Role of Chyavanprash as a Rasayana in combating an outbreak of COVID 19

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ABSTRACT

Today the whole world is suffering from the most dreadful disease that is Covid 19. The Causative factor for COVID 19 is SARS-COV2. It was first noticed in Wuhan city of China. World Health Organisation declared the fatality of this disease as a pandemic. This disease has become a problem of great concern globally. This virus targets the respiratory system of human beings. There is a high incidence of person to person transmission of this disease through contact. However, there is also a significant role in innate immunity in pathogenesis and management of this disease. The whole world is seeking for flawless control of this viral disease. Ayurveda is a holistic science. Its aim is not only on the cure of diseases but also on its prevention. It emphasises mainly on healthy life of an individual. There is a wide range of principles described in Ayurveda which are used to combat disease from its root. Rasayana Chikista is a useful principle of Ayurveda, beneficial for management and prevention of many diseases. It is always said that “prevention is better than cure”. Chyavanprash is one of the well known Rasayana. Contents of Chyavanprash shows a wide range of actions on respiratory diseases as well as on boosting immunity. These properties of it provoke us to review the role of Chyavanprash in the prevention of Covid 19, thereby increasing one’s immune response. This Chyavanaprash can be a boon in the prevention of Covid 19 by improving immunity against it.

INTRODUCTION

Covid 19 is declared as a pandemic disease in a global context WHO states it as a worldwide health concern. These coronaviruses are non-segmented, single-stranded RNA virus genomes. (Li et al., 2020)
sidered as Hinabala Vyakti as per Ayurveda. That means fatality is as per “Rogi Bala”. Those having less Bala are having more chances to get infected with this virus. (Ismail et al., 2017) So, enhancing Rogi Bala and prevention of further course of the disease is the vital step in the management of it. Recent researches show that patients of this disease are presenting with higher leukocyte count; that is, there is a rise in pro-inflammatory cytokines in plasma. (Rothan and Byrareddy, 2020) This study shows the involvement of the host immune system in the infection of Covid 19. These viruses are mainly spread by contact. Till date, there is no therapeutic elixir treatment found to fight against Covid 19. Also, there is no vaccine available, yet. Only preventive measures such as washing hands with soap and rubbing with a sanitiser, covering mouth and nose with a flexed elbow while sneezing and coughing, maintaining social distancing of 1-3 meters with unwell and suspected people are being followed. Also, the intake of Vitamin C is advised. Isolation and staying at home is a significant remedy suggested by the governments throughout the world. Prime Minister Narendra Modi has advised the physician’s of AYUSH to take up the challenge and come forth to fight against these frightful viruses by using principles of the study of their diseases. This integrative approach will help to turn upside down the Covid 19. Ayurveda is all-inclusive science which mainly emphasise on prevention of disease, maintaining good health along with the cure of diseases from their root. Rasayana is one of the significant elements in Ayurvedic Chikista. (Chulet and Pradhan, 2009) Rasayana is etymologically derived from the words “Rasa” and “Ayana”. Rasa is the first Dhatu forming in our body from the food that we ingest. Dhatus is the primitive matter present in the menu. Ayana means mode by which this Rasa of the Dhatus transforms further into other Dhatus. (Tripathi et al., 2015; M.O.M.I.N. and Ali, M., 1998) The other Dhatus are formed step-by-step. This Rasa Dhatus can be correlated with plasma tissue as per modern science. It rejuvenates the body, reinstates youthfulness, enhances the mental and physical strength and improves ones’ immunity, helps in relieving stress and tension of life. As per Dalhana (ameedieval commentator of Sushruta Samhita), it is the therapy which deals with good health and longevity. (Kumar et al., 2014) It also boosts the immune response of the human being. (Gautam and Debnath, 2001; Shaillesh and Vaishali, 2018) There are different types of Rasayana described in Ayurveda. One of them is Chyavanprash. It is a blend of nearly about 50 herbal drugs. These drugs show various activities against alleviated Doshas in the body during Samprapti of disease. It is mainly prepared in Aamlaki base which shows sarvdoshgghna property that means it is helpful in the homeostasis of the body by maintaining all the Doshas (the four senses of humour of European history - blood, phlegm, yellow bile (choler), and black bile) in proper condition and helps in rejuvenating the body. (Kumar et al., 2017) It is Pancharasatamaka as per Ayurveda, that means, it is almost a mixture of sweet, sour, bitter, astringent and pungent tastes. As its main base is Amla, it is rich in Vitamin C, which affects curatively in respiratory diseases. Thus this Rasayana therapy, particularly Chyavanprash, can be proven as adjuvant therapy in the management of Covid 19. It will help to keep away these viruses by boosting ones’ immune response.

DISCUSSION

Covid 19 is one of the dreadful diseases which primarily attacks the respiratory system of the host. The symptoms of it range from simple cough to severe respiratory distress. It also affects the overall immunity of the patient. These viruses show a replication strategy, which is unique to them. Along with the respiratory system, it also invades the immune system of the host. CD4+ T cells, T cells, and CD8+ T cells have a unique antiviral role by harmonising combat against pathogens showing the position of immunity in infections of Covid 19. (AnthonyR and Perlman, 2015) Rasayana Chikista among the eight elements of Chikista of Ayurveda can be very much in effect against Covid 19. Chyavanprash is one of the imperative compounds of this Rasayana Padhathi. It is a blend of around 50 natural products. The dose of Chyavanprash is given as 10 gm thrice a daily for about 28 days in Indian Pharmacopedia. (Debnath et al., 2012) Its Anupama is Godugdh. Chyavanprash is prepared using the classical method and can be nectar in the prevention and cure of these viruses. A significant component of Chyavanprash is Amalaki which is a well-known most abundant source of vitamin C. It also consists of polyphenolics and flavonoids. This vitamin C acts like an antioxidant which aids in preventing lung damages due to cytokinin induction by viruses and prevents further pathology of the disease. (Sharma et al., 2019) Concerning Ayurveda, individual actions of ingredients in Chyavanprash at micro as well as macronutrient level, tissue nourishment level, metabolic level are well established (Gautam and Debnath, 2001)

The following are the Dravyas of Chyavanprash show several actions on the respiratory system.

1. Vasa (AdhatodavasicaNees) (Sanjeev Kumar ND, 2015)
2. Aguru (Aquilaria malaccensis Lamk) (Ismail et al., 2017)

3. Punarnava (Boerhaviadiffusa Linn.) (Bhowmik et al., 2012)

4. Shalparni (Desmodiumgangetium DC.) (Suman et al., 2015)

5. Aamalaki (Emblica Oficinalis Gaertn.) (Bhat et al., 2019)

6. Pushkarmula (Inula racemose Hook. F.) (Kimothi, 2014)

7. Pippali (Piper longum Linn.) (Ashalatha et al., 2015)

8. Kakdasingi (Pistaciaintegerrima Stewart-ex Brandis) (Shirole et al., 2014)

9. Kantakari (Solanum xanthocarpum Schrad and Wendi (Roshy et al., 2012)

10. Guduchi (Tinosporacordifolia Wild) (Tripathi et al., 2015)

11. Shatavari (Asparagus racemosus Wild) - (Joshi, 2016)
Important constituents - Dihydrophenanthrene, racemofuran, Wildhatvarin I to VI, undecanylecetaoate, asparagine, γ-linolenic acids, oligospirostanoside, rutin, hyperoside, sitosterol, 4, 6-dihydroxy-2-O, sarsapogenin, benzaldehyde, quercitin diosgenin, and quercetin 3-glucourbinides, Vit A, C, E, B1, B2

Important actions - Nutritive, tonic, antioxidant

12. Vidaarikand (Pueraria Tuberosa DG) (Mirzaei and Venkatesh, 2012)
Guna – Guru, Snigdha, Rasa – Madhur, Vipaka - Madhur, Virya – Sheet

Important constituents - stigmasterol, puerarone coumestan, 6-diacetylpuerarin, daidzein, pterocarpustuberosin β-sitostreol, puertuberosanol and hydroxytuberosone isoflavone C-glycoside-4, puerarin,

Important actions - antioxidant, relieves debility, boosting immunity (p.739)

13. Ashwagandha (Withaniasomnifera Linn.) (Gupta and Rana, 2007)
Guna – Laghu, Snigdha, Rasa – Tikta, Katu, Madhur, Vipaka - Madhur, Virya – Ushna

Important constituents - Anahygrine, tropine, Cuscohygrine, anafurine, pseudotropine, chlorogenic acid, and withaferin A withananine, isopeptilertine, somnine, somnifierine, withananin, pseu-dowithanine, somnifiernine, withanone, withasom-nine, visamine,

Important actions - Antioxidant, adaptogenic, cyto-protective, antistress, promotes strength

Madhu and Goghrita are transporters for the potency of herbs that is Yogavahi as per Ayurveda. These promote quick absorption. Also, these promote rapid assimilation of other ingredients of Chyavanprash in the distant tissues. (Chunekar and Pandey, 2002) Chyavanprash also consists of some spicy herbal drugs which aid in improving the circulatory system, thus channelising the elimination of the toxins from visceral organs and distant tissues. It builds a corresponding interaction within physiological functions routing toward an upgraded metabolism. (Sharma et al., 2019) An observational study carried out on 99 patients of pulmonary tuberculosis which were newly diagnosed put forth that adjuvant use of Chyavanprash with anti TB drugs significantly declined the symptoms and increased the bioavailability of pyrazinamide and isoniazid. (Debnath et al., 2012) Sharmaghara has quoted in Phalshruti of Chyavanprash that it is beneficial in treating Shosha. (Patel, 2017). In this Vyadhi, degeneration of all the Dhatus occurs, and Bala of the patient is also deprived. This condition is synonymous of Rajyakshma Vyadhi described by Acharya Charaka, which shows nothing but syndrome affecting the respiratory and immune system. By considering the signs and symptoms and pathology of Covid 19, it can be said that there is vitiation of mainly Kapha Dosha along with Vata and Pitta. It’s one of the acute symptoms, is fever. Most of the Dravyas of Chyavanprash is of TiktaRasatmaka. This rasa is said as Jwarghna by Acharya Charaka. (Akhtar et al., 2010) Also, it is Laghu, Ruksa, Gunamaka as per Acharya Sushruta which pacifies vitiated KaphaDosha. (Kumari et al., 2013) That means Chyavanprash devastes viti ated Kapha Dosha and will help fight against Covid 19. As said earlier, in Covid 19, also respiratory and immune systems of victims are generally involved. By considering all these facts, Chyavanprash can have a crucial role in the management and treatment of Covid 19 as an adjuvant compound to increase Bala of the healthy patient as well of the diseased one.

CONCLUSION

Rasayana Chikista is beneficial for prevention and cure of any disease. Chyavanprash as a part and partial of this Chikista have also potential to combat various diseases. It is made of huge range of useful natural products which are of great medicinal value showing effect on respiratory and immune system which are primarily affected in Covid 19 infection. It is well known compound to people in the society. Chyavanprash is very much cost effective and its ingredients are also easily available to prepare it. Also due to its sweet and sour test it is easy to consume. Many researches have been carried out to show its potential and action. Along with general preventive measures, if this is consume with proper dose and duration with Anupanaas Godugdhit can prevent the person from Covid 19 and it should also be taken by person which are just suspected for the disease. In this way, we can fight pandemic Covid 19 by integrated approach by using Chyavanprash as Rasayana. And this disease can be controlled world wide. Thus, an effort is made to compile the information from Ayurvedic texts and treatises, along with ethnopharmacological, ethnobotanical and scientifically proven researches, that focuses the role of Chyavanprash in combating Covid 19.

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