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Review Article

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ROLE OF SHALAKYA IN MANAGING COVID-19

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ABSTRACT

Coronavirus is a novel virus in the field of medical science which has become a threat in recent times. It has become a worldwide threat and affected millions of lives by either taking their lives or producing severe acute respiratory distress symptoms. Till now, there is no measure to curb its growth. No vaccine or medication have been found to slower the pace or stop the growth of virus. It is a contagious respiratory disease which was first detected in China in December 2019. Since it was a novel virus it was called SARS CoV-2 and the disease it caused was called covid 19 which mean coronavirus Disease which was earliest detected in 2019. The coronavirus pandemic has turned the world's attention to the immune system, the body's defense force against disease-causing bacteria, viruses and other organisms that

we touch, ingest and inhale every day.^[1] The virus has affected approximately 220 countries worldwide and the number of deaths is increasing day by day. In present times when there is no absolute cure for the virus, when there is no vaccine, the role of Ayurveda stands supreme. *Shalakya* one of the eight branches of ayurveda has a pioneer role in fighting against the deadly virus. By the virtue of ayurvedic drugs we are able to improve the immunity and thus fight against the infection in a much effective manner.

KEYWORDS: Coronavirus, covid 19, shalakya, immunity, vaccine, SARS.

INTRODUCTION

The COVID-19 pandemic, also known as the coronavirus pandemic, is an ongoing pandemic of coronavirus disease 2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).^[2] The outbreak was first identified in Wuhan, China, in December 2019.^[3] The World Health Organization declared the outbreak

a public health emergency of international concern on 30 January, and a pandemic on 11 March.^[4]

Coronavirus is a term used for the viruses which cause respiratory illnesses and other types of common cold. The name novel i.e new is used for this new strain of coronavirus which has emerged in 2020 as pandemic. The virus transmits through droplets and nasal, oral and other mucosa. The contaminated hands if touched to upper mucosa causes the virus to enter the body and cause covid 19 illness. The symptoms mainly include sore throat, dry cough and fever. Although, the patient may remain asymptomatic and not show any symptom for a long time. That's the reason the patients may transmit the virus unknowingly and increase the morbidity.

COVID 19 IN CONTEXT TO SHALAKYA

COVID-19 (SARS-CoV-2) Structure

The structure of COVID-19 (SARS-CoV-2) consists of the following: a spike protein (S), hemagglutinin-esterease dimer (HE), a membrane glycoprotein (M), an envelope protein (E) a nucleoclapid protein (N) and RNA.^[5] *Shalakya* is one of the 8 branches of *ashtanga ayurveda* which deals with the diseases of upper clavicular diseases.^[6] As the symptoms of covid 19 are mostly confined to upper clavicular and upper respiratory tract, the role of *shalakya* in the prevention and treatment of covid 19 is very much important.

The symptoms of covid 19 are Runny nose, sore throat, fever and dry cough. In *Shalakya*, the similar features are found in *Vatika pratishyaya*. Moreover the *purva roopa* of *pratishyaya* are also similar to the clinical presentation in covid 19. [8]

The main aim of treatment in context to *Shalakya* remains on the 2 goals:

- Protection of mucosa of nose and throat
- Boost immunity so as to make body capable to fight against infections.

Protection of mucosa of nose and throat

There is currently no vaccine to prevent coronavirus disease 2019 (COVID-19).

The best way to prevent illness is to avoid being exposed to this virus.

The virus is thought to spread mainly from person-to-person.

Between people who are in close contact with one another (within about 6 feet).

Through respiratory droplets produced when an infected person coughs, sneezes or talks.

These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.

Some recent studies have suggested that COVID-19 may be spread by people who are not showing symptoms.

As we all are aware that the main route of transmission of the virus is through droplets,

One should cover mouth and nose with a cloth face cover when around others.

One can spread COVID-19 to others even if one does not feel sick.

Everyone should wear a cloth face cover when they have to go out in public, for example to the grocery store or to pick up other necessities.

Cloth face coverings should not be placed on young children under age 2, anyone who has trouble breathing, or is unconscious, incapacitated or otherwise unable to remove the mask without assistance.

The cloth face cover is meant to protect other people in case you are infected.

Do NOT use a facemask meant for a healthcare worker.

Continue to keep about 6 feet between yourself and others. The cloth face cover is not a substitute for social distancing.^[9]

The main entry point of virus is nose and throat. The virus enters the throat or nose and then in upper respiratory tract.

Respiratory tract infection starts from cough and gradually converts in Severe Acute respiratory Syndrome (SARS). Thus avoiding contact and covering of nose and mouth is very crucial in preventing its spread.

Thus everyone should hands wash often with soap and water for at least 20 seconds especially after you have been in a public place, or after blowing your nose, coughing, or sneezing.

If soap and water are not readily available, use a hand sanitizer that contains at least 60% alcohol. Cover all surfaces of hands and rub them together until they feel dry.

Avoid touching eyes, nose, and mouth with unwashed hands.

Boost immunity so as to make body capable to fight against infections

Ayurveda the word derived from two words Ayur i.e life and Veda i.e science which means science of life. Ayurveda is a traditional system of medicine which deals by treatment focused on two goals:

- Prevention (swasthasya swasthya lakshanam)
- Treatment of the disease(*aaturasya vikar prashmanam*)^[10]

The first and the foremost task is to prevent the disease which we as ayurvedic practitioners and in particular the branches of *Shalakya*, *Kaya chikitsa* can use to curb its spread.

Rasayana therapy which is used to boost immunity is full of ayurvedic text references.

One of the few are listed here which one can use to enhance the immunity and fight against the virus.

Single drug therapy

- Tulasi
- Guduchi
- Amala
- Pippali
- Haridra
- Ashwagandha
- Yashthi madhu

Ayurvedic preparations

- Chyawanprash
- Sitopaladi churna
- Sanshamni vati
- Sanjeevani vati
- Arvindasav
- Indukant rasa
- Guduchi rasayan
- Dashmoola kwatha
- Haridra khand

Rasayana helps in increasing the immunity of the person and prevent the disease. *Rasayana* are health promoting and rejuvenating agents which by their empirical effects produce resistance against disease both physically and mentally.

Charak samhita mentions that the person undergoing the *rasayana* therapy benefits as intelligence, memory, body strength, skin luster, sweetness of voice & physical strength is increased and it helps to attain optimal physical strength & functioning of the sense organs.^[10]

In the disease caused by novel coronavirus there is an oxidative stress in oral and nasal mucosa so the herbal remedies when used reduces the stress by generating anti oxidants and are a rich source of multi vitamins which help fight the infection.

Local prophylaxis measures such as herbal decoctions, gold milk or *haridra* mixed milk, consumptions of hot water, gargling with medicated water, and nasal instillition of drops described in Ayurveda for respiratory illnesses.^[12]

Nasya and kawal^[13]

- 1. Nasal application Apply sesame oil / coconut oil or Ghee in both the nostrils (*Pratimarsh Nasya*) in morning and evening.
- 2. Oil pulling therapy- Take 1 table spoon sesame or coconut oil in mouth. Do not drink, Swish in the mouth for 2 to 3 minutes and spit it off followed by warm water rinse. This can be done once or twice a day.

Nasya is nasal insufflations of medicated Oil, Decoction or Powder. The Nasal route is the only superior way to treat disease conditions of Upper part of Sternum.

The Probable explanation of its action is given below.

'Nasa hi Shirso Dwaram^[14]

Ayurvedic School of thoughts says nose is the entrance of the cranial cavity, the nasal medicine enters in *Shringatak marma* and spreads in the cranial cavity, eyes, ears, throat and the minute capillaries of Face and the *doshas* are removed from the site.

Retention of various kinds of fluids in mouth is Gandusha or Kawala. The retained fluid which can be easily moved/rotated from side to side is called Kawala(Gargle).^[15]

Systematically performed kawala/gandusha causes elimination of vitiated kapha from surrounding structures which get mixed with fluids/pastes of kawala/gandusha and thrown out along with it at the end of procedure. The procedure is helpful.^[16]

More and more studies can be done on the use of ayurvedic drugs in prevention covid19.

Yogasana play a very important role in enhancing the immunity and detoxification of body. Meditation and *yogasanas* like *bhasrika*, *bhramri*, *kapalbhati*, *rechak*, *purak and surya namaskar* can be done regularly to make the body and mind fit and healthy.

In todays scenario when every where there is a panic regarding this novel outbreak, yogasana can help in relieving the stress. Stress and mental anxiety are one of the major causes in reducing the immunity as they releases free radicals and make the body susceptible for the entry of various bacterias and viruses.

Last but not the least a healthy body and healthy mind depends on healthy life style. So the lifestyle must be good. One should not indulge in *Adhyashana*, *vishmashana*. Always have *Hitkara ahaar* and *vihaara*.

Since there are no treatment modalities for this new pandemic and no vaccine has been developed till now this is an opportunity to find true potential of Ayurveda systems and adopting integrative approaches for innovating solutions against COVID-19 pandemic. India can demonstrate the potential of AYUSH systems in addressing this global health crisis. Various scientific studies and researches are going and can be increased using ayurvedic preparations and relieve the nation of this pandemic.

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