is near about similar to that of *gara visha* which reduces *jatharangi* (digestion) and absorption in gastrointestinal tract. This study has illustrated the correlation of *Gara viṣha* and food poisoning. *Gara visha* is a cause to produce food poisoning because *gara visha* is a *samyogaj visha*. When two or more things meet each other and after this reaction, toxin formation which can lead to food poisoning, and its various health hazard effects on body.

CONCLUSION

Ayurveda has explained *Garaviṣha* as artificial poison. Wonderful concept of *Gara visha* explained by *Ayurveda*. The possibility of exposure of toxins due to using various chemical agent, food preservatives and many more things in our changing lifestyle is nothing but *gara visha*. *Gara visha* is nothing but composition of two non-toxic elements that lead to form toxic element which deteriorate well-being of individual. Unknowingly in our routine life activities we are exposed to such type of toxic materials. Due to the changing life style people are exposed to one or other kind of poisons in their day to

day life. This exposure is in the form of food, drinks, drugs etc. If this type of toxication in food it lead to food poisoning and it can cause serious health hazards such as allergy, asthma, carcinogenic changes, skin disorders, neurological changes, etc. This article aims to understanding concept of *Gara visha* and relation between food poisoning and *gara visha* and its health hazards and its *Ayurvedic* management by detoxification.

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