

## Ayurvedic Evaluation and Treatment of Covid 19 Severe Cases: A Case Series

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### ABSTRACT

There is no proven treatment of COVID-19 as of now. Ministry of AYUSH, Government of India, has permitted use of traditional systems of medicine for treating mild to moderate and severe cases of COVID-19. In line with this, there are few case reports which show promising results for treatment of COVID-19 with Ayurveda treatment module. These treatment reports highlight subdued COVID-19 infection without developing serious complications. Ayurvedic treatment module appears to be safe and efficacious with early recovery and better outcomes. Despite the patient presenting with symptoms, namely high fever, severe body pain and severe cough, along with many of the other associated symptoms of COVID-19, the progress of the disease could be arrested within a short period by being exclusively on Ayurvedic medicines. This should encourage the healthcare policy makers to quickly use Ayurveda to bring the COVID-19 pandemic under control in India, as they seemed to have demonstrated it in China with TCM (traditional Chinese medicines)<sup>(1-3)</sup>

**Keywords-** Covid-19, Ayurveda treatment, Traditional medicine

### I. INTRODUCTION

The COVID-19 pandemic has tightened its grip on India. India does not figure in the most severely affected countries but fares worse than the top affected nations in key medical infrastructure and health care investments. India has fewer hospital beds and doctors per 1000 people than any of the countries affected by COVID-19. Moreover, those who progress into critical stages would require intensive care and this can pose a major challenge for the limited hospital resources and capacities in case of a sudden spike in infections. Considering the fact that COVID-19 requires a structured.

Complementary and Alternative Medicine (CAM) is a set of practices that are not fully

integrated into the modern healthcare system and include herbal products, animal products, spiritual healers, yoga, and relaxation techniques.<sup>(4)</sup> The practice has been used throughout the world for centuries to prevent and treat chronic and acute illnesses including, respiratory tract infections. The immunity of patients plays an essential role in COVID-19. Therefore, traditional medicines having immunomodulatory effects could be a potential candidate for preventive and treatment of COVID-19 patients.<sup>(5,6)</sup>

Approach covering preventive care, management in early stages of confirmed disease as well as hospital care for moderately and critically ill patients, it is imperative that the capacity of the AYUSH sector is harnessed to ensure optimal use of the scarce health care resources available in the country. The World Health Organization has also recommended inclusion of traditional medicine in its COVID-19 strategic preparedness and response plan.

### Patients Information

In this case series study we collected 5 cases of all genders mid age to old age group of viral pandemic Covid-19 positive few are severe acute respiratory illness (SARI) were approached in the month of April - May 2021 to the DCHC (Dedicated Covid Health Center) government Ayurvedic college Osmanabad. The classification in the diagnosis of the cases are on the basis of their confirmation those with their RT-PCR test positive are labeled as covid 19 those who didn't approach for testing RT-PCR but their signs and symptoms and pathological findings are suggestive of viral pandemic like conditions either SARI or FLI (Flu like illness). All these 5 cases selected are amongst the total cases of 50 plus cases treated but selected only 5 in this article as they opted only for Ayurvedic treatment and along with other treatments and also they are above mid age group and with some co morbidities. Almost all the cases

though mid aged and above with some co morbidities requested local health authorities to be in home isolation and they were allowed by authorities on conditions to follow the isolation rules strictly and relatives were instructed to update the conditions regularly. There was tremendous

pressure on local health infrastructure in those days as it was a peak period of pandemic in that area. Here 5 patients with their Rtpcr Positive Date and their basic information along with sign and symptoms are mentioned in following tables.

**Table 1.**

Patient ID	01	02	03	04	05
Age in year and Sex	47 year Male	51 year Male	39 year Male	65 year Female	75 year Female
Rtpcr Positive Date	20/04/2021	21/04/2021	25/04/2021	01/05/2021	27/05/2021
HRCT Score out of 25	24	14	12	12	10
Other Findings such as CRP, D-Dimer etc	CRP-54	CRP-33	CRP-60 D-Dimer-374 LDH-1394 Sr. ferritin-545	CRP-29	CRP-27

**Table 2. Symptoms**

Symptoms	01	02	03	04	05
Fever	Y+++	Y++	Y+++	Y+++	Y++
Headache	Y++	N	N	Y++	N
Cough	Y++	Y++	Y+	Y+++	Y+++
Bodyache	Y+++	Y++	Y+++	Y+++	Y+++
Fatigue	Y++	Y+++	Y+++	Y++	Y+++
Taste loss	Y+++	N	Y+	Y++	Y++
Anosmia	Y+++	Y+++	Y+	Y++	Y+++
Breathlessness	Y+++	Y+++	Y++	Y+	Y+++
Dyspepsia	N	Y++	Y+	N	Y++

Y-Yes, N-No, + Mild, ++ Moderate, +++ Severe

**Diagnostic findings**

In viral pandemic, diagnoses of the case by contemporary methods in its earlier stage before it progresses, this is a very important step which should be adopted by physician. That's why detecting a case in early condition is necessary which can be possible by following points.

**Reading of Hemogram:** on onset of few symptoms getting hemogram done after couple of days along with Platelets count and ESR is very important step. Calculating Neutrophiles to Lymphocyte ratio (NL Ratio) <sup>(7)</sup> gives very clear idea about advancing cases, if NL ratio is equal or above 3.5 it is an indication that the condition is advancing to moderate or severe or even critical stage. Similarly Leucocytosis can lead to severity

and Leucopenia can be of mild type. Also Platelets number slightly going down shall be sign of progressing type and platelets normal or increasing can be a sign of recovering stage. Almost all the 5 cases soon they approached to author they were asked to test hemogram and CRP and also asked to recheck it after interval of 7 to 10 days till they become normal. In every case there was disturbances found in all above points those are WBC count either increase or decreased, high ESR values. Either Neutrophiles increased and lymphocytes decreased or Lymphocytes increased and Neutrophiles lowered, either platelets are increased or decreased;

**Early Markers like C Reactive Protein <sup>[8]</sup>:** CRP is a marker of inflammation in body and if it is very

strongly positive (Above 25 mg/dl), it indicates the increasing severity of COVID-19/SARI/FLI in all the 5 cases every person showed increase in CRP in their first reports (mentioned in Table 1); After objective parameters few subjective parameters like signs and symptoms of the patients and blood oxygen saturation level is also considered in present study, these symptoms are quite helpful to correlate the disease with few disease or conditions mentioned in Ayurved literature especially as mentioned in introduction it is a jwaratold in Janapadavidhwansabuta to be specific it can be correlated to Vata kaphajwara (type of dwandwaja jwara) mentioned in Charaka Samhita Nidanasthanas Jwaranidanam<sup>(9)</sup>. As mentioned in table no.1 fever, headache, cough, body ache, fatigue, taste loss, smell loss (anosmia), breathlessness and dyspepsia all were the common symptoms amongst these 5 cases and all these symptoms are present in jwara, in fact fever (jwara) is the very important symptom in viral pandemic almost all scientific articles available on covid19 mentions the same.

#### Diagnostic Assessment

Above mentioned clinical findings are only the diagnostic criteria are of importance to diagnose the stages earlier before they progress. Other test like HRCT of chest and few blood parameters like ferritin, D dimer, LDH and procalcitonin are also considered as major diagnostic parameters to assess stages, HRCT can be earlier marker to help in early diagnoses but the others are more significant in later stages. In the present study cases first two diagnostic criteria those are hemogram, and CRP were only considered or included. And reduction in their symptoms and most important is survival of patient.

#### Therapeutic Intervention

Systematic management is adopted solely by Ayurvedic medicine and as it can be correlated to jwara specifically vata kaphajwara its shaman aushadhichikitsa was considered first and whichever easily available licensed drugs with more strong capacity to breakdown the samprapti or pathophysiology of viral pandemic is administered with Yukti, Anuman and Aptapramanas. On the bases of symptoms and laboratory findings; from Ayurvedic point of view there should be Chikitsa sutra which follows Jwarachikitsa management with following drugs or medicines which are having jwaraghna (antipyretic), Agantuja Krimighna, Kasahara (antitussive cough

reducing) and, Shwasahara (antiasthmatic), Vedanasthapa (anti-inflammatory) and Rasayana (rejuvenating or antioxidants) properties. For almost all patients of viral pandemic in this study following Ayurvedic medicines are given till they reduce their symptom so their maximum pathological findings reaches normal or near normal values.

#### JAYMANGAL RAS<sup>(10)</sup>

It is used in the Ayurvedic treatment of fever, chronic fever, intermittent fever. Effect on Tridosha. It balances Vata, Pitta, Kapha. We give it on a dosage of 250mg twice a day for 10 days for reliving fever. Jay Mangal Ras have been made up of following ingredients are Black Pepper, Suhaga, Swarna bhasma, Rajat bhasma, Vang bhasma, Lohbhasma, Shuddha Gandhak, Barley, Tamrabhasma. primarily used for the treatment of Weakness, Fever.

**SHWASKUTHAR RAS<sup>(11)</sup>**- It is an Ayurvedic medicine in tablet or powder form. It is used in the treatment of asthma, dyspnea, chronic bronchitis, cough etc. we give this along with shwaskutharra for better results on respiratory distress problems like breathlessness in above patients.

**MAHA SUDARSHAN GHANVATI<sup>(12)</sup>**- It is beneficial for viral fever, it act as a antipyretic. It has digestive action and known as a bitter tonic. It improves appetite and reduces indigestion. Therefore, it is also beneficial for treating loss of appetite, indigestion and abdominal heaviness occurring in fever. It is helpful for treating mild headache and body pains linked with fever. In addition, it helps to clear the bowel. So we give this in patients no.4 and 5 with 10 days and in remaining patient for 3 days.

**TRIBHUVAN KIRTI RAS<sup>(13)</sup>**- It is a trusted ayurvedic medicine for chills associated with fever arising due to vata and kapha predominance. It digests ama, stimulates sweat glands to produce perspiration in a natural way to bring down body temperature, also beneficial in reducing symptoms associated with common cold and cough. So we give this in a patient who having fever less than 100 degree centigrade. for 5 days and later sos.

**BHUNIMBADI KWATH 10-20ml Thrice daily** (Classical medicine indicated for Vata-Kaphajwara or viral fever) (Ref: BharatBhaishajya Ratnakara)<sup>(14)</sup> This kwath is mentioned in Bharat Bhaishajya Ratnakara for Vata kaphajwara it is different than regularly used Bhunimbadi kadha used for Amlapitta, This formula contains Bhunimba,

Katuki, Guduchi, Duralabha, Parpata, Musta and Shunthi, all these herbs are proven jwaraghna and best amapachana which are required in the breaking down pathophysiology of this pandemic. The patients who were on the verge of developing multiple organ problems like liver and kidneys.

**SHWAS KASCHINTAMANI RAS**-It is used in the Ayurvedic treatment of cold, cough, bronchitis, asthma, and such other respiratory diseases. Allergic rhinitis, allergic bronchitis, Interstitial lung disease we used in the Ayurvedic management of covid 19 patients mentioned in this case series study.<sup>(15)</sup>

**Follow up and Outcomes:**

following points considered to assess the management above-mentioned line of treatment,

assessment is considered in both the ways one is subjective parameters another objective parameters.

1. Symptomatic improvement or total cure of symptoms in patients.
2. Increase in oxygen saturation to normal or maintaining SpO<sub>2</sub> to normal.
3. Improvement and normalizing effect in Hemogram i.e. correction in the total WBC counts, normalized NL ratio, Normalized platelets count.
4. Reduction in CRP to normal value.
5. Reduction or normalized values of other markers like Ferritin, D-Dimer, LDH etc.
6. Negative RT-PCR test which was previously positive.
7. Survival of Patient.
8. Presence of Antibodies of COVID-19 in patient's blood.

**Table 3. After treatment**

Patient ID	01	02	03	04	05
Age in year and Sex	47 year Male	51 year Male	39 year Male	65 year Female	75 year Female
Rtpcr Positive Date	20/04/2021	21/04/2021	25/04/2021	01/05/2021	27/05/2021
HRCT Score out of 25	24	14	12	12	10
Other Findings such as CRP, D-Dimer etc	CRP-4	CRP-2	CRP-5 D-Dimer-230 LDH-300 Sr. ferritin-150	CRP-5	CRP-6

**Table 4. After completion of treatment**

Symptoms	01	02	03	04	05
Fever	N	N	N	N	N
Headache	N	N	N	N	N
Cough	N	Y+	N	N	Y+
Bodyache	Y+	N	N	N	N
Fatigue	N	N	Y+	N	Y+
Taste loss	N	N	N	N	N
Anosmia	N	N	N	Y+	N
Breathlessness	N	N	N	N	N
Dyspepsia	N	N	N	N	N

Y-Yes, N-No, + Mild, ++ Moderate, +++ Severe

**II. DISCUSSION**

- Limitations

The physical distance between the patient and doctor made it difficult to examine and observe the patient directly. The medicines used for managing the condition had to be selected from a limited set of medicines that the patient had with him. There are a large number of Ayurvedic medicines that are currently in use for all types

of Vata-kaphaja and Sannipata-jwara which may prove to be effective for COVID-19.

- Strength

It is noticed that the patient's condition did not deteriorate. So it can be presumed that the management of COVID-19 with the given Ayurvedic medicines arrested the progress of the disease to a more serious state. Despite the patient

having severe cough and fever more than 39.1 °C, the patient did not worsen and develop breathlessness.

“Median time for onset of symptoms to recovery in mild and severe cases was 2 and 3–6 weeks, respectively. Furthermore, time interval between onset and developing severe symptoms such as hypoxia was one week.”<sup>(16)</sup> It can be said that the duration of the disease was presumably shorter because of the Ayurvedic medicines as it was noted where TCM was used<sup>(17)</sup>. This aspect needs to be studied further.

There are COVID-19 patients who test positive, but are asymptomatic. This case can be classified as mild to moderate in nature. There is “scarce and inconclusive evidence on symptoms that easily distinguish mild and moderate cases.”<sup>(18)</sup> However, fever above 39.1 °C (102.2 °F) is not considered mild. “Many mild cases also have very few symptoms, and cough is present in less than half of the mild cases.”<sup>(18)</sup> These patient exhibited many of the symptoms, including severe body pain, severe cough, anosmia, breathlessness etc. and had a peak temperature of 39.5 °C (103 °F), we consider these cases to be not very severe, but moderately severe.

The regulated diet played an important supportive role in the cure. The diet was advised so that it did not further aggravate the doshas, it was easy to digest (laghu), it stimulated the digestive fire (Agni deepanam) and it nourished the patient<sup>(19)</sup>, ChikitsaSthana, 3/142-143, 3/163-164]. The diet recommended for the patient, namely soup made of mung dal and cooked parboiled rice are included in the recommended diet in management of fevers. These are two of several preparations as described in the texts, as part of a larger detailing of food preparations and their effects on doshas and diseases.

We report this case series to show that COVID-19 is a condition where usage of Ayurvedic medicines & diet might have contributed to the case not turning critically ill.

### III. CONCLUSION

COVID-19 is responsible for causing a large number of deaths particularly in medically and technologically advanced countries like USA. This is presumably due to the absence of a proper treatment protocol in MWM to address this condition. Therefore, we report this case to show that COVID-19 is a condition where focussed Ayurvedic treatment, if given, may prevent the deterioration of the disease into a more critical

condition. This patient’s presentation was not mild. However he didn’t become critically ill owing to Ayurvedic intervention and regulated diet. India is in a position to use the wealth of knowledge available in the Indian Systems of Medicine, to cure this disease and control the epidemic. This is also an invaluable opportunity for demonstrating the efficacy of Ayurveda.

### REFERENCES

- [1]. Chan K.W., Wong V.T., Tang S.C.W. Covid-19: An update on the epidemiological, clinical, preventive and therapeutic evidence and guidelines of integrative chinese-western medicine for the management of 2019 novel coronavirus disease. *Am. J. Chin. Med.* 2020;48:737–762. Doi: 10.1142/S0192415X20500378. [PubMed]
- [2]. Wu Y.Q., Zou L., Yu X., Sun D., Li S.B., Tang L., Yang J.R., Chen X.Y., Wu Y.G., Fang H. Clinical effects of integrated traditional Chinese and western medicine on COVID-19: A systematic review. *Shanghai J. Tradit. Chin. Med.* 2020:1–8. Doi: 10.16305/j.1007-1334.2020.06.093.
- [3]. Qi G., Qi W., Jiang Q., Shen K.Q., Zhang X., Zhang L. The Efficacy of LianhuaQingwen Combined with Western Medicine Scheme on COVID-19 General Type Patients: A Systematic Review. [(accessed on 22 May 2020)];*Clin. J. Tradit. Chin. Med.* 2020 :1–9. Available online: <http://kns.cnki.net/kcms/detail/34.1268.r.20200410.0909.002.html>. [Google Scholar]
- [4]. Alzahrani AS, Price MJ, Greenfield SM, Paudyal V. Global prevalence and types of complementary and alternative medicines use amongst adults with diabetes: systematic review and meta-analysis. *Eur J ClinPharmacol.* 2021;8:1–6. [PMC free article] [PubMed] [Google Scholar]
- [5]. Zhang L, Liu Y. Potential interventions for novel coronavirus in China: a systematic review. *J Med Virol.* 2020;92(5):479–490. Doi:10.1002/jmv.25707 [PMC free article] [PubMed] [CrossRef] [Google Scholar]
- [6]. Sharma M, Anderson SA, Schoop R, Hudson JB. Induction of multiple pro-inflammatory cytokines by respiratory viruses and reversal by standardized

- Echinacea, a potent antiviral herbal extract. *Antiviral Res.* 2009;83(2):165–170. [PubMed] [Google Scholar]
- [7]. Yang Ai-Ping, Liu Jian-ping, Tao Wen-qiang, Li Hui-ming. The diagnostic and predictive role of NLR, d-NLR and PLR in COVID-19 patients. *Int ImmunoPharmacol* 2020;84:106504. <https://doi.org/10.1016/j.intimp.2020.106504>.
- [8]. Wang L. C-reactive protein levels in the early stage of COVID-19. *Med Mala-dies Infect* 2020;50(4):332e4. <https://doi.org/10.1016/j.medmal.2020.03.007>
- [9]. Pandey Gangasahaya, editor. *Charaka Samhita Part 1, Nidansthan, (Jwar-anidanam)*. 1st Ed. Varanasi: Chowkhamba Sanskrit Series; 1969.
- [10]. Bhaishaj Ratnavali Jwara Rogadhikara – 212 – 221. review by .C.K. Kokate ,A.P. Purohit, S.B. Gokhale. Forty Seventh Edition. Pune, India: Nirali Prakashan; 2012: Page No 11.12.
- [11]. Bhaishajya Ratnavali Shwasa Rogadhikara Yogaratnakara, Shwasa Chikitsa (treatment of respiratory disorders with difficulty in breathing) page number 373, *Ayurvedic Formulary of India Volume 1* 20:49
- [12]. on mahasudarshan ghan vati. available on. <https://www.ayurtimes.com/mahasudarshan-ghan-vati/>
- [13]. Rasamrit Rasayoga Vijnaniya, 9/80 – 81. available article <https://www.wjpmr.com/download/article/67042020/1588220454.pdf>
- [14]. Vaidya, editor. *Bharat Bhaishajya Ratnakara Part 3, BhakaradiKashayaprakaranam*, 4807. 2nd Ed. New Delhi: B. Jain Publishers Pvt. Ltd;1928.
- [15]. BAMS. Swas Kas Chintamani Ras – Benefits, Dosage, Ingredients, Side Effects. *Ayurvedic Medicine Information, PGDPSM. Bhaishaj Ratnavali Hikka Shwasa Adhikara*; 2015. pp. 85–87
- [16]. G. Kolifarhood, M. Aghaali, H. Mozafar Saadati, N. Taherpour, S. Rahimi, N. Izadi, et al.  
**Epidemiological and Clinical aspects of COVID-19; a narrative review**  
*Arch Acad Emerg Med*, 8 (1) (2020), p. e41
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7117787/>
- [17]. J.L. Ren, A.H. Zhang, X.J. Wang Traditional Chinese medicine for COVID-19 treatment *Pharmacol Res*, 155 (2020), p. 104743, 10.1016/j.phrs.2020.104743 Advance online publication
- [18]. Melina Michelen, Nicholas Jones, Charitini Stavropoulou  
**In patients of COVID-19, what are the symptoms and clinical features of mild and moderate cases?**  
Available online 01 April 2020  
Centre for Evidence-Based Medicine, Nuffield Department of Primary Care Health Sciences, University of Oxford; School of Health Sciences, City, University of London (2020)  
<https://www.cebm.net/covid-19/in-patients-of-covid-19-what-are-the-symptoms-and-clinical-features-of-mild-and-moderate-case/>
- [19]. Ram Karan Sharma, Vaidya Bhagwan Dash (Eds.), *Charaka Samhita of Agnivesha*, text with English translation of Ayurveda Dipika commentary of Chakrapanidatta, Chowkhambha Sanskrit Series, Varanasi (2003) Reprint