



## Review Article

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### ROLE OF VISHAGHNA YOGAS (ANTI-TOXIC FORMULATIONS) IN CURRENT SCENARIO: A REVIEW

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#### ABSTRACT

In current scenario, most of the diseases are caused due to unconventional etiology. For this unconventional etiology modern science focuses on oxidative stress caused by toxicants/chemicals while Agad Tantra (Ayurvedic perspective of toxicology) focuses on Viruddha Ahar (Incompatible diet), Gara Visha (Concocted poison) and Dooshi Visha (Denatured /Latent poison). Oxidative stress can be correlated with the concept of Viruddha ahar, Gara visha and Dooshi visha. When a disease is caused by unconventional etiology, it can be managed effectively by using principles of Agad Tantra. Most of the diseases in current scenario need Nirvishikarana (Detoxification). Hence Anti toxic formulations mentioned in Ayurveda which include single antitoxic herb, combination of anti-toxic herbs, herbs-minerals combinations etc. can be very useful in such diseased conditions.

**Keywords:** Anti toxic formulations, Vishaghna Dravya, Agad Tantra, Oxidative Stress, Antioxidant

#### INTRODUCTION

Ayurveda is an ancient Indian System of Medicine. Ayurveda, the science of life is evolved for two prime goals that are to maintain the good health and to cure the diseases or pathological conditions. The philosophy, logic and practice of 'Ayurveda System' involves a variety of concepts like Mahabhoota, Dosha, Dhatu, Mala, Dravya, Guna, Agni, Ama, Rasa, Ojas and hundreds of intra and interactions amongst these variables. Such a vast knowledge base is a treasure, which needs to be explored, expanded, experienced and experimented<sup>1</sup>. The strength of Ayurveda is its holistic approach towards health and diseases. Ayurveda describes health as balanced state of physical, psychological and spiritual level rather than merely absence of disease. Health is defined as the state of equilibrium of Doshas (Bio energetic humors), equilibrium in Agni (The governing process of digestive system), equilibrium in Dhatus (body tissues) and normal expulsion of Malas (wastes like feces, urine, sweat etc.) with state of peace in Atma (soul), Indriya (senses) and Mana (mind)<sup>2</sup>. Ayurveda generates good health by using wholesome diet, lifestyle and natural remedies prepared from medicinal plants and minerals. Modern science explains the theory of balance between free radicals and antioxidants to maintain the good health. But in present era oxidative stress induced disorders are increasing day by day due to exposure of Human being to various toxicants or chemicals. This oxidative stress due to toxicants/ chemicals can be compared with concept of Viruddha ahar (Incompatible diet/food), Gara visha (Concocted poison) and Dooshivisha (Denatured/ Latent poison) mentioned in Ayurveda. This review article highlights the role of antitoxic drugs/formulations mentioned in Agad Tantra (Ayurvedic perspective of toxicology) to conquer diseases due to unconventional etiology in current scenario.

#### Review of Literature

##### Agad Tantra

Ayurveda is divided into eight classical disciplines known as Ashtang Ayurveda viz. Shalyatantra (Surgery), Shalakyatantra (Ear, nose, throat and eye diseases), Kayachikitsa (Internal Medicine), Bhutavidya (Psychiatry), Kaumarbhritya (Pediatric), Agad Tantra (Toxicology), Rasayana (Rejuvenation) and Vajeeekarana (Aphrodisiac therapy)<sup>3</sup>. Agad Tantra, one of the eight clinical branches of Ayurveda describe Ayurvedic perspective of toxicology. It deals with study of poisons with special reference to their sources, properties, action, manifestations and management. Agad Tantra also explores concepts of Viruddha Aahar (Incompatible food), Gara visha (Concocted poison) and Dooshi Visha (Denatured/ Latent poisons). In present scenario, as compared to plants, minerals and venom poisoning, cases of poisoning due to Viruddha ahara, Gara visha and Dooshi visha are increased. These three concepts and their management is a gift of Agad Tantra to Human beings to improve their health status and longevity.

##### Viruddha Ahara (Incompatible diet/food)

The diet which provokes bio energetic humors without eliminating them is considered as Viruddha Ahara<sup>4</sup>. Drugs and food materials incompatible with the normal body tissue elements are Viruddha<sup>5</sup>.

Charaka Samhita has mentioned eighteen types of food incompatibilities viz.

1. Desha Viruddha (Place incompatibility) - E.g. Hot and sharp food in arid place. Cold and unctuous food in marshy place.
2. Kala Viruddha (Time incompatibility) - E.g. Cold and dry food in cold season. Spicy and hot food in summer.

3. Agni Viruddha (Digestion incompatibility) - E.g. Intake of heavy food when digestion is mild. Intake of light food when power of digestion is high.
4. Matra Viruddha (Dose incompatibility)- E.g. Honey and Ghee in equal quantities
5. Satmya Viruddha (Habit incompatibility) - E.g. Spicy food to a person who is not habituated to it.
6. Doshha Viruddha (Bio energetic Humor incompatibility) - Food which aggravates any of humors Vata, Pitta or Kapha Doshas. E.g. dry and light diet aggravates Vata Doshha. Hot and spicy food aggravates Pitta Doshha while unctuous and cold food aggravates Kapha Doshha.
7. Sanskara Viruddha (Process incompatibility) - Incompatible due to improper cooking process. E.g. Pigeon fried in mustard oil.
8. Veerya Viruddha (Potency incompatibility) - Combination of substances of opposite potencies. E.g. Combination of Fish and milk with hot and cold potency respectively.
9. Koshtha Viruddha (Gut incompatibility) - Not suitable for the type of Koshtha (Gut). E.g. Strong purgatives in Mrudukoshtha (soft bowel) and mild laxative in Krurakoshtha (hard bowel).
10. Avastha Viruddha (Condition incompatibility) - Not suitable to the condition of person. E.g. dry food to a person who exercises more. Unctuous food to excessive sleepy person.
11. Krama Viruddha (Sequence incompatibility) - E.g. Taking food with natural urges like defecation and urination or taking food without appetite.
12. Parihara Viruddha (Exemption incompatibility) - Use of things which are to be avoided before and after food. E.g. Intake of hot potency substances after eating pork.
13. Upachar Viruddha (Regimen incompatibility) - E.g. Exposure to cold after consuming Ghee.
14. Paka Viruddha (Cooking incompatibility) - Improperly cooked. E.g. Use of bad fuel material to cook, overcooked or uncooked rice.
15. Samyoga Viruddha (Combination incompatibility) - E.g. Milk with acidic fruit.
16. Hrita Viruddha (Mind incompatibility) - Objectionable to mind. E.g. Meat for Strict vegetarian.
17. Sampata Viruddha (Maturity incompatibility) - Immature or Over mature substances. E.g. Immature Banana. Over mature mango.
18. Vidhi Viruddha (Regulation incompatibility) - Against the rule of consuming food. E.g. eating without privacy<sup>6</sup>.

Viruddha ahara generally do not have any effect on those who are habituated to it or consume it in a small quantity, their Agni (Digestive power) is strong and who are young and practicing exercise regularly<sup>7</sup>. But due to continuous use of above-mentioned incompatible food many diseases occur like impotency, blindness, erysipelas, ascites, boils, insanity, anal fistula, fainting, intoxication, distension of abdomen, spasmodic obstruction of throat, anemia, food poisoning, vitiligo, skin diseases, mal-absorption syndrome, edema, hyperacidity, fever, rhinorrhea and congenital disease of progeny or death<sup>8</sup>. Incompatible food like Garavisha (Concocted poison) may be one of the reasons of several diseases and death<sup>9</sup>.

For prophylaxis of these diseases, Ayurveda emphasizes on prohibition of incompatible food. Diseases caused by incompatible food may be treated with emesis, purgation, by using the drugs which act opposite to that particular disease and wholesome diet<sup>10</sup>.

In present era food mentioned further can be included in eighteen types of Viruddha ahara (Incompatible food). E.g. Bakery products like Cake, Pastries, Bread, Biscuits having combinations of Maida, milk, egg, cheese etc; in India street food like Dabeli, Panipuri and Chats having combinations of potatoes, tomatoes, chilies with Yoghurts. Burger and Pizzas are heavy to digest. Burger and Pizza with Cold Drinks or Milk shakes again become incompatible. Consuming cold water just before or after taking hot tea or coffee, milk and egg, milk and banana, milk and fish, milk with yoghurt, deep fried potatoes, immature or over ripened fruits, heated honey, heated curd, re heated edible oil are some examples of unwholesome diet. Avoiding such type of unwholesome food definitely helps to improve good health of the person.

### Gara visha (Concocted poison)

Basically, poisons are divided into two types- Akrutrima visha (Natural poison) and Krutrima visha (Artificial poison). Akrutrima visha is further subdivided in to two types Sthavara visha (Inanimate poison like plants and minerals) and Jangama visha (Animate poison). Krutrima visha (Artificial poison) is termed as Garavisha. According to their combinations these Gara visha shows acute poisoning or sub-acute poisoning or chronic poisoning or produces disorders like Shophha (Edema), Pandu (Anemia), Udara (Ascites), Unmada (Psychological disorder), Durnam (Piles) etc. in the body<sup>11</sup>. As per Charaka Samhita except Inanimate and Animate poison another type of poison is existing which is known as Gara. Gara is a toxic combination of the substances producing various diseases. As its Vipaka (assimilation) is delayed, it does not cause death immediately. In the commentary, Chakrapani says Gara visha is of two types- Nirvisha Dravya samyonga (Combination of nontoxic substances) and Savisha Dravya Samyonga (Combination of toxic substances); former known as Gara visha and later known as Kritrima Visha<sup>12</sup>.

Manifestations of Garavisha are anemia, emaciation, anorexia, cough, breathing disorder, fever, narcolepsy, depression, ascites, liver and spleen disorders, feeble or husky voice, debility, edema, flatulence, slimming of arms and legs, wasting disorder etc. In the second stage, somatic symptoms give way to psychic disorders. Patient dreams of fox, cat, mongoose, ferocious animals, monkey, dry pound or wells, dry climber (plant) etc. Fair complexioned mistakes their color dark and vice versa. Patients may be obsessed that their nose and face have ceased to exist. The patient may suffer such or more severe afflictions of the body and mind<sup>13,14</sup>. Management of Garavisha includes induction of emesis and purgation by suitable emetics or purgatives, consumption of compatible diet, Tamra Bhasma with honey for Hridashuddhi (Removal of poison from heart) and medication with Swarna Bhasma (Gold Bhasma)<sup>15,16</sup>.

In current scenario, Gara visha can be correlated with any substance which is synthetic or artificial in origin and harmful to body either directly or by means of its toxic metabolites. 21<sup>st</sup> century is the world full of synthetics and each individual living in this world is under the influence of artificial or synthetic substances. Gara visha concept covers many areas like incompatible diet, adulteration of food, preservatives-additives-sweeteners used in foods, pesticides or agrochemicals found in cereals-vegetables-fruits-milk, Drug induced toxicity (Drugs in combinations or indiscriminate use of synthetic drugs like analgesics-antibiotics-anticonvulsants-anti hypertensive-oral contraceptives etc.), occupational poisoning etc. So, all these areas which cover under Gara visha concept may be one of the causes of oxidative stress.

### **Dooshivisha (Denatured or latent poison)**

Sthavara, Jangama or Krutrima poisons which are not completely eliminated from the body and due to digestion (metabolism) or due to antitoxic formulation or due to exposure to heat, air or sunlight become dry or when the foresaid natural ten qualities of the poison becomes less potent are called as Dooshivisha. Because of its low potency, it does not prove fatal for an individual. As it gets enveloped by Kapha, it resides in the body for many years. Prodromal features of Dooshivisha are sleepiness, heaviness, yawning, a sense of looseness in the joint and body ache. One who suffers from Dooshivisha shows manifestations like looseness of stool (Diarrhea), discolored complexion, foul smell from mouth, bad taste in mouth, unquenchable thirst, fainting, vomiting, stammering speech, depression accompanied with symptoms of Dushyodara (chronic ascites). When Dooshivisha is situated in stomach, patients suffer from diseases of Kapha - Vata and when it is situated in colon it precipitates diseases of Vata - Pitta. Also, symptoms like loss of hair, emaciated body are seen, and patient looks like a bird clipped off from feathers and wings. Deeper entry of Dooshivisha in Rasadi dhatus (body tissues) results in their derangement and subsequent disease which is termed as Dhatuvikara in Ayurveda. The ill-effects are aggravated in cloudy day and by exposure to cold and wind. If the above conditions are also neglected, patient suffers from sense of intoxication after meal, indigestion, anorexia, eruption of circular patches on skin, urticaria, mental confusion, deterioration of tissues, edema on face and extremities, ascites, vomiting, diarrhea, discoloration, fainting, irregular fever, unquenchable thirst. Advancing further, it causes flatulence, impaired functions of reproductive tissues, stammering and insanity. Widespread skin lesions and various types of diseases are produced due to this<sup>17-19</sup>.

In the management of Dooshivisha the patient should be subjected to sudation, after which induction of emesis and purgation will have to be done. The purpose of sudation is to bring the latent humors situated in Dhatus (body tissues) to alimentary tract. Once brought to the gut they can be eliminated by induction of emesis and purgation. Dooshivishari Agada finely powdered and mixed with an excess quantity of honey is to be consumed<sup>20</sup>.

In present era, knowingly or unknowingly human beings are exposed to various types of poisons which may be of natural or artificial origin. Low potent poisons of artificial origin called as Garavisha gain entry in to the body and act as Dooshivisha. Storage of chemicals/ toxins often occurs when the rate of exposure is greater than rate of metabolism or excretion. Ayurveda explains this notion of body burden of toxins under the concept of Dooshivisha. As Dooshivisha is less virulent it does not cause any immediate manifestations and lies dormant in the body for several years. Dooshivisha is a state where low potent poison can stay in the body for several years and cause diseases on getting precipitating factors. Xenobiotic is a term that is used for a foreign or synthetic substance like drug, food additives, pesticides, pollutants etc. found in the body. Xenobiotics are those which can't be broken down to generate energy or be assimilated into biosynthetic pathway. The concept of Apaki Guna (not being assimilated in the body) in poison explains mechanism of xenobiotics. Xenobiotics are also responsible for the oxidative stress in the body.

### **Oxidative Stress and Antioxidant**

In modern western medicine, the balance between anti oxidation and oxidation is believed to be a critical concept for maintaining healthy biological system<sup>21</sup>. Oxidation is a chemical reaction that can produce free radicals, leading to chain reaction that may

damage cells. Free radicals are natural by-product of our metabolism which is electrically charged ions that attack cells, tearing through cellular membranes. They react and create havoc with nucleic acids, proteins and enzymes present in the body. These attacks of free radicals are collectively known as oxidative stress are capable of causing cells to lose their structure, function and can eventually destroy them<sup>22</sup>. In present era oxidative stress is increased due to incompatible food, unhealthy lifestyle, exposure to toxic substances, pollutants, chemicals and drugs. Free radical induced oxidative stress is the major cause in various human disorders like cancer, cardiovascular disorders, neurological disorders, liver disorders, renal disorders, skin diseases, infections, premature aging etc.

Antioxidants are the substances which can scavenge free radicals and helps to decrease the incidence of oxidative stress induced damage. An antioxidant is a molecule that inhibits the oxidation of other molecule and protects cell damage in the body. Antioxidants are mainly divided into two major groups in living cells- Enzymatic antioxidants and Non-enzymatic antioxidants. The enzymatic antioxidants are further divided into primary and secondary enzymatic defenses. The primary defense is composed of three important enzymes like superoxide dismutase, catalase and glutathione peroxidase which prevents formation of free radicals and neutralizes free radicals. The secondary defense includes glutathione reductase and glucose-6-phosphate dehydrogenase which supports primary enzymatic defense antioxidants and does not neutralize free radicals directly. The group of Non-enzymatic antioxidants contains several subgroups, the main ones being vitamins (A, E, C), enzyme cofactors (Q10), minerals (zinc and selenium), peptides (glutathione), phenolic acids and nitrogen compounds (uric acid). There is great importance in maintaining the fragile balance between antioxidants and free radicals. For instance, in humans disturbing this balance causes serious health problems such as cancer, cardiovascular and neurodegenerative diseases and premature aging<sup>23</sup>.

Dietetic foods and traditional herbal medicines are the main sources of antioxidants which protects from oxidative stress damage caused by free radicals.

### **Vishaghna Yogas (Antitoxic formulations)**

According to Modern Science, basically it is the phytochemical constituent in the herbs which leads to desired healing effect, such as saponins, tannins, alkaloids, alkenyl phenols, flavonoids, terpenoids, phorbol esters and sesquiterpenes lactones. A single herb may even contain more than one of the aforementioned phytochemical constituents, which works synergistically with each other in producing pharmacological action<sup>24</sup>. The trend of modern concept to isolate pure compounds may not achieve the desired results, as observed in the natural version. Once an active principle is isolated from the natural product without its synergic colleagues to support and/or balance its action, it may lose its character as present in its natural form. The isolation and study of a problem from its environment is beauty of modern science. However, the natural or holistic approach of Ayurveda attempts to solve problems by taking these in their entirety, with all their inter linkages and their complexity. The concept of synergy is central to holistic approach. This may be the reason why Ayurvedic preparations have different permutations according to the diseased condition<sup>25</sup>. Due to synergism poly herbal confers some benefits not available in single herbal formulation. It is evident that better therapeutic effect can reach with a single multi-constituent formulation. For this, a lower dose of the herbal preparation would be needed to achieve desirable

pharmacological action, thus reducing the risk of deleterious side-effects<sup>26</sup>.

In the management of diseases or poisoning Ayurveda focus on Equilibrium of Dhatu by maintaining equilibrium in Dosha and Agni with the help of various single herb or combination of herbs (Poly herbal formulation) or combination of herbs-minerals. The principle behind any formulation of Ayurveda in any disease or poisoning condition is to correct Agni and vitiation of doshas viz. vata, pitta and kapha which may be seen in that specific disease or poisoning condition. Accordingly, single herbs or poly herbal formulation or herb-mineral formulations are used in that disease or poisoning condition. Physician can also change combinations, forms, vehicle of these formulations as per vitiation of doshas in the patient or disease.

The word Agada is derived from Gada. Gada has two meanings one is Roga (Disease) and the other is Visha (poison). Agada is also a synonym to drug. So Agada is a drug that conquers disease or poison. In Ayurvedic Samhitas (Compendium) various single herb, poly herbal formulation or herb-mineral formulation are mentioned as Anti toxic. Drugs which act against toxic substances are called as Vishaghna (Antitoxic). Some Vishaghna drugs act by Dravya prabhava (virtue of their own nature), some drugs act by Guna prabhava (by virtue of their properties) and some drugs act by Dravya Guna prabhava (virtue of their nature as well as properties). These Vishaghna Dravya (Antitoxic herbs) and Vishaghna Yogas/Agadas (Antitoxic formulations) are used in various poisoning and diseased condition. Anti toxic formulations in these forms mentioned in Ayurveda has unique combination for unique vitiation of doshas in various poisoning cases. Most of these antitoxic formulations acts as Raktashodhaka (Blood purifier), Tridoshaghna (causes equilibrium in body humors), Hridya (Cardio protective) and Ojavardhaka (Rejuvenate).

Charaka Samhita has mentioned ten antitoxic herbs in Vishaghna Mahakashaya<sup>27</sup>. Sushruta Samhita has mentioned 95 antitoxic drugs in different Gana (Group) like Aaragwadhadi Gana (20), Rodhradi Gana (13), Arkadi Gana (14), Shyamadi Gana (19), Patoladi gana (07), Anjanadi Gana (8), Utpaladi gana (7), Trapvadi Gana (7) in the chapter 38 Dravya samgrahaniya of Sootrasthana<sup>28</sup>. Twenty antitoxic drugs are also mentioned in Ekasara Gana in Sushruta Samhita<sup>29</sup>. Ashtang Hridaya describes 104 antitoxic drugs which are listed in Gana like Anjanadi Gana (9), Patoladi Gana (6), Aaragwadhadi Gana (20), Rodhradi Gana (13), Arkadi Gana (14), Eladi Gana (24) and Shamadi Gana (18)<sup>30</sup>. These antitoxic drugs can be used singular or in combination with other drugs mentioned in that specific Gana. Vishaghna Yogas (Antitoxic formulations) like Kshara agada<sup>31</sup>, Dooshivishari Agada<sup>32</sup>, Bilwadi Gulika<sup>33</sup>, Maha agada<sup>34</sup>, Siddhartakadi Gulika<sup>35</sup>, Ajita Agada<sup>36</sup>, Baladi Yoga<sup>37</sup>, Ajeya Ghrita<sup>38</sup>, Sanjeevana Agada<sup>39</sup>, Mandar Agada<sup>40</sup> etc. are mentioned in Ayurveda in context with specific poisoning as well as diseased conditions.

At the present time study of these antitoxic formulations is carried out in various toxicities. For e.g. Effect of Dooshivishari Agada is reported previously over MSG-induced reproductive toxicity with special reference ovary and follicle count<sup>41</sup>. Nephro protective activity of Bilvadi agada in gentamicin induced nephrotoxicity in male Wistar rats is also reported<sup>42</sup>.

## DISCUSSION

Health of the people is worsening day by day due to deforestation, global warming, indiscriminate use of pesticides-fertilizers in the farming, food adulteration, food additives-preservatives-sweeteners, increasing pollution levels, industrial emission,

hormonal administrations in poultry-dairy, indiscriminate use of various synthetic drugs etc. In current scenario, most of the diseases are caused due to unconventional etiology. For this unconventional etiology modern science focuses on oxidative stress due to toxicants/chemicals while Agad Tantra focuses on Viruddha Ahar (Incompatible diet), Gara Visha (Concocted poison) and Dooshi Visha (Denatured /Latent poison). All these toxicants/chemicals in the form of Viruddha ahara or Gara visha or Dooshi visha enters into the human body by different routes and responsible for various disorders/diseases like cancer, cardiovascular disorders, neurological disorders, liver disorders, renal disorders, skin diseases, infections, psychological disorders, premature aging etc. In the production of these disorders/diseases modern science emphasizes on the oxidative stress while Ayurveda emphasizes on the vitiation of dosha.

According to Ayurveda, diseases are produced due to imbalance of Dosha (Body Humors) and Dushya/ Dhatu (Body tissues)<sup>43</sup>. Dhatuvaishmya (Imbalance of Body humors or body tissues) is termed as *Vikara* (Disease)<sup>44</sup>. Poison first vitiates the blood, then vitiates the humors Kapha, Pitta and Vata in sequence along with their substrata, proceed to heart and then become fatal<sup>45</sup>. Vitiation of doshas is very important factor in the production of both diseased and poisoning condition. Only difference is in the case of poisoning it vitiates blood first then body humors. As Dhatusamyā (Equilibrium in body humor and body tissue) is the goal of Ayurveda, both diseased and poisoning conditions should be treated for this goal.

Diseases caused by Viruddha Ahar, Gara visha and Dooshi visha have same principle of management that is Shodhana Chikitsa (Elimination of toxins) by induction of emesis or purgation before using antitoxic formulations. As antitoxic formulation act as blood purifier, causes equilibrium in body humors viz. vata-pitta-kapha, cardio protective and rejuvenate, it reverses the action of poison and helps to become free from poison. A person possessing the qualities like Equilibrium and normal functioning of the Dosha and Dhatus, good appetite or desire for food, proper elimination of urine and feces, normal complexion, normal functioning of sense organs-mind and normal activities is considered as free from poison<sup>46</sup>. These qualities resemble with the definition of health mentioned in Ayurveda. These antitoxic formulations are helpful in diseases caused by incompatible diet, concocted poison and denatured/latent poison. Thus, they help to improve health status and longevity of the human being.

## CONCLUSION

Agad Tantra is the branch which once pinnacled glory of Ayurveda is now being sidelined and forgotten. Most of the disorders caused in present scenario are due to unconventional etiology such as indiscriminate use of pesticides-fertilizers in the farming, food adulteration, food additives-preservatives-sweeteners, indiscriminate use of various synthetic drugs etc. For this unconventional etiology, modern science emphasizes on oxidative stress while Agad Tantra in Ayurveda emphasizes on Virudha Ahar (Incompatible diet/food), Gara Visha (Concocted poison) and Dooshi Visha (Denatured /Latent poison). Oxidative stress can be correlated with the concept of Virudha ahar, Gara visha and Dooshi visha. This unconventional etiology causes diseases like cancer, cardiovascular disorders, neurological disorders, liver disorders, renal disorders, psychological disorders, skin diseases etc. So, to treat such diseases of unconventional etiology, conventional drugs/treatment may not be useful. Now it's time to explore and use the principles of Agad Tantra with Antitoxic formulations not only to poisoning conditions but also in various diseases and pathological conditions to improve health status and longevity of human being.

Hence according to the principles of management in Agad Tantra, most of the diseases in present era need Nirvishikarana (Detoxification). Nirvishikarana encompasses Shodhana Chikitsa (Elimination of Toxins), Raktashodhana (Blood purification), Tridoshaghna (Equilibrium in body humors), Hridya (Cardio protective action) and Ojavardhana (Rejuvenation therapy). Anti-toxic formulations help in detoxifications. Thus, these anti toxic formulations mentioned in Agad Tantra will be nectar for society in the disorders of current scenario. Further Preclinical and Clinical study have scope in this regard.

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