EXPLORING RASAUSHADHIES AS A POSSIBLE REMEDIES FOR CORONA VIRUS DISEASE: A REVIEW

ABSTRACT

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. Today world is fighting with deadly corona virus pandemic and all medical fraternity is searching for promising solution for this ailment. So it is time to explore medicines for this pandemic situation of covid 19. Antibiotics and Anti-viral drugs are always on front foot to tackle such acute conditions but right now there is no sure anti-viral treatment is available. According to the current observation, mostly elderly and immune compromised co morbid conditions are more prone to this disease. So there is urgent need of such drug which will increase the immunity as well as stop further progression of disease. Ayurveda has enriched with so many formulations. Rasaushadhies are one of them which have a strong potential to boost immunity along with therapeutic role in such conditions due to its phenomenal characteristics such as quick action, less dose and easy palatability.

According to the Ayurveda Nidan Shastra (Science of Diagnosis of diseases) symptoms of COVID-19 can be correlated with Vatakaphaj Jwara which then turn into Swashanaka Jwara and it is counted under Sannipataja Jwara (Involve all three Dosha and difficult to treat). There is a wide range of pharmaceuticals which could be used in COVID-19 according to Ayurveda. Present paper aimed to highlight some Rasaushadhies in the form of Bhasma, kupipakwa rasayana, and Kharaliya rasayana. It is noticed that almost all contents of described Rasaushadhies have Ushna, Tikshna properties. Tikta and Katu Rasa which mark there action on Kapha and Kaphajanya Vikara. Bhasma like Abhraka help to improve the disturbed physiology of respiratory organs. Kajjali (HgS) and arsenic in Kupipakwa Rasayana has visaghna, Yogavahi (catalytic) properties which helps to nullify toxins in mucosal secretions. Arsenic compounds in Kharaliya rasayana has immense potential to treat respiratory disorders by its strong antitussive and stimulant action. Rasayana properties claims immune boosting and protective action of body tissue. Ayurveda Rasaushadhies has been used for prevention as well as therapeutic purposes. It has a strong potential to cure respiratory infections and complications if use cautiously with proper adjuvants. There is need to generate clinical data in order to evidence safe use of this ancient medication in such pandemic disease.

Keywords COVID-19, Rasashastra, Bhasma, Kupipakwa Rasayana, Kharaliya Rasayana

INTRODUCTION: Today world is fighting with deadly corona virus pandemic and all medical fraternity is searching for promising solution for this ailment. Many developed countries are caught in this hurricane and trying to escape from it. Worldwide it is a great concern over the increasing mortality day by day.

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. Most people
infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people, and those with underlying medical conditions like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness. Common symptoms include: fever, tiredness, dry cough. Other symptoms include: shortness of breath, aches and pains, sore throat and very few people will report diarrhea, nausea or a runny nose.

According to the World Health Organization (WHO), the most effective way to protect yourself against coronavirus is by frequently cleaning of your hands with alcohol-based hand rub or washing them with soap and water. People should eat only well-cooked food, avoid spitting in public, and avoid close contact, the WHO said, adding that it is important for people to seek medical care at the earliest if they become sick.

According to the latest data compiled by India’s drug regulatory authority The list contains antibiotics like Azithromycin, Amoxicillin, Ofloxacin, Metronidazole, vitamins such as B12, B1, B6, and E, female hormone progesterone and anti-cardiac arrest drug Atorvastatin, among others. Although modern medical science is striving for specific anti-viral therapy, but it will definitely take some time. Meanwhile many researches are going on worldwide for the control of COVID - 19 so it’s time to explore age old medications of Ancient Ayurveda.

Ayurved has mentioned such pandemic under Aupasargic Roga and people get contaminated by close contact, by droplet infections, by sharing food and use of cloth and accessories of diseased person. Physiology of human body is solely based on equilibrium of Vatadi dosha (Basic constituents) Rasadi Saptadhatu and Trimala. Most of the pathogenesis in Ayurveda is due to divergence of Doshas (Basic body constituents), still most of the theories support microbial infections as Agantuj vyadhi. There are two distinct objectives of Ayurveda i.e. Swasthyasya Swathya Rakshanam (stabilize the health of healthy being) and Aturasya Vikara Prashaman (cure the diseased people) It means that Ayurveda has more focused over prevention of disease by means of following of proper Ritucharya(Protocol to be followed in certain season), Dincharya, (Protocol to be followed in daily routine) Yogasana and Rasayana (Health booster) therapy whenever necessary.

Presently Ayurveda experts have stressed that medicinal herbs such as Amla, Giloy, Shilajit and Neem are helpful in strengthening the immune system which is key to fighting the deadly virus. also there are other plant based formulations which can be used as a prophylaxis treatment in COVID. Recently AYUSH department has come up with few immunity promoting measures such as drinking golden milk, steam inhalations, Nasya etc. Since Ayurveda has also been prospered with Rasashastra (Science which deal with pharmaceutics of Metals-mineral formulations) other than plant based medicine, Ayurveda is having rich heritage of promising medicines called as Rasaushadhies which have very potent therapeutic potential. It has very less dose, easy palatability, quick action and long shelf life hence preferred over plant base medicines. Rasaushadhies are basically potentiated with processed mercury and other metal- minerals by plant drugs. It is
claimed that diseases which do not cured by other medicines are cured by Rasaushadhies. So it is time to explore these medicines for this pandemic condition of COVID-19. So present paper will discuss pathophysiology of COVID-19 according to Ayurveda and expected use of these Rasaushadhies.

METHODS AND MATERIALS
For present review, literature was collected from classics of Ayurveda and Rasashastra texts. Also various national and international research papers along with internet literature were reviewed related to the topic. In present study very specific and particular Rasaushadhies was selected in spite of its wide range to keep literature limited. So only three Bhasma, seven Kupipakwa Rasayana and seven Khalvi Rasyanaa are emphasized in present study.

COVID-19 and Ayurveda diagnosis
As per the symptoms of COVID-19, it is confirmed that the disease affect respiratory system. It mainly affect lungs and throat. As most of the cases recovered with strong immunity, in severe condition there is strong blockage of mucosal secretions (Pneumonitis) and patient die due to terminal respiratory failure.

As Jwara (Fever) is predominant symptom in COVID patient, it is confirmed that main source of pathology stated with Annavaha Strotasa (Gastrointestinal tract). There is vast treatment protocols for Jwara described in Ancient classics of Ayurveda. By the 6th -2nd century two famous scholar of Ayurveda Charak and Sushrut contributes to the field of etiology of jwara (pyrexia). According to Charak define the fever in five different categories as continuous fever, remittent fever, quotidian fever, tertian fever and quarter fever developed as an imbalance in bodily elements, or “doshas,” and has thereby weakened their immune system, may be subject to a microbial infection as symptom of that imbalance of tri doshas. According to Ayurveda primarily these symptoms such as fever, sore throat, dry cough resembles that of Vatakaphaj Jwara which turn into Swashanaka Jwara which is counted in Sannipataja Jwara (Involve all three Dosha and difficult to treat). It is due to Aamsanchit Kapha (Abnormal metabolites) in Lungs.so it is unable to resist microbial toxins and hence infected by secondary infections. Hence there is accumulation of vikrit Kapha (Mucosal secretions) and due to vitiated Udana vata in lungs there is Kasa(cough) and vitiated Pitta produce symptom of Jwara. So here according to Ayurved there need to pacify all three Doshas.

Basically treatment protocol for such diseases are typical in Ayurveda and more concentrated towards the breaking the chain of pathogenesis of causative factors for Jwara so as to balance the physiology of body. But in treatment with Rasaushadhies multidimensional actions on vitiated Doshas(Imbalanced physiological elements) is taken into consideration along with its immune system boosting potentials.

Rasaushadhies for COVID - 19
There are numerous Rasaushadhies which can break the cycle of pathogenesis of this disease. But only few are quite specific over these symptoms. These are categorized in following ways.

1. Bhasma(Incinerated metal/minerals)

Bhasmas are very fine incinerated inorganic preparation which are processed with plant based substances for potent therapeutic actions. Bhasma which act on respiratory system are tabulated with their therapeutic action.
Table 1: Bhasmas

<table>
<thead>
<tr>
<th>Sr.no</th>
<th>Bhasma</th>
<th>Therapeutic action</th>
<th>Dose</th>
<th>Adjuvant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Abhrak Bhasma</td>
<td>Rasayana, Vrishya, Yogavahi</td>
<td>120 - 240 mg</td>
<td>Cinnamon powder</td>
</tr>
<tr>
<td>2</td>
<td>Shrunga Bhasma</td>
<td>Kaphayukt Kasa</td>
<td>120-340mg</td>
<td>Mishri</td>
</tr>
<tr>
<td>3</td>
<td>Shubhra Bhasma</td>
<td>Parshwashool, Repeated bouts of cough</td>
<td>120-500mg</td>
<td>Mishri, Honey, Vanpsha Sharker</td>
</tr>
</tbody>
</table>

2. Kupipakwa Rasayana

Kupipakwa Rasayana are most potent formulations in Ayurveda due to its unique pharmaceutical processing techniques. It has been prepared in Kupi (Bottles) with help of Valuka Yantra and use especially for respiratory tracts diseases. The basic content in any kupipakwa rasayana is Kajjali (Black sulphide of Mercury) along with other metals and minerals. Following are the few Kupipakwa Rasayana which can be used in COVID patients.

Table 2: Kupipakwa Rasayana

<table>
<thead>
<tr>
<th>Sr. no</th>
<th>Kupipakwa rasayana</th>
<th>Content</th>
<th>Therapeutic Action</th>
<th>Dose</th>
<th>Adjuvant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Purna Chandrodaya Rasa</td>
<td>Kajjali, Suvarna (Purified Gold)</td>
<td>Rasayana, Hridya Antimicrobial</td>
<td>30mg-120mg</td>
<td>Milk, Butter etc</td>
</tr>
<tr>
<td>2</td>
<td>Rasasindoor</td>
<td>Kajjali</td>
<td>Kasa, Swasha, Rasayana</td>
<td>120-240mg</td>
<td>Trikatu, Honey etc</td>
</tr>
<tr>
<td>3</td>
<td>Malla sindoor</td>
<td>Kajjali, Su, Somal (processed Arsenic)</td>
<td>Swash, Kasa, Sannipataj</td>
<td>30mg-60mg</td>
<td>Honey, Pipal churna</td>
</tr>
<tr>
<td>4</td>
<td>Talsindoor</td>
<td>Kajjali, shu, Hartaal (AS$_2$S$_3$)</td>
<td>Kasa, Swasha, Kshaya</td>
<td>120mg-240mg</td>
<td>Honey, Ginger juice</td>
</tr>
<tr>
<td>5</td>
<td>Shila sindoor</td>
<td>Kajjali, Shu, Mainshil (AS$_2$S$_2$)</td>
<td>Swasha, Kasa</td>
<td>120mg-240mg</td>
<td>Honey</td>
</tr>
<tr>
<td>6</td>
<td>Samirpan nag Rasa</td>
<td>Kajjali, Shu, Somal, Shu, Hartal, Shu, Manshila</td>
<td>Jwara, Pratishya, Kasa, Swasha</td>
<td>60-120mg</td>
<td>Honey, Adrak swara, Nagarv elpatra swarasara</td>
</tr>
<tr>
<td>7</td>
<td>Manikya Rasa</td>
<td>Kajjali, Manshila, Shu, Naga, Manshila</td>
<td>Jwara, Kasa, Swasha</td>
<td>60-120mg</td>
<td>Honey, Ginger juice</td>
</tr>
</tbody>
</table>

3. Kharaliya Rasayana

Kharaliya Rasayana are those medications which are prepared in Kharala (Mortar and pestle). It aims to prepare the medicines super fine (Nano size) in order to increase its bioavailability and decrease its dose. It is usually herbo-mineral preparations includes combination of Metals, Minerals, Processed plant based poisons treats with organic liquid media. Many kharaliya rasayana is prominently use for both acute and chronic disease conditions. For the symptoms like COVID 19 Various Kharaliya Rasayana can be advocated.
3. Table 3. Kharaliya Rasayana

<table>
<thead>
<tr>
<th>Sr.No</th>
<th>Kharaliya Rasayana</th>
<th>Main Contents</th>
<th>Therapeutic action</th>
<th>Dose</th>
<th>Adjuvant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tribhuvan Kirti Rasa</td>
<td>Shu.Hingul(HgS), Shu.Vatsanabha, Trikatu Shu.Tankan,Pippali</td>
<td>Kaphgna, Jwarghna, Swedal</td>
<td>60-120mg</td>
<td>Honey, Ginger Juice</td>
</tr>
<tr>
<td>2</td>
<td>Trayalokya Chintamani Rasa</td>
<td>Rasasindre,Hirak,Suvara, Tambra.Loha,Abhrak Bhasma,Muktabahsam etc. Hartal,manshla</td>
<td>Sleshmic Sannipat, Swashnak Sannipat</td>
<td>60-120mg</td>
<td>Honey, Ginger Juice</td>
</tr>
<tr>
<td>3</td>
<td>Mrityunjaya Rasa</td>
<td>Hingool,Vatsanabh,Gand hak, Marich,Tankan,pippali</td>
<td>Jwarghna, Vatakapha rprdhan sannipat</td>
<td>15-60mg</td>
<td>Honey, Ginger Juice</td>
</tr>
<tr>
<td>4</td>
<td>Kalkut Rasa</td>
<td>Kajjali,Manshila,Hartal, TambraBhasma, shu.vatsnabha etc. triturated with decoction of 13 herbs</td>
<td>Sannipataj Jwara</td>
<td>60mg</td>
<td>Ginger Juice</td>
</tr>
<tr>
<td>5</td>
<td>Kaphakuthar Rasa</td>
<td>Kajjali,Trikatu,Tamabrahmasa, Lohabhasma etc</td>
<td>Kaphaj kasa Jwara</td>
<td>120-250mg</td>
<td>Nagarwel patraswaras a</td>
</tr>
<tr>
<td>6</td>
<td>Chandramurti Ras</td>
<td>Kajjali, Loha Bhasma, Trikatu, Triphala,etc</td>
<td>All types of Kasa</td>
<td>250-500mg</td>
<td>Vasa Swarasa, Honey etc.</td>
</tr>
<tr>
<td>7</td>
<td>Swashkuthar Rasa</td>
<td>Kajjali,Manashila,.Trikat u marich ,Vatsanabha etc</td>
<td>Vatashleshm a Jwara,Kasa</td>
<td>120 -240 mg</td>
<td>Honey, Ginger Juice, Boiled water</td>
</tr>
</tbody>
</table>

DISCUSSION: Ayurveda has distinct formulations in form of varied single and combinations remedies which are used with Yukti [Judgment according to Bala (Physical and Mental strength), Vaya (age), Prakriti, (Constitution) Kaal (Time), Desh (Habitat) etc.] Rasaushadhies are strength of Ayurveda pharmaceutics and hence preferred due to its quick action and less dose.

It is observed from present scenario that COVID 19 symptoms are likely to attack in cold weather and host those who have immune compromised. Rasaushadhies recommended for these symptoms are not only release symptoms but also have long lasting Rasayana effect which will boost immune system of patients for longer duration.

Bhasma are the incinerated and processed metal and minerals are used with specific adjuvants according to the predominance of Doshas. So the Bhasma like Abharak (Mica), Shringa (Deer horn) and
Sfatica (Alum) could be used. (Table: 1) Abharak Bhasma is very effective Bhasma in Rasasthara, as it is been used in all disease with varied adjuvants according to the disease. It has Rasayana properties. It rejuvenate diseased body by gradually improving Dhatu pariposhak krama. It improves all metabolic activities by stimulating enzymatic activities and hormonal secretions. It gives strength to respiratory organs and other systems.

Shringa Bhsama is used as expectorant with Pippali churna or Honey. It is use in Pneumonia fever, Bronchopneumonia, Pleurisy, Influenza, Jeerna jwara (Chronic fever) etc. It is used in combination with Abhrak Bhasma, Sitopaladi Churna or Kaphanashak Kwatha. It is never been use in dry cough as it bring dryness to airways. It moderate mucosal secretions with help of respective adjuvant such as Vasa, Yashtimadhu etc. Shubhra Bhasma (Alum) is use in painful conditions due to acute episodes of cough. It constrict the airways which help to remove Sticky mucous in airways .It is useful in second stage of pneumonia when the lungs become dense.

In Kupipakwa Rasayana, Kajjali (Black sulphide of Mercury) is the basic component which has antimicrobial properties and catalytic effect. (Table: 2) These mercurial compound enhance the bioavailability, bio-accessibility and potency of other component what are mixed with them by carrying the component into the targeted cell. Purna chandrodaya acts mainly as Hridya (Heart protective) and Rakta dhata (Blood) it detoxify microbial toxins in body. Rasasindoor is having stimulating properties as it expectorate unhealthy mucous from lungs. It removes repeated irritation of nasal mucosa and mucosal layer of larynx. Hence control upper respiratory infections. It improves function of circulatory system and gives strength to respiratory organs. Mallasindoor is strong Rasayana as it contain arsenic compound.so it is given exclusively in accumulation of Dushit kapha (Abnormal mucosal secretions) in respiratory diseases. It is use in acute state of disease with due precautions. It is use in acute pneumonitis and influenza. A case study on the therapeutic effect of malla sindoor and shring bhasma in the elevated absolute eosinophil count showed highly significant results by symptomatic and pathological investigation with treatment period of 17 days as compared with baseline, a significant change in clinical symptoms was observed and significant reduction in AEC. Talsindoor contain Arsenic compound is used in obstruction of mucosal secretions in lungs hence it clears airways by its Ushna and Tiksha properties.

Samirpannag Rasa (SPR) contains all three arsenic compound hence more potent Rasayana in Acute stage of pneumonia.it reduces inflammation on bronchoile and alveoli and stimulate secretion of mucus for excretion of abnormal mucosal secretions.it give strength to respiratory organs if use judiciously with proper adjuvants. Mishru M. et al (2013) has concluded that the SPR has a significant action in cases bronchial asthma and it could suppress total leukocyte count, eosinophil count, ESR and can improve PEFR and providing symptomatic relief. A single case study on “Effect of ayurvedic formulation on seasonal respiratory disease “(cough, dyspnea, runny nose, sneezing) with use of Sameerpinnag Rasa along with Sitopaladi Churna And Tankan Bhasma showed
relief in Seasonal respiratory disease and reducing ESR count.¹⁷

*Manikya Ras* is mostly used in dry cough where mucosal secretions are difficult to expectorate. It stimulate mucosal secretions which helps to soothe airways. It helps to improve overall health by *Rasayana* properties.

*Kharliya Rasayana* are processed with distinct plant based liquids such as decoctions, juices etc. in such a ways so as to break pathogenesis of diseases. So particular Kharaliya *Rasayana* has been chosen for particular disease conditions. (Table: 3)

*Tribhuvan Kirti Ras* is *kaphgna, Jwarghna, Swedal* and *Vedanahar*. Hence it is useful in *Vatkapahaj Jwara* (Influenza).It is use in judicious way with proper adjuvant according to the Prakriti as it contains *Vatsanabha* (Aconitum Ferox). Acharya charaka while explaining line of *dosa* tackling in *jwara* advices to conquer *kapha* first, *pitta* in second order and *vata* at last, Tribhuvana keerthi rasa works on the same principle.¹⁸

*Trayalokya chintamani Rasa* is a blend of many important *Bhasma* and arsenic compounds like *Hartal* and *Manshila* which not only relieve the symptoms of respiratory disorders but also helps to normalize the function of respiratory system. It clears obstruction in airways and maintain oxygen supply it improves *Ojashakti*(Vital Power), bring *Dhahtusamyata*,(Equilibrium of body composition) and improves metabolic function over a period of time.

*Mrityunjaya Rasa* as the name suggest is medication which overcome death. It act mainly on influenza like symptoms such as fever, sore throat, excessive mucosal secretions. All the content in this preparation have *ushna tikshna* properties hence use cautiously in *pitta dosha lakshana*. Jagtap GA et al (2019) in the review on *Mrityunjaya Rasa* has concluded that it can be used is an emergency drug in systemic disorders such as different type of fever conditions, Diabetes mellitus, Tuberculosis and even as rejuvenator and it has broad spectrum activity for the management of *Kapha Vaataj* disorders.¹⁹ Agrawal Sachin et al (2014) in the study on “Antimicrobial study of Mrityunjaya Rasa” has evidenced the antimicrobial potential of *Mrityunjaya Rasa* more in *Adrak swarasa bhavit* (triturated with ginger juice Ref - Yogaratnakar) hence concluded the importance of Bhavna dravya in antimicrobial potential.²⁰

*Kalkut Rasa* is very strong preparation as compare to other formulation as it contains arsenic compound as well as potent herbs such as *Vatsnabha, Kalihari mula, Dhattur mula* along with other antitussive herbs such as *Panchkola*, so it has to be use with proper dosage and appropriate disease condition along with suitable adjuvant. It is mainly use in *kaphaj sannipata*.

*Kaphakuthara Rasa* is used in *Kaphaj Kasa*. When there is excessive congestion due to *kapha* (mucous secretions) it is triturated with *kantakari kwath* and *Dhatturpatra swarasa* which helps to constrict the airways which help to expel the mucosal secretions. Satpute JS et.al (2019) has concluded on a clinical study of *Kaphakuthara Rasa* in *Jirna kaphaja kasa* that due to *Chedan* and *Bhedan properties* control over vitiated *Kapha* was achieved by Kaphakuthara Rasa and it helped to remove *Avarodha*(Obstruction) of *Vayu*. The study did not observe any adverse effect of *Kaphakuthara Rasa* in patients.²¹ *Chandramrit Rasa* is processed with Goat milk and other *Agnidipak* herbs
which not only relieve the symptom of Kasa but also complication of it by improving overall strength of patient. Swashkuthar Rasa contain Manashila and Vatsanabh along with Kajjali with gradual addition of Krishamarich (Black Piper) having Kaphanashak properties and clears airways with its shukma and Ruksha guna. It is used in swashvega (Repeated bouts of Asthma) when there is accumulation of dusit Kapha. Jadhav R et al (2018) concluded in the “A clinical study of Shwaskuthar Rasa in the management of Tamaka shwasa w.s.r. to Bronchial asthma” Shwasakuthara Rasa showed 58.80% good result on signs and symptoms of Tamaka Shwasa which have been selected as assessment criteria and better effective in Kapha Pradhana Samprapti Shwasakuthara Rasa in the dose of 250 mg with honey were administered three times a day after food for the period of 6 weeks on 20 patients of Tamaka Shwasa between the age group of 18 to 60 years. Yadav kapil Dev et al (2012) in the study on Antimicrobial Properties of Swash Kuthar Ras by Agar Disc Diffusion has concluded that Shwas kuthar rasas was effective against only third strain of Staph. aureus. Shwas kuthar rasa shows different minimum inhibitory concentration on different species of bacteria like S.typhimerum, Pseudomonas, Morganella, Shingella, Serratia, Staph. aureus and E.coli was 4.5 mg/ml, 75 mg/ml, 150 mg/ml, 18.5 mg/ml, 300mg/ml and 9.25 mg/ml respectively. It is observed almost all contents of Rasaaushadhies have Ushna, Tikshna Aampachak properties. Most of the drugs have Tikta and Katu rasa which mark their action on Kapha and Kaphajanya Vikara. Rasasindoor (Red sulphide of Mercury) and arsenic content Kharaliya rasayana has immense potential to treat respiratory disorders by its strong antitussive and stimulant action. These Rasayana also has antimicrobial potential. The drug used in trituration and other processing are used in such a way that it enhances its action furthermore adjuvants used with these medicines have potentiate its effect. In this context mostly honey, Ginger juice, Betel leaf juice etc. is been used which are kaphavatashamak properties. It is observed from the review of above Rasaaushadhies that it has a capacity to break the pathogenesis of Annavaha and Pranavaha srotas vyadhies (Diseases). Apart from that, these drugs have proven pharmacological actions like bioavailability enhancer, anti-asthmatic, free radical scavenging activity, antimicrobial activity, anti-inflammatory, detoxification, anti-mutation activity, Broncho dilator and anti-allergic activities. These attributes increase the potency and safety of Rasaaushadhies prescribed in Shwasa Roja and help in targeted action. In Ayurveda Rasaaushadhies has been used for prevention as well as therapeutic purposes. As per COVID symptoms is concern, it is definitely going to be breakthrough in this alarming situation.

CONCLUSION: Ayurveda treatment protocol solely depends on Agni chikitsa and strongly believe in equilibrium of basic elements of body. Rasaaushadhies in Ayurveda are phenomenal due to metal-minerals constituents. It has wide range and multidimensional therapeutic potential. In today’s challenging situation of COVID - 19, when whole world is looking for promising remedies to cure the disease, it could be a key for this. Rasaaushadhies have strong potential to cure respiratory infections and
Complications arise due to it if use cautiously with proper adjuvants. Only one need to take under guidance of scholar Rasavaidya. Bhasmas, Kharaliya and Kupipakwa rasyana mentioned in the study needs to test therapeutically in different stages of COVID cases with proper follow-up so that its preventive and curative aspects can be explored. There is need to generate clinical data by using this ancient medication in acute stage to assure its safe use.

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