Covid-19 an Ayurvedic Prospective

DR. Shivalingappa J. Arakeri¹, DR. Sudendra Navale², DR. Rajesh Sugur³, DR. Shivanand Karigar⁴, DR. Mohasin Kadegaon⁵

¹Associate Professor and HOD, Department of Shalya Tantra, Taranath Government Ayurvedic Medical College, Ballari, Karnataka, India.

²Associate Professor, Department of Swasthavritta, Taranath Government Ayurvedic Medical College, Ballari, Karnataka, India.

³Assistant Professor, Department of Panchakarma, Taranath Government Ayurvedic Medical College, Ballari, Karnataka, India.

⁴Assistant Professor, Department of Dravyaguna, Taranath Government Ayurvedic Medical College, Ballari, Karnataka, India.

⁵Associate Professor, Department of Shalya Tantra, Taranath Government Ayurvedic Medical College, Ballari, Karnataka, India.

*Corresponding Author:: DR. SHIVALINGAPPA J. ARAKERI

Associate Professor & HOD Department of Shalya Tantra Taranath Government Ayurvedic Medical College Ballari- 583101 Mobile No.: 9845894052

ABSTRACT:- COVID-19 (SARS COV-2) is a new global pandemic affecting nearly 200 countries with 4.5% mortality rate. In India currently 6lakh positive cases with 3% mortality rate reported. Ayurveda, generally perceived as the medical system dealing with non-communicable and chronic diseases, but when we explore the classical texts, the disease outbreak (epidemic) reference is understood as "Janapadodhwamsa". In Kushta Adhikara we can find reference of mode of transmission of infectious diseases under different headings. Acharya Sushrutha, explained the symptoms of Janapadodhwamsa in the context of polluted air as cough, breathlessness, vomiting, cold, headache and Sthana Parityaga (social distance) which all holds good in present COVID pandemic. There is reference of Ushna Jala Pana, Amalaki, Ashwagandha intake and Lashuna Ksheerapaka is present in order to boost immunity of mankind. Those who are in quarantine can be advised for Kavala, Nasya, Akshitarpana, and Dhoopana Karma. For hospitalized patients as an adjuvant therapy Rasayanas, Kasahara and Jwarahara Kashayas and Vatis can be advised. So in this article, sincere effort has been put forth to meet the objectives of COVID-19.

Keywords: COVID-19, Ayurveda, Janapadodhwamsa, prevention

I. INTRODUCTION:

COVID-19 (SARS COV-2) is emerged as global pandemic affecting nearly 200 countries (1crore Population) throughout the world, with 4-5 % mortality rate. In India nearly 6lakh positive cases as on today with 3% of mortality rate is reported. Government of India has taken aggressive and preventive measures in controlling its community spread by flattening the curve in the graph.

Ayurveda generally perceived as a system of medicine majorly dealing with non-communicable diseases and chronic health conditions, but when we explore the classical texts of Ayurveda, we come across many such instances where in disease outbreak (Epidemic) is understood as Janapadhodhwamsa. A sincere effort has been put forth to meet the objectives of COVID-19.

Mode of transmission (Hetu Sutra)¹:

The following are the different modes of transmission of the Corona Virus which is mentioned in the context of Kusta adhikara (contagious diseases)

- Prasangath By physical contact/ sexual contact
- Gatrasamsparshath By touching the infected person
- Nishwasath When exposed to exhaled air of the affected person including the droplet while coughing or sneezing
- Saha Bhojanath –Eating contaminated food with all together
- Saha Shayyath Sharing of bed, pillow or blanket of infected person
- Saha Asanath Sharing the seats specially in crowded public transports

Gandhamala Anulepanath –Sharing of personal cosmetic things

Clinical Features (Linga Sutra):

Common symptoms	Other symptoms	
Fever-88%	Shortness of breath- 18.7%	
Dry cough-67%	Aches and pains- 14.9%	
Fatigue-38%	Sore throat	
	Very few people will report diarrhea, nausea or a runny nose.	

Severity of COVID-19:-

- Severe illness (Hypoxemia, >50% lung involvement on imaging within 24 to 48 Hours) in 14%
- Critical Disease (Respiratory failure, shock, multi-organ dysfunction syndrome) was Reported in 5%
- Overall case fatality rate was between 2.3 to 5%

II. UNDERSTANDING OF ILLNESS

As the **COVID-19** is newly emerged disease condition, it is very difficult to understand the clinical presentation in a single context mentioned in classical texts. In the context of Rutucharya, Acharya Susrutha mentioned about the Janapadhodhwamsa, Pandemic diseases with symptoms like Cough, Breathlessness, Vomiting, Cold, Headache and Fever spreads by means of polluted air. He also advises for Sthana parityaga (Social Distance) by means of breakdown of chain in community spreading. Similarity of COVID-19 cases in Ayurveda.

² Sannipataja Jwara (kapha-mild, pitta-moderate, vata-aggressive)	³ Pachyamana Jwara Lakshana	⁴ Kshataja kasa
Shwasa- Difficulty in breathing	Adhika Jwara Vega – High grade fever	Excessive pain in the throat and feeling of cracking pain in the chest
Kasa – Cough	Trushna- Thirst	Pricking type of pain as if pricked by sharp needles
Pratishyaya – Cold & Running nose	Pralapa- Delirium, irrelevant talk	Excruciating pain and discomfort by touch on chest, miserable appearance.
Mukhashosha- Dry mouth	Shwasa – Dyspnoea	Pain in joints and fingers, fever, labored breath, thirst and altered voice
Ati Parshwa ruk- Severe pain in flanks	Bhrama- Giddiness	While coughing, sounds humming like pigeon.
Shwasa- Difficulty in breathing	Mala and Shleshma pravrutthi- Elimination of Feces as well as Phlegm	Excessive pain in the throat and feeling of cracking pain in the chest

Prevention care (health promotion/Aoushadhi sutra vivechana):

Amalaki– Āmalaki possesses significant Immunostimulant activity and moderate cytoprotective activity. It is rich in Vitamin C which is a natural Antioxidant

 $\label{lem:asymptotic-constraint} \textbf{Ashwagandha} - \text{Withaferin A and 3-b-hydroxy-2,3-dihydrowithanolide F isolated from Withania somnifera show promising antibacterial, antitumoral, immunomodulating and anti-inflammatory properties}$

Antiviral activity of Withania somnifera extract has been reported earlier on Herpes Simplex Virus Type-1.

The inhibitory action of Withaferin A, a steroidal compound present in Withania somnifera against Herpes Simplex Virus has also been reported.

Indhukanta Gritha – Preliminary studies in our laboratory showed IG to possess considerable immunomodulatory effects with a Th1 type of immune response

Ashtamangala Gritha – It increases both, Haemagglutinating antibody (HA) titre and Delayed type hypersensitivity (DTH) response which indicates that the polyherbal formulation potentiates humoral as well as cellular immunity.

Advised for those who are in Quarantine / Isolation / Vulnerable group

Lashuna Ksheera paka - Allium sativum modulates cytokine secretion and that such modulation may provide a mechanism of action for many of their therapeutic effects.

Ushna Jalapana is advised frequently

Advised for Common public

Primary prevention by means of Bahirparimarjana Upakramas-

• Considering Route of entry of Virus in Mucosal linings of the Oropharynx, Nose & Eyes, Primary prevention for above mentioned category have to be adopted in the form of Bahirparimarjana upakramas like Kavala & Gandusha, Nasya, Akshi tarpana/parisheka & Dhupana karma.

Kavala & Gandusha:

- Haritaki Kashaya with Honey.
- Kashaya prepared with Draksha, Guduchi, Sumanapravala, Darvi, Yavasa, Triphala with Honey
- Trikatu with Kshara jala and Lavana

Netra Tarpana/ Parisheka: :

- Triphala Gritha can be used for Tarpana and Triphala Kashaya can be used for Parisheka **Nasya:**
- Pratimarsha nasya with Anu taila or Goghritha.

All these external therapies (Kavala, Gandusha, Nasya & Netra tarpana/ parisheka) will induce first line of defense by strengthening the mucosal lining of eyes, nasal cavity & oropharynx. These therapies create unfavorable condition (barrier) for proliferation & infiltration of pathogens. Kashayas being alkaline media retards the growth of micro organisms.

Dhupana karma:

• Guggulu, Aguru, Sarjarasa, Vacha, Swetha Sarshapa, Lavana, Nimba patra with Gritha. This dhupana karma is a **Traditional method of fumigation which ensures the protection from microbes in the living atmosphere.**

Ushna Jalapana⁵:

In the context of Janapadhodhwamsa Vyadhis Characterized by Jwara as a main clinical feature, Ushna jalapana is strongly recommended by our Acharyas. Hot water is best Appetizer, Digestive, good for throat ailments, helps to relieve cough, breathlessness, cold, running nose & it clears phlegm in chest

Curative Measures:

Advised for Hospitalized patients

All **COVID- 19** positive cases should be treated with standard treatment protocol advised by WHO/ state health authority. The following Ayurvedic line of treatment is formulated from the context of Jwara (Sannipataja jwara & Pachyamana jwara in specific), Kasa (Vataja & Kshataja kasa in specific) & Swasa. These Ayurvedic medicaments can be advised as Adjuvant/Supportive care in **COVID- 19** positive cases.

• Shatyadi Varga Kashaya:

Shati, Puskaramula, Srungi, Duralabha, Guduchi, Ginger, Patha, Kirata, Katukarohini.

Cures: Sannipata Jwara along with Kasa (cough), Hrut graha (stiffness in cardiac region), Parshva arati (pain in the sides of the chest), Shvasa (Breathlessness) and Tandra (drowsiness).

• Bruhatyadi gana Kashaya :

Both the varieties of Brihati, Pauskara, Shati, Srungi, Duralabha, Seeds of Vatsaka, Patola and Katukarohini. Cures: Sannipata Jwara, Kasa (cough) etc. and all types of complications.

- The Peya prepared of red variety of rice (Raktashali) and boiled with Gokshura (Tribulus teresteris) and Kantakari (Solanum surattense) alleviates fever and it is taken by the patient suffering from pain in Parshva (sides of the chest), Basti (urinary bladder) and Shiras (head).
- The Vidarigandhadi Gana Yavagu is stimulant of digestion and it promotes sweating. This Yavagu is taken by a patient suffering from Jwara associated with Kasa (cough), Shvasa (breathlessness) and Hikka (hiccup)
- The Peya which is sour and which is boiled with Prishnaparni (Uraria picta), Bala (Sida cordifolia), Bilva (Aegle marmelus), Shunti (Zingiber officinalis), Utpala (Nymphaea alba) and Dhanyaka (Coriander sativa), is taken by a person suffering from Jwara-atisara (fever associated with diarrhea).

• Ksheerapaka prepared with Shunti (Zingiber officinalis)/Lashuna (Allium sativum) can be given in Pachyamana avastha of Jwara.

"Based on clinical condition of the patient, below mentioned medicines can be given with appropriate dosage."

- Agastya Hareetaki Rasayana
- Chyavanaprash Avalehya
- Vasavalehya
- Trayushanadi Gritha
- Dashamula Katutraya Kashaya
- Amritarista
- Pippalyasava
- Kanakasava
- Pushkaramulasava
- Sudarshana Ghanavati
- Mrityunjaya Rasa
- Jayamangala Rasa

Post Recovery Supportive Management:

- Vardhamana Pippali Rasayana- Pippali is considered to be best Rasayana for Pranavaha srotas.
- Pranayama- Breathing exercises improves respiratory capacity.
- Yoga- It maintains physical and mental stability.

III. CONCLUSION:

COVID-19 is a recent serious global health problem. There is no specific antiviral treatment recommended for COVID-19 & No vaccine is currently available at this point of time. In Ayurveda, COVID-19 is better understood in terms of some the conditions like Sannipataja Jwara, Kshataja Kasa, Pachyamana Jwara. Here an attempt is made to establish the Etiopathogenesis & Management (Preventive & Curative) of COVID-19 as per Ayurvedic classics in the form of Trisutra of Ayurveda for better understanding and evidence based clinical practice in mild & moderate form of illness. Treatment protocol can be standardized & established after clinical trial.

REFERENCE

- [1]. Acharya Sushruta. Sushruta Samhita. (Nibhanda Sangraha commentary of Dalhanacharya & Nyaya Panjika commentary of Gayadasa). Edited by Yadavji Trikamji, 1st ed,. Varanasi: Chaukamba Sanskrit Samsthana 2014. Nidana Sthana 5th Chapter, verse no.33,p289
- [2]. Caraka Samhita, Ayurveda-Dipikas Ayusi-Hindi Commentary by Vd. Harish Chandra Kushwaha,2nd Part, edition 2012; Varanasi, Chaukhamba Orientalia, Cikitsasthana, chapter 3rd, verse no. 136-137, p94
- [3]. Caraka Samhita, Ayurveda-Dipikas Ayusi-Hindi Commentary by Vd. Harish Chandra Kushwaha,2nd Part, edition 2012; Varanasi, Chaukhamba Orientalia, Cikitsasthana, chapter 3rd, verse no. 101, p88
- [4]. Caraka Samhita, Ayurveda-Dipikas Ayusi-Hindi Commentary by Vd. Harish Chandra Kushwaha,2nd Part, edition 2012; Varanasi, Chaukhamba Orientalia, Cikitsasthana, chapter 18th, verse no. 21-23, p473
- [5]. Acharya Sushruta. Sushruta Samhita. (Nibhanda Sangraha commentary of Dalhanacharya & Nyaya Panjika commentary of Gayadasa). Edited by Yadavji Trikamji, 1st ed,. Varanasi: Chaukamba Sanskrit Samsthana 2014. Uttaratantra 5th Chapter, verse no.106,p680

*Corresponding Author:: DR. SHIVALINGAPPA J. ARAKERI
Associate Professor & HOD Department of Shalya Tantra Taranath Government Ayurvedic
Medical College Ballari- 583101 Mobile No.: 9845894052