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Ayurvedic management of a patient with Hypoxia and Co-Morbidities by Home Care through Telehealth in 2nd wave of COVID-19 - Case Report

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ABSTRACT

Ayurvedic herbal combinations like *Kasaya*, *Churna* and *Vati* are very useful even in the moderate to severe patients with oxygen support. It was reported that Ayurveda medication can prevent further progression of inflammatory phase (cytokine storm) and prothrombic phase (Organ failure) of Covid-19 infection. *Rasa Rasayana* are thought to be more potent and quicker in action as compared to Ayurvedic herbal combination in *Jvara Chikitsa* (Fever) and are potent Immuno boosters also. A 42 years male consulted an Ayurvedic Physician with breathing difficulties and redness of eyes and face. His SPO₂ was 85% and HRCT of thorax's severity score was 14/25 with Diabetes and Hypertension as pre-existing co-morbidities. The patient had received Ayush-64, *Siddha Makardwaja*, *Swasa Kasa Chintamani Rasa* for the first three days of treatment along with oxygen therapy after that *Dasamoola Haritaki* was added. The patient showed clinical improvement within a day of administration of Ayurvedic medicines and felt good. His cough and breathing difficulties have substantially reduced and his SPO₂ became stable between 94 and 96% in two days. This case report highlights the clinical success story as a result of administration of Ayurvedic *Rasa-Rasayana* and herbal combination in early Inflammatory phase of COVID-19 infection without the use of synthetic steroid and reducing the oxygen requirement needed for home care set up through telehealth service. It may sensitize the reader for early detection and management of similar or identical cases.

Key words: AYUSH-64, *Siddha Makardwaja Rasa*, *Swasa Kasa Chintamani Rasa*, COVID-19, Hypoxia, Oxygen therapy, Home Care, Case Study.

INTRODUCTION

The resurgence of Second wave of Covid-19 in India has been spreading like wild fire and effect are more in rural population, highlighting the need for urgent evidence-based guidelines for home care to reduce overcrowding of hospitals.^[1] It is observed that the

mutant virus in second wave has more effective transmission capability and its incubation period is also lesser as compared to the initial wave. There has been a widespread disregard to the 'Covid Appropriate Behaviours or CAB' by the public which results in more severe illness, reducing the neutralisation of antibodies and effectiveness of treatment/vaccine. The breathing difficulties are commonly seen in 2nd wave, right from the beginning of infection in most of the patients.^[2] There existed a shortage of hospital beds, ICU capacity, medical oxygen and modern medicine to begin with. The incidence of angioinvasive maxillofacial fungal infections (*Mucor mycosis*) showed a positive development in some diabetic patients treated for SARS-CoV-2 with high dose corticosteroid administration.^[3] Patient had to struggle at home as hospitals were loaded beyond their capacity and

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many people sought Ayurvedic Intervention. The preliminary Randomised Clinical Trial report of CCRAS showed that AYUSH-64 can reduce progression of disease, quicker improvements in SPO₂ and faster resolution of symptoms with no causalities.^[4] Ayurvedic herbal combinations like *Kasaya*, *Churna* and *Vati* are very useful even in the moderate to severe patients on oxygen support and can prevent further progression of inflammatory phase (cytokine storm) and prothrombic phase (Organ failure) of Covid-19 infection.^[5] *Rasa Rasayana* are more potent and quick in action as compared to Ayurvedic herbal combination in *Jvara Chikitsa* (Fever)^[6] and are potent Immuno Boosters.^[7] Severe illness in COVID-19 typically occurs approximately 1 week after the onset of symptoms. The most common symptom is dyspnoea, which is often accompanied by hypoxemia. Patients with severe disease typically require supplemental oxygen and should be monitored closely for worsening respiratory status because some patients may progress to acute respiratory distress syndrome (ARDS). The optimal oxygen saturation (SPO₂) in adults with COVID-19 is uncertain. However, a target SPO₂ of 92% to 96% seems logical considering that indirect evidence from experience in patients without COVID-19 suggests that an SPO₂ <92% or >96% may be harmful.^[8] In the mild and moderate stages of disease, normal oxygen supportive measures (facemask oxygen) may be advantageous. WHO recommends supplemental oxygen therapy immediately for patients with respiratory distress, hypoxaemia or shock with a target SPO₂ > 94%.^[9] It is very crucial to train family member or nurses to screen patients and initiate quick management to the high risk patients under home care settings through telehealth to prevent hospitalisation, reduce economic burden and exposure of emergency care.^[10] Pronging and Yogic postures are medically accepted practice to improves breathing comfort and oxygenation. It is extremely beneficial in COVID-19 patients with compromised breathing comfort, especially during home isolation.^[11] This case report highlights the clinical success story of administration of Ayurvedic *Rasa Rasayana* and herbal combination in early Inflammatory phase of COVID-19 infection

without the use of synthetic steroid along with optimum oxygen in home care under the guidance of telehealth service.

Patient Information

A forty-two years old male patient suffering from body ache and mild fever (100°F) on 1st April 2021 ignored the problem and avoided Corona Verification Test fearing social stigma. He self-medicated by consuming Paracetamol (650mg), Azithromycin, Poly Vitamin with Zinc and Vitamin C without consulting any doctor for five days. On 5th April his fever subsided but cough, fatigue, nausea, sore throat and loss of taste and smell developed. He is a known case of Diabetes controlled only with diet and exercise without medication or medical advice. He felt profound weakness and was unable to stand up on 8/4/2021 and Rapid antigen test for Corona was positive. There was redness of face and eyes, along with tightness of chest and breathing difficulties on 9th April 2021 (9th day of initial symptom). The Patient's wife consulted me on 10th day of initial symptom (10th April 2021) when he became serious.

Clinical Findings

SPO₂ and blood sugar was recorded immediately. His SPO₂ was below 90% but it reached 85% often. His respiration rate was 30/min, Pulse rate was 98/min and blood pressure was 154/102 mmHg. The patient then consulted me with video call wherein I found redness of face with conjunctivitis, sluggish voice and congestion. He was advised to do chest X-ray immediately and found consolidation opacity and Ground Glass Opacity (GGO). So, I advised the patient for further investigations and arrangement of oxygen cylinder otherwise get admitted in COVID hospital. But the patient was not willing to get admitted and gave his written consent for Ayurvedic treatment.

Diagnostic Method

He was sent for RT-PCR test and HRCT of thorax for covid scoring on 11th day of his sufferings. His RT-PCR test was positive HRCT of thorax (COVID Screening) showed GGO with fibrotic band in bilateral lungs. His CT severity Score was 14/25, which showed moderate

stage of COVID-19. His Hb%-11.2g/dl, TLC-5210, total platelet count 2.64 laks/cum mm, FBS-260mg/dl and PPBS-320mg/dl, HBA1C-10, CRP-36(<8), D.Dimer-321 (<500) and IL6 -10(<6). The Liver function test, renal function test and blood electrolytes were within normal limits. His SPO₂ was below 90% always. The patient was diagnosed as severe Covid-19 infection in Inflammatory phase with severe hypoxia and moderate lung injury. The Ayurveda diagnosis was *Pittaja Sotha* as per symptoms.

Ayurvedic Intervention and Time line

The treatment was advised as per symptoms of the patient after receiving his consent and undertaking from the patient's wife. The initial treatment on 10th day of initial symptoms was AYUSH-64 - 2 Tablets T.D.S. with Siddha Makardwaja 125mg OD and advised to drink Haldi Milk 200ml twice. As patient developed hypoxia, then continuous oxygen therapy through mask and insulin 10 units TDS to control the hypoxia and sugar respectively by consulting a Pulmologist on 11th day of initial symptoms. The techniques of Oxygen therapy and insulin delivery were taught to patient's wife as Para Medics of the locality refused to come for assistance. The Swasa Kasa Chintamoni 125mg TDS were added to control breathlessness and Dasamula Haritaki - 5gram BID to control abdominal discomfort and flatulence. The redness of eyes and face disappeared on next day and oxygen saturation (95-96%) was stabilised on 3rd day of treatment. But intermittent oxygen therapy was advised and given for another day (Table no. 1). The patient had not received any steroid in any form during the course of treatment as steroid could precipitate sugar load and secondary infection.

Table 1: Time line of the course of the disease, diagnosis, interventions and outcomes.

Date	Symptom and evaluation	Treatment
1/4/2021 (D1)	Body ache and mild fever	No medicine
2/4/2021 (D2)	Headache with fever	Paracetamol, Poly Vitamin, Zinc, Antibiotics

3/4/2021(D3)	No fever, Cough, fatigue, body pain	-----do-----
8/4/2021(D8)	Profound weakness and bed ridden	Rapid Antigen Positive
9/4/2021(D9)	Breathing difficulties developed	Consult doctor, advised hospitalisation in COVID Ward.
10/4/2021(D10)	Redness of eye, breathing difficulties	Ayush-64 – 2tab TDS Siddha Makardwaja 125 mg OD Haldi Milk 200ml Bid
11/4/21 (D11)	More Breathing difficulties, Redness disappeared, anorexia, Oxygen saturation below 90%, Chest x ray showed GGO, RBS-322mg/dl, BP-155/102	Added Swasa Kasa Chintamoni 125 mg BID Oxygen therapy, Insulin - 10-unit TDS and Temikind 40 mg OD
12/4/2021(D12)	Breathing difficulties improved HRCT and Blood Investigation done, SPO ₂ -94-96%, RBS-262, Bp-140/90mmhg, RTPCR -Positive	Continued the same treatment with Oxygen support and Pranayama- 30 minute thrice
13/4/2021(D13)	Breathing difficulties improved and cough persist	Intermittent oxygen and Dasamula Haritaki -5 gram BID after food added
14/4/21(D14)	No breathing difficulties, SPO ₂ -96-98%, RBS-123, BP-140/90mmhg	Oxygen withdrawn and medicine continued
17/4/21 (D17)	Appetite increased; weakness persist	Mamsa Rasa
22/4/21(D22)	Able to do all	Shifted to OHA and Anti




house hold works and no weakness	hypertensive drug continued, Stopped all Ayurvedic Medication
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22/4/21 Normal state of living without Ayurvedic medications	
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Follow up and Outcome measure

The patient’s progress was followed on four hourly bases after the detection of severe symptoms through video call and was advised to inform if any emergency/change in status. The outcome was measured through clinical symptoms and oxygen saturation. The Initial Oxygen flow was 2.5lit/per hour continuously and was increased to 3.5 lit/hour to achieve SPO2 96%. Then intermittent oxygen with breathing exercise and Pranayama for 30 minutes twice were advised. The oxygen saturation and blood sugar were stabilised on third day of treatment. The oxygen therapy was stopped on 4th day of my treatment (D14).

Table 2: Different Photographs of Patients with description

Time line & Descriptions	Photographs
10/4/2021(D10) Redness of eye and face Breathing difficulties	
11/4/21(D11-13) Oxygen therapy in Home	
14/4/21 No breathing problem without oxygen	

DISCUSSION

The patient was not prepared for admission in COVID hospital and had faith in Ayurvedic treatment and gave his consent as also the requisite undertaking for treatment. The Patient’s wife was given all four-hourly feedback during the crisis period and Ayurvedic physician trained her to administer Oxygen and insulin. The redness disappeared on 2nd day of therapy as Haridra has anti-allergic properties and milk is best for *Pittaja Sotha*. The Curcumin in *Haridra* inhibits spike protein, ACE₂ receptors, mRNA expression and secretion of cytokines, IL-1β, IL-6, TNF-α, and IL-18.^[12-14] Siddha Makardwaja reduced *Pitta* and stabilized other two *Dosas*.^[15] AYUSH-64 is proven drug for COVID-19 infection. Swasa Kasa Chintamani is a potent brocho-dilators and gives strength to Lungs with good internal integrity of renal and hepatic parameters.^[16] The prescribed regimen was safe and effective without side effect as was observed in home-based treatment.

CONCLUSION

Ayurvedic *Rasa-Rasayana* and herbal combinations (AYUSH-64) are safe and effective in early Inflammatory phase of COVID-19 infection without the use of synthetic steroid along with minimum requisite measured dose of oxygen in home care set up through telehealth service. This preliminary case report may be used for Treatment of Corona 19 infection in Moderate to Severe stage.

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REFERENCES

1. Yamini Aiyar entitled, India's Resurgence of COVID-19: urgent action needed, The Lancet, May 2021, DOI: [https://doi.org/10.1016/S0140-6736\(21\)01202-2](https://doi.org/10.1016/S0140-6736(21)01202-2)
2. Sv P, Lathabhavan R, Ittamalla R. What concerns Indian general public on second wave of COVID-19? A report on social media opinions [published online ahead of print, 2021 Apr 14]. *Diabetes Metab Syndr.* 2021;15(3):829-830. doi:10.1016/j.dsx.2021.04.001
3. Moorthy A, Gaikwad R, Krishna S, et al. SARS-CoV-2, Uncontrolled Diabetes and Corticosteroids-An Unholy Trinity in Invasive Fungal Infections of the Maxillofacial Region? A Retrospective, Multi-centric Analysis [published online ahead of print, 2021 Mar 6]. *J Maxillofac Oral Surg.* 2021;1-8. doi:10.1007/s12663-021-01532-1
4. Balagi Potbhare & R Gopinda Reddy, Therapeutic potential of AYUSH-64 in COVID-19 : An Ayurvedic prospective, April-June NJ RAS, 9(2) <https://doi.org/10.52482/ayurlog.v9i02.829>
5. Joshi JA, Puthiyedath R. Outcomes of Ayurvedic care in a COVID-19 patient with hypoxia - A Case Report [published online ahead of print, 2020 Oct 13]. *J Ayurveda Integr Med.* 2020;10.1016/j.jaim.2020.10.006. doi:10.1016/j.jaim.2020.10.006
6. Chauvan Divya, Arora Palak, Choudary Shruti, Mitigating Covid -19 with Ayurveda Rasa sastra. May 2020, *World J Phar. Res;*9(2):603-11.
7. Panda AK, Kar Sarbeswar. Ayurvedic Immuno-Booster: Is it myth or Reality in COVID-19 pandemic, Jan 2021, *Int J Cur Res.& Rev;*13(1):134-140
8. Chu DK, Kim LH, Young PJ, et al. Mortality and morbidity in acutely ill adults treated with liberal versus conservative oxygen therapy (IOTA): a systematic review and meta-analysis. *Lancet.* 2018;391(10131):1693-1705. Available at: <https://www.ncbi.nlm.nih.gov/pubmed/29726345>
9. Nãmendys-Silva SA. Respiratory support for patients with COVID-19 infection. *The Lancet Respiratory Medicine.* 2020 Mar 5.
10. Osakwe, Zainab Totah PhD, MSN, NP Home Care and Use of Telehealth Amidst the COVID-19 Pandemic, *Home Healthcare Now: July/August 2020 - Volume 38 - Issue 4 - p 229-230* doi: 10.1097/NHH.0000000000000900
11. Messerole E, Peine P, Wittkopp S, Marini JJ, Albert RK. The pragmatics of prone positioning to increase oxygen concentrations in Covid-19 infection. *American journal of respiratory and critical care medicine.* 2002 May 15;165(10):1359-63
12. Thimmulappa R. K., Mudnakudu-Nagaraju K. K., Shivamallu C., Subramaniam K. J. T., Radhakrishnan A., Bhojraj S., et al. (2021). Antiviral and Immunomodulatory Activity of Curcumin: A Case for Prophylactic Therapy for COVID-19. *Heliyon* 7, e06350. 10.1016/j
13. Valizadeh H., Abdolmohammadi-vahid S., Danshina S., Ziya Gencer M., Ammari A., Sadeghi A., et al. (2020). Nano-curcumin Therapy, a Promising Method in Modulating Inflammatory Cytokines in COVID-19 Patients. *Int. Immunopharmacology* 89, 107088. 10.1016/j
14. Rattis BAC, Ramos SG, Celes MRN. Curcumin as a Potential Treatment for COVID-19. *Front Pharmacol.* 2021;12:675287. Published 2021 May 7. doi:10.3389/fphar.2021.675287
15. Kumar G, Srivastava A, Sharma SK, Gupta YK. Safety evaluation of mercury based Ayurvedic formulation (Sidha Makardhwaja) on brain cerebrum, liver & kidney in rats. *Indian J Med Res.* 2014;139(4):610-618.
16. Kumar Y, Singh BM, Gupta P. Clinical and metabolic markers based study of Swas Kasa Chintamani Rasa (An Ayurvedic herbo-metallic preparation) in childhood bronchial asthma (Tamak Swas). *Int J Green Pharm* 2014;8:37-44

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