



COVID-19: IN THE LIGHT OF SUSRUTA SAMHITA KALPASTHANA

*Dr. Dilip Kr. Goswami

Associate Professor, Agada Tantra and Vidhi Ayurveda (Toxicology and Forensic Medicine) Govt. Ayurvedic College, Guwahati -781014, Assam, India.

*Corresponding Author: Dr. Dilip Kr. Goswami

Associate Professor, Agada Tantra and Vidhi Ayurveda (Toxicology and Forensic Medicine) Govt. Ayurvedic College, Guwahati -781014, Assam, India.

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ABSTRACT

Susruta, the most beloved and brilliant disciple of Lord Dhanwantari, the advisor of Shalya Tantra (Surgery) is unanimously admitted to be the writer of the famous book "SUSRUTA SAMHITA". Though Susruta Samhita basically deals with Surgery then also there are many valuable informations on other topics, like Medicine (Kayachikitsa), Eye and ENT (Shalakya Tantra), Demonology (Bhutavidya), Paediatrics (Kaumarabhritya), Toxicology(Agadatantra), Rejuvenation (Rasayana tantra) and Aphrodisiac (Bajikarana). Agadatantra (Toxicology) is the branch that deals with the poison and poisoning. COVID-19, the dreadful virus of present time is causing terror in the globe. Till now no scientist is being able to enter into the inside magic of the virus and no medicine/vaccine is coming to the market to fight with the virus/disease. The weapon and technique of fighting with CORONA VIRUS is remaining uncertain till now. While going through the branch "AGADATANTRA" of Susruta Samhita some very interesting facts that can be closely co-related with the present "COVID-19" comes to light which may give some new area for consideration for prevention and cure of the present crisis.

KEYWORDS: COVID-19, Susruta Samhita, Agadatantra, uncertain, present crisis.

INTRODUCTION

Susruta Samhita is admitted to be the most ancient book on Surgery. This book is containing basically the facts on Surgery, but not devoid of discussion on the other branches of Ayurvedic science. Like the other Ayurvedic authors Susruta has also classified Ayurveda into 8 branches and a detail discussion on the topics is made. Agada Tantra is the branch of Ayurveda that deals in detail about the different aspects of poison. Among the descriptions some facts about the poisons are seemed to have similarity with the present **CORONA CRISIS**.

CORONA VIRUS is causing chaos in the globe now. Thousands of people are being victim of the disease caused by the virus. A good number of sufferers have lost their life even after getting the utmost medical care. The Governments are being bound to fight against the situation with application of all resources. The common people are keeping themselves imprisoned in their home to get rid of the infection. Till now the secrets about the virus is not coming to the knowledge of the scientists, hence no medicine, vaccine is coming to the reach of the human society to prevent /cure the infection.

Hence it is felt that, a discussion on the concepts of the Ayurvedic classics, specially Agadatantra as mentioned in Susruta Samhita, Kalpasthana, may be beneficial in the present situation of crisis.

AIM OF THE STUDY

This is a literary research conducted with the following aims –

- (1) To study Susruta Samhita Kalpasthana in detail
- (2) To do a search to find out whether there is any condition mentioned that can be closely simulated with the present situation "COVID-19"
- (3) To do a comparative study of "COVID -19" and the similar condition mentioned in Susruta Samhita, Kalpasthana with special reference to signs –symptoms, prevention, treatment etc.
- (4) At the end of the study to arrange the findings in the form of a scientific article for appraisal of the scientific forum.

MATERIALS AND METHODS

Susruta Samhita was studied in detail in the Central Library of Govt. Ayurvedic College, Guwahati -14, Assam, India. The informations on "COVID-19" was also collected from the available sources and the findings from both fields arranged accordingly in the form of a scientific article.

OBSERVATION AND RESULT

- (1) Defining Bisha (poison) a broad idea is mentioned as "**The substance that causes BISHADA**" (unhappiness-grief) can be considered as a Bisha. One ferocious

demon with destructive attitude is described by the author to explain its harmful actions.^[1]

(2) A situation caused by enemy during war is mentioned to create danger of the opposition by applying poison on grass (trina), water (ambu), road (soil)(marga-bhumi), food(anna), smoke (dhuma) and air(shwashana). The kings are advised to understand the character of such substances and to take the remedial measures accordingly.^[2]

(3) The characters and manifestations mentioned in relation to poisoned water (Dushita jala), soil (Kshitipradesha), grass (trina), food (anna) are seemed to be irrelevant in relation to present situation.^[3]

(4) The characters and manifestations mentioned in relation to poisoned smoke and air are – (i)falling of the birds on the ground losing their capacity to fly, (ii) cough (kasa), (iii) sneezing and rhinorrhoea (pratishyaya), (iv) headache (siroruja), (v) severe type of eye diseases (tibra nayanamaya).^[4]

(5) Describing the procedure of purification of the polluted air it is advised that, the whole area should be fumigated with the smoke of some prescribed drugs.^[5]

(6) Advising the procedure of purification of poisoned soil spraying of the preparation prepared by mixing some drugs is described.^[6]

(7) In relation to the fatality of Bisha it is said that, Bisha is having 10 properties in high potency with which it causes vitiation of all the doshas (3 body humors that control all functions). In this situation Kafa becomes vitiated in highest level and causes death of the patient by obstructing breath (respiratory failure).^[7]

(8) At a state of coma (Nashtasajna) emergency treatment procedures like, Shirobirechana (application of strong irritating drugs through nostrils), Siratadana (application of strong stimulation on some specific points of the body), Kakapada (application of medicine/fresh meet on the vertex after giving incisions) etc. are advised to apply.^[8]

(9) “**KSHARAGADA**” is a preparation that is advised to use orally, through the nostrils and application over the whole body to destroy even the strongest poison. In this context it is also advised that, this preparation should be applied on different types of musical orchestra, flags and gates. As described the sound of the musical orchestra, hoisting of the flags in the area and keeping the gates can destroy the action of the poisons.^[9]

(10) As the available information CORONA VIRUS is a virus with capacity to mutate according to the environment. It can adjust with any type of environment and even can modify its character to resist the medicines applied. It can travel with air up to a distance, can live on wood, matel, cloth etc. for certain time and can infect the people who comes to a certain distance of a person suffering from cough, sneez or any other respiratory reactive phenomenon and touches the contaminated substances. Their main affinity is towards the respiratory tract. The cause of death due to COVID -19 is respiratory failure and /or multi organ failure. The symptoms of COVID-19 are – fever, cough, sore throat, headache, pneumonia, tiredness, nasal congestion and diarrhea.^[10]

(11) Possible characteristics of the dying process in COVID-19 are – (1) Terminal Respiratory Failure, (2) Septic shock, multiple organ failure and Cardiogenic shock (acute myocardial injury or myocarditis).^[11]

(12) Some patients who get infection in Upper Respiratory Tract present with fever, cough, headache or conjunctivitis.^[12]

DISCUSSION

From the observations of the study the following facts can be considered.

(1) Susruta observed the existence of some substances in the creation that, after coming to the contact with the living beings (specially human) externally or internally, cause imbalance of the body humors leading to manifestation of some signs and symptoms of unhappiness. Considering in the point of “BISHADA” (unhappiness) he gave the nomenclature “BISHA” to the category of substances and tried to create an image of these substances in the form of a ferocious demon. Following the concept, at present situation, the dreadful virus “CORONA” can be kept under the category “BISHA”.

(2) Concept of Poisoning of grass, soil, food and air induced by the enemies in war time is praisable. It indicates the silent harmful activities of the kings to defeat the opposition. The present situation cannot be considered to be the same. But the role of soil (soil, matel, cloth etc.) and air in spreading the infection can be tried to control by applying the principles of purification of soil and air mentioned by Susruta. Here it is to be noted that, though there is no similarity of the signs and symptoms of “COVID-19” with the contact with contaminated (poisoned)soil then also they have close similarity with the signs and symptoms mentioned under the heading “DUSHITA VAYU LAKSHANANI”(signs and symptoms of exposure to poisoned/contaminated air). In this context application of fumigation with selected drug smoke is to be considered.

(3) The manifestations following exposure to poisoned air have similarity with the present manifestation of “COVID-19”. In both the situations respiratory signs and symptoms are predominant. Hence the present situation can be discussed in the light of the concept of Susruta.

(4) Since to prevent the spread of CORONA VIRUS desinertization and cleaning of all the usables with disinfectants is being utilized hence the procedure of “DUSHITA BHUMISHODHANA” (poisoned soil purification) can be applied for the purpose. Since for the purpose herbal preparations are used this procedure may be proved to be of low cost with negligible hazard.

(5) In the context of the cause of death due to “BISHA” it is said that, after getting contact with BISHA there is vitiation of all the body humors and vitiation of Kafa (liquid components of the body) is predominant which causes obstruction of the respiration and causes death. The modern observations in relation to death due to COVID-19 also suggests respiratory failure as the prime cause. Multi organ failure, Septic shock, Cardiogenic shock etc. can be considered as

MARMABANDHANACCHEDA (detachment of the co-ordinations among the vital organs), OJANASHA (destruction of the OJA-the vital component of the body) etc. as mentioned in Susruta Samhita in the context of the mode of action of bisha.

(6) Susruta has mentioned the emergency management procedures at the terminal stage of the patient of poisoning. Some medicines are also mentioned in the situations. From the study it is noted that, "KSHARAGADA" is said to be the best medicine that can be used through all routes both for prevention and cure of the patients with poisoning. It is interesting that, this preparation is said to have potency to protect the population of a large area from the poison if used in the gate, flag etc. hoisting in the area.

SUMMARY AND CONCLUSION

As summary it can be said that,

(1) Following the definition of Bisha of Susruta Samhita the present COVID-19 can also be considered as a poison (Bisha).

(2) Considering the descriptions of poisoned air etc. mentioned by Susruta in the context of "induced poisoning during war" signs and symptoms of air pollution can be closely simulated with the present manifestations of COVID-19.

(3) The concept of "purification of air and soil" as advised by Susruta can be tried in the present situation for prevention of CORONA VIRUS infection.

(4) The cause of death due to poisoning described by Susruta and the modern concept has got close similarity.

(5) Considering the similarity of signs and symptoms and cause of death between Bisha and COVID-19 some Ayurvedic principles and preparations can be taken for scientific evaluation and use as the herbal preparations have very less chance to cause adverse effect and also have strong theoretical support in favour of their benefits.

As **CONCLUSION** it can be said that, the concepts of Susruta Samhita may be proved to be useful and beneficial for the human society at this critical moment. Hence fruitful work should be done to evaluate the facts scientifically.

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