

ROLE OF AYURVEDA IN PANDEMIC SITUATION (COVID-19) AND INVOLVEMENT OF PRANVAH SROTAS WITH ITS TREATMENT.

ABSTRACT

Pandemic disease affects the whole world. COVID-19 is a Pandemic disease which deteriorates an individual's life, not only in a specific country but the whole world is suffering. Individuals health, life, economy affected by this Corona virus. It is proven that corona virus can infect people of all ages, but there are people with high risk of contamination who are elderly, individuals with a compromised immunity system and people with health conditions like diabetes, heart disease, kidney failure, asthma, lung disease etc. It is highly contagious that's why it is more dangerous than other viruses of its family. we can prevent from this viral disease by taking such precautions no antibiotics is beneficial in corona virus infection so we can prevent ourselves from this virus by taking preventive measures. *Sushrut* has mentioned *aupsargik rog* (communicable disease) in *Ayurveda*. *Ayurveda* is an ancient science, which believe in preventive measures for healthy persons and treat a patient by medicines which is described in ayurvedic textbook and *Aachar rasayan*.

Keywords: Coronavirus, *Aachar rasayan*, *Pranvahasrotas*, Immunity, *Aupsargic rog*.

INTRODUCTION

COVID-19 is a contagious disease, it is highly transmissible. This feature makes it a very dangerous disease. It belongs to the family coronaviridae. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the virus strain that causes coronavirus disease (COVID-19) in 2019. It belongs to the large family RNA virus. There are 7 members, 4 produce common cold while other 3 produce lethal respiratory syndrome. SARS in 2004, MERS in 2013 noted and newest member coronavirus produced COVID-19 first noted in december 2019 in wuhan, China. Its name is SARS-CoV-2 due to its resemblance with SARS virus. It shows a serious

effect on the respiratory tract, but it is totally different from SARS Virus in view of replication, it replicates more frequently in the upper respiratory tract than SARS virus. Surface protein forms knobs on surface of SARS-CoV-2 Which bind with ACE 2 receptor which present on bronchial epithelial cells and internalized by endocytosis RNA replicated and nuclear capsid with RNA and vesicle formed , virus enclosed in vesicle and then undergoes exocytosis and released into extracellular fluid where it can infect adjacent cells as well as infect new host. Virus can replicate in nasal passage and oropharynx during first 24 to 48 hours of infection during this period patient is asymptomatic as the virus can migrate to the bronchi and then into the alveoli. and then it induce inflammation and symptomatic disease the inflammatory response of virus cause breakdown of the alveoli wall and leaky serum into the alveoli which acutely blocking the exchange of oxygen in the lungs. over the time passage alveoli wall become fibrotic and this condition interfere with oxygen exchange.

Transmission: Transmission of SARS-CoV-2 can occur through direct, indirect or close contact with infected people through infected secretion such as saliva and respiratory secretion or their respiratory droplet. Cough originate droplet with virion spread into surrounding but the droplet cannot project beyond 2 metre or 6 feet. Aerosols below 10 microns remain in air for 3 hours. Only close contact with an infected person inhales the droplet. Virus can present in stool but it is difficult to culture. If a pregnant lady is infected there is no transmission to foetus documented , hosts can infect 2 to 2.5 people¹.

***Pranavahasrotas* involvement:** *pranvahasrotas* is that channel present in our body which carries *prana* or oxygen, which is the vital energy and it is important to sustain life. *Dushti* of that srotas leads to death of a person because impairment in *pranvahasrotas* lead to interference in passage of oxygen which definitely cause diseases related to *pranvahasrotas* and can lead to death. symptoms of *dushti* (impaired) *pranvahasrotas* are *atistrustha swas* (too long breathing), *kupita swas* (aggravated breathing), *alpa alpa* (shallow breathing), *shashabd swas* (breathing associated with abnormal sound like wheeze), *sashula swas* (breathing associated with pain).²

***Aupsargik* (communicable) *roga* in *Ayurveda*-** Acharya *Sushrut* has mentioned *aupsargik roga* as they are contagious disease which spread through direct contact or contaminated object of patient by physical contact, expired air, eating with infected patient in same vessel , sharing bed , using clothes, use infected person *mala* (garland) and *lapan* (face mask or paste). *Aupsargik roga* are infectious disease which can spread from person to person³.

***Janpadodhwansh* or causes of epidemic:** Root cause of vitiation of factors are *pragyapradh*

(intellectual blasphemy), that also arises from misdeeds of previous life. Adharma (sinful act). God deserts the people of that place and water, air, earth, drugs, food impaired. A sinful act is at the root cause of destruction of the community by weapon due to other people also getting destroyed by *Rakshas* (demons which are invisible like virus and bacteria) and varieties of other creatures.⁴

MATERIAL AND METHODOLOGY

Data on COVID-19 is collected by the internet and review of Ayurvedic literature is collected by Ayurveda samhita like Charak samhita and Sushrut Samhita, Textbooks of *Yoga* t.

Motive of Ayurveda

Aim of Ayurved is first to prevent the health of a healthy person and giving curative treatment to patients⁵. The policy of Ayurveda is first prevention and then treatment.

Preventive aspect in COVID - 19 – Prevention of Covid- 19 can be done by the help of *Yoga* and asanas.

Yoga- Yoga like *Pranamayam*. It is very effective in COVID-19 situation, because we can define it as controlling the motion of exhalation and inhalation,so it directly affects our lungs and makes it healthy. It is a combination of breathing exercises which helps to make lungs healthy even in post covid individuals and we can use *pranayam* in preventive measures⁶..

Asanas - Dhanurasana- This yoga helps in flow of proper blood circulation by putting pressure on the abdomen and also improve the circulation of organs. Because of this digestive system will be more healthier. *Dhanurasana* also strengthen muscles of leg and arms⁷.

Matsyasana – This asana improve the immunity of the individual which detoxifies the body⁸.

Bhujangasana – It will helps in improving the circulation of heart and lungs by stretching shoulder, chest, abdomen and lungs⁹.

Treatment of pranvahsrotas: *Pranvahsrotas* should be treated like *swasa rog*(like asthma)¹⁰. Use of warm water, *sunthi*, *haridra*, *guduchi* etc.which is described in *Charak chikitsasthan* chapter 17.

Use of swedan for bronchodilation: *Swedan* is described in *Charak samhita* for *hikka* and *swasa rog*. First of all we have to apply *tila tail* mixed with *sendha namak* on patients chest region and do little massage for a while with it and then use *nadi sweda* (it is a type of *swedan*)

over the chest for a few minutes to release mucus which is stuck in lungs passage. With use of this *abhyang* and *Swedan*, thick mucus will be liquified and come out very easily and after clearance of passage patient gets relief.

Rasayan chikitsa: Design therapy adopted with proper medicine to stop physical health. Palan of *achar rasayan* like *satya*(truthfulness), *daya*(mercy) *dana*(donation to righteous person), *bali* (sacrifices of sins, bad habits), *devatarchana*(prayer), *sadvritta*(good deeds and follow proper *ritucharya* and *dincharya* like having proper diet, maintain cleanliness), adoption of preventive measures, *mantradi raksha*(protection of self by *mantra*)¹¹.

DISCUSSION

COVID-19 is a pandemic disease which transmits person to person very frequently. Patient can be asymptomatic for a week but he or she can be carrier for virus and transmit droplet with virion to their surrounding as virus can survive in fomite for few hours and in air upto 3 hrs. so we can prevent transmission of virus through isolation or keeping a particular distance from a person. We don't have to share bed, clothes and garlands with others. In COVID-19 involvement of respiratory tract occurs and there is involvement of *pranvahsrotas* according to *Ayurveda*. As SARS- CoV-2 is named due to the severe acute respiratory syndrome. Treatment of *pranavaha srotas* which is given in ayurvedic text book we can give in COVID-19, and can use immunity booster to boost immunity to prevent from COVID -19 because it is highly transmissible and can affect 2 person in same time because it is highly contagious due to its replication, some shows symptoms and some become asymptomatic and play role as carrier of virus.

CONCLUSION AND SUMMARY

Whole world is suffering from COVID-19 and it is spread from human to human by dopleit produced by infected people whether they are symptomatic or asymptomatic. It is related to SARS virus but very dangerous than SARS virus in view of replication. So we only can be in healthy state by taking some precaution which is described in *aupsargik rog* and by increasing our immunity, it is proven that some person has been asymptomatic even after exposure to virus. Involvement of *pranvahsrotas* is present in that disease and can be cured by medicine

which is described in ayurved for *swas. Aupsargic rog* which is communicable disease described in Ayurveda which is science of sages that is the proof that they had knowledge about communicable disease and *janpadodhwans*(epidemic) that's why they give preventive measures

. **NOTE:**

The study highlights the efficacy of " Ayurveda " which is an ancient tradition, used in some parts of India. This ancient concept should be carefully evaluated in the light of modern medical science and can be utilized partially if found suitable.

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