



International Journal of Indian Medicine

www.ijim.co.in

ISSN: 2582-7634

Volume 2, Issue-5



IJIM

INDEXED

MAY 2021



International Journal of Indian Medicine

Access the article
online



A STUDY ON EFFICACY OF AYURVEDA INDIGENOUS FORMULATIONS IN KASA (COUGH) AMONG POST COVID-19 PATIENTS.

Yende M.R¹ Chamat A.D.² Thosar Sheetal³

1. Professor and HOD, Dept. of Rachana Sharir, Bhausaheb Mulak Ayurveda College and Research Hospital, Butibori, Nagpur.
2. Associate Professor and HOD, Dept of Swasthvrutta, Shri K. R. Pandav Ayurveda College, Nagpur.
3. Associate Professor & HOD, Dept. of Dravyaguna, Shri K. R. Pandav Ayurveda College, Nagpur

Abstract: Background: According to *Ayurveda*, pandemic diseases are those disease which spread from one person to other through contacts or droplets through air. Post-COVID syndrome is increasing after SARS-CoV-2 infection. It is associated with long term symptoms, most commonly cough, anorexia, sleeplessness and fatigue. **Objectives:** To determine the efficacy of Ayurveda formulations in post covid -19 kasa (cough). **Methodology:** In this study 20 patients having cough as a post covid-19 symptom between age group of 30-50 years were selected. Sitopaladi Churna with Choushastha Prahari Pippali, Swaskuthar Rasa, Prawal Pishthi and Lawanagadi Vati administered to the selected patients for 10 days. **Results:** This combination has shown statistically significant result for Shuska Kasa (Dry Cough), Urah Shool, Swarbheda and Daurbalya after 10 days administration of these drug. **Conclusion:** . This combination formula of Ayurvedic drugs is cost effective and without any side effects, these drugs can be given in covid-19 patients suffered from cough.

Keywords: Sitopaladi Churna, Swaskuthar Rasa, Prawal Pishthi, Lawanagadi Vati, Kasa

Corresponding Author:

Dr. Mohan R. Yende

Professor and HOD, Dept. of Rachana Sharir
Bhausaheb Mulak Ayurveda College, Butibori, Nagpur.
Email: yrmohan1@gmail.com Mobile no.9970137300



How to cite this article: Yende M. R, Chamat A. D. Thosar Sheetal. A Study on Efficacy of Ayurveda Indigenous Formulations In Kasa (Cough) Among Post Covid-19 Patients. Int. J Ind. Med. 2021;2(5):15-23

Introduction:

Corona viruses (Covid-19) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and severe acute respiratory syndrome (SARS-CoV).¹ General signs and symptoms found in covid infection include fever, cough, myalgia, fatigue and breathing difficulties. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, kidney failure, lung fibrosis followed by a short period of convalescence (on the order of few days).² Subsequently patient complained of a relapse with persistent symptoms, especially myalgia, intense fatigue, cough, sensation of fever, shortness of breath, chest tightness, tachycardia, headaches and anxiety.³ According to Ayurveda, pandemic diseases are those disease which spread from one person to other through contacts or droplets through air. As far as, there is no restorative medicine for COVID-19 as of now, various efforts are taken to enhance body immunity through various preventive measures.⁴ The holistic approach of AYUSH systems of medicine gives focus on prevention through lifestyle modification like

Ritucharya, Dincharya, dietary management for improving the immunity and various herbal remedies given in Ayurveda.⁵

Post-COVID syndrome is increasingly recognized as a new clinical entity in the context of SARS-CoV-2 infection. Symptoms persisting for more than three weeks after the diagnosis of COVID-19 characterize the post-COVID syndrome.⁶ Cough is a protective reflex by means of which respiratory passages are kept free from foreign matter. Cough may be productive or non-productive. Post-acute covid-19 ("long covid") seems to be a multisystem disease, sometimes occurring after a relatively mild acute illness.⁷ Post-acute covid-19 symptoms vary widely. Even so-called mild covid-19 may be associated with long term symptoms, most commonly cough, low grade fever, and fatigue, all of which may relapse and remit.^{8,9} In Non-productive cough, suppressant medicine should be given while in productive cough serves to drain the airway. Hence a balanced approach is necessary in the management of cough with specific remedies with Ayurveda.

Objective:

1. To determine the efficacy of Ayurveda formulations in post covid -19 cough

- To study the use of Ayurvedic indigenous drugs to prevent complications occurring due to post covid -19 cough.

Materials & Methods:

Source of Data: CRF and Clinical examination of patients

Study instrument / Data Collection tools

- Case record Form (CRF)
- Clinical Examination

Methods of Data Collection relevant to objective

Clinical Examination : A detailed Case Record Form including all the classical signs and symptoms of patients were filled and included in case report proforma by clinical examination.

Type of Study: Interventional study.

Sampling procedure: Random sampling method

Study Duration: 2 months,

Treatment duration: 10 days

Consent Form:

Informed consent was obtained from the participant prior to the start of clinical trial.

Intervention: A combination of drugs are advised to the patients as follows-

- Sitopaladi Churna- 1 gm

- Choushastha Prahari Pippali- 125 mg
- Swaskuthar Rasa- 125 mg
- Prawal Pishthi- 125 mg
- Lawangadi Vati – 250 mg

Powdered combination of above drugs (1 to 4) mixing with 5 ml of honey for 3 – 4 times a day and Lawangadi Vati - 250 mg 3 times a day for 10 days was given. Meanwhile subsequent follow up was taken on 5th day.

All patients were instructed not to take any other cough syrup during this treatment.

Inclusion criteria:

- Patients attending OPD with history of covid-19 infection irrespective of gender.
- Age group between 30 – 50 years
- Patients moderately complaining dry or productive cough.

Exclusion criteria:

- Patients having positive RT-PCR at present.
- Patients less than 21 days of covid -19 infection.
- Patients who are not willing and do not ready to give informed consent.

Assessment Criteria:

A) Subjective parameters:

- Kasa (Cough)
- Shool in Ura & Hritpradesh

3. Swarbheda

4. Daurbalya

OBSERVATION & RESULTS:

In this study, 20 patients were selected randomly as per criteria of selection. These were selected irrespective of sex, religion, socio-economic status and these were from the age group of 30-50 years visiting to Vishwagyan Ayurveda

Panchakarma Clinic and Sundarai Ayurved Clinic, Nagpur. Specially designed Case Report Form (CRF) was used to fill the all basic as well as clinical information of the patients. After a complete examination, treatment was started. All these observations were statistically analyzed and results obtained are presented as follows.

Table No.1 Percentage of Relief in Symptoms of Post Covid Kasa

No.	Symptoms	BT Score	AT Score	Relief
1	Shuska Kasa (Dry Cough)	27	10	63.0
2	Sakapha Kasa (Productive cough)	28	08	71.4
3	Shool in ura and Hritpradesh	44	21	52.3
4	Swarbheda	29	13	55.2
5	Daurbalya	26	11	57.7

Percentage of Relief in Symptoms Score:

In Shuska Kasa (Dry Cough), the percentage of relief was 63%, while relief observed among patient having Sakapha Kasa (Productive cough) was 71.4%. Shool in Ura and Hritpradesh was relieved upto 52.3%.

The percentage of relief for Swarbheda was 55.2%. In symptom Daurbalya the percentage of relief was noted as 57.7%. Overall, it was observed that percentage of relief in all symptoms was 60%

Graph. 1 Percentage of Relief in Symptoms Score:

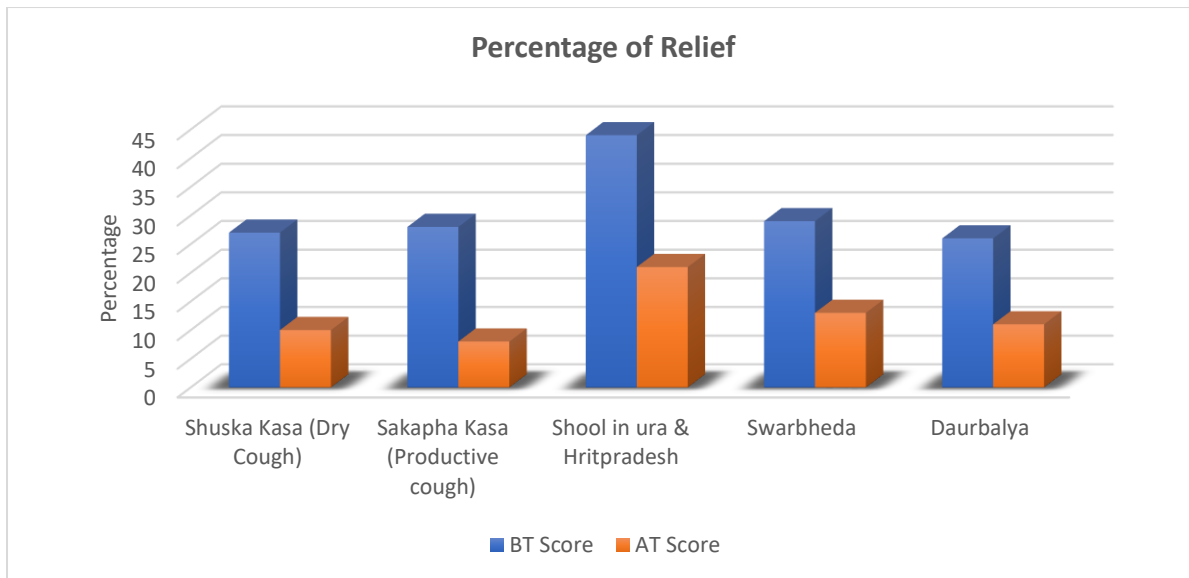


Table No.2 Wilcoxon Signed Rank Test of Symptom score of Post Covid Kasa:

No	Symptoms	Mean \pm SD		\pm S Ed		Sum of +Ranks (T ₊)	P Value
		BT	AT	BT	AT		
1	Shuska Kasa (Dry Cough)	1.35 \pm 1.42	0.50 \pm 0.60	0.31	0.60	55	0.002
2	Sakapha Kasa (Productive cough)	1.40 \pm 1.14	0.40 \pm 0.50	0.25	0.11	91	0.001
3	Shool in ura & Hritpradesh	2.20 \pm 0.61	1.05 \pm 0.75	0.13	0.16	120	0.001
4	Swarbheda	1.45 \pm 0.88	0.65 \pm 0.58	0.19	0.13	78	0.001
5	Daurbalya	1.30 \pm 0.57	0.55 \pm 0.51	0.12	0.11	105	0.001

Effect of Therapy on Symptoms of post covid-19 Kasa statistically:-

For the analysis of subjective criteria in the experimental group the Wilcoxon Signed Rank Test was applied for the Symptom score of Kasa. The results obtained are as follows.

In symptom, Shuska Kasa(Dry Cough) the Mean \pm SD value obtained Before Treatment (BT) was 1.35 \pm 1.42 and After Treatment(AT) was obtained as 0.50 \pm 0.60 which was

statistically highly significant ($p < 0.001$). Similarly in symptom Sakapha Kasa (Productive cough) the Mean \pm SD value obtained Before Treatment (BT) was 1.40 \pm 1.14 and After Treatment(AT) was obtained as 0.40 \pm 0.50 which was statistically highly significant ($p < 0.001$).

In symptom Shool in Ura and Hritpradesh, the Mean \pm SD value obtained Before Treatment (BT) was 2.20 \pm 0.61 and After Treatment(AT) was obtained as

1.05±0.75 which was statistically considerably highly significant ($p < 0.001$).

In symptom Swarbheda, the Mean \pm SD value obtained Before Treatment (BT) was 1.45±0.88 and After Treatment(AT) was obtained as 0.65±0.58 which was statistically considerably highly significant ($p < 0.001$).

In symptom Daurbalya, the Mean \pm SD value obtained Before Treatment (BT) was 1.30±0.57 and After Treatment(AT) was obtained as 0.55±0.51 which was statistically considerably highly significant ($p < 0.001$).

Discussion:

There are several studies published on the basic and complex knowledge on COVID-19. But these focuses almost exclusively on acute illness. It has become evident that long-term consequences occur and some serious complications of covid-19.^{10,11} Beyond inflammation, post-COVID cough and fatigue may be attributed to lung dysfunction. Some study evidence suggests that prolonged inflammation has a main role in the pathogenesis of most post- COVID manifestations including Cough.^{12,13}

The theory of epidemic which is mentioned by Acharya Charaka in Janapadodhwansa Chapter in Vimanasthana. To fight against such Covid 19 post

complications, prevention is the only one option and also immunity plays an important role to fight as decreased immunity in covid-19 causes various problems specially related to respiratory system. The drug Sitopaladi Churna, Choushastha Prahari Pippali, Swaskuthar Rasa, Prawal Pishthi, with honey and Lawanagadi Vati acts especially on Pranavaha Strotasa and these are having Rasayana properties also. These proved to be good immunostimulants. These formulations show soothing effect and relieves cough.

(Sitopaladi Churna, Choushastha Prahari Pippali, Swaskuthar Rasa have a remarkable immunomodulatory effect that leverages the power of five compounds. Shwasakuthara Rasa acts through all its ingredients, as it contains Black pepper is a major component, it stimulate mucous membrane of the respiratory system. Shunthi and Pippali having Ushna and Tiksha Guna which enhance release the sputum. It helps in mucous drainage and imparts strength to alveolar mucous membrane. Aconitum ferox is antispasmodic in nature, hot and stimulant for mucous membrane. While contents of Ingredient in Lawanagadi Vati act as a demulcent, anti-inflammatory and expectorant in action. Lavanga(Clove) is the

main ingredient of this medicine. Clove has kapha dosha balancing, antispasmodic, antiseptic and carminative properties. Lawanagadi Vati and Sitopaladi Churna like pepper and cinnamon function as bio-enhancers. Cardamom is loaded with antioxidants that prevent free radical damage and possesses strong anti-inflammatory properties. This combination has shown statistically significant result for Shuska Kasa, (Dry Cough), Sakapha Kasa (Productive cough) Shool in Ura and Hritpradesh, Swarbheda and Daurbalya after 10 days of administration in post Covid Kasa.

Conclusion:

Sitopaladi Churna combined with Choushastha Prahari Pippali, Swaskuthar Rasa, Prawal Pishthi along with Lawangadi Vati gives significant results in the patients of post covid-19 patients of Kasa. This combination formula is cost effective and does not show any noted side effects. Hereby it can be concluded that the combination of these drugs can be given in covid-19 patients suffering from cough. Whereas multidimensional randomized control trials are necessary to establish the fact. So the objective of the study was to establish a treatment modality which can be helpful to

treat Post Covid Kasa without any adverse effect and restoring the functional capacity of Pranavaha Srotas.

References:

1. Dr. Neha Vats, Dr. Anjna Kumari, Dr. Minakshi. Overview of COVID-19: Current scenario and role of Ayurvedic measures. J Ayurveda Integr Med Sci 2020;5:410-418.
2. Benjamin Davido., & et.al. PosteCOVID-19 chronic symptoms: a postinfectious entity. Clinical Microbiology and Infection;2020,p.1448-1449
3. Gobalenya AE, Baker SC et al. "The species severe acute respiratory syndrome-related coronavirus: classifying 2019-nCoV and naming it SARS-CoV-2". Nature Microbiology, (March 2020). 5 (4): 536-544
4. Anand D. Chamat & Mohan R. Yende: Preventive Aspect on Pandemic Covid-19 Through Ayurveda. International Ayurvedic Medical Journal. December, 2020 http://www.iamj.in/posts/images/upload/5388_5390.pdf
5. Archana Kashid Zende, Dwivedi Amarprakash. Role of Ayurveda in

- prevention of Covid-19 pandemic - An Integrative Overview. *J Ayurveda Integr Med Sci* 2020;5:350-364.
6. Maltezou, H.C.; Pavli, A.; Tsakris, A. Post-COVID Syndrome: An Insight on Its Pathogenesis. *Vaccines* 2021, 9, 497.
 7. Geddes L. Why strange and debilitating coronavirus symptoms can last for months. *NewScientist* 2020. <https://www.newscientist.com/article/mg24632881-400-why-strange-and-debilitatingcoronavirus-symptoms-can-last-for-months/>.
 8. Larun L, Brurberg KG, Odgaard-Jensen J, Price JR. Exercise therapy for chronic fatigue syndrome. *Cochrane Database Syst Rev* 2017;4:.pmid: 28444695
 9. Trisha Greenhalgh & et.al. Management of post-acute covid-19 in primary care. *BMJ* 2020;370:m3026 <http://dx.doi.org/10.1136/bmj.m3026>
 10. Lagier, J.C.; Million, M.; Gautret, P.; Colson, P.; Cortaredona, S.; Giraud-Gatineau, A. Outcomes of 3737 COVID-19 patients treated with hydroxychloroquine/azithromycin and other regimens in Marseille, France: A retrospective analysis. *Travel Med. Infect. Dis.* **2020**, 36, 101791.
 11. Eythorsson, E.; Helgason, D.; Ingvarsson, R.F.; Bjornsson, H.K.; Olafsdottir, L.B.; Bjarnadottir, V. Clinical spectrum of coronavirus disease 2019 in Iceland: Population based cohort study. *BMJ* **2020**, 371, m4529. [[CrossRef](#)]
 12. Maltezou, H.C.; Raftopoulos, V.; Vorou, R.; Papadima, K.; Mellou, K.; Spanakis, N.; Kossyvakis, A.; Gioula, G.; Exindari, M.; Froukala, E.; et al. Association between upper respiratory tract viral load, comorbidities, disease severity, and outcome of patients with SARS-CoV-2 infection. *J. Infect. Dis.* **2021**, 223, 1132–1138. [[CrossRef](#)] [[PubMed](#)]
 13. Pavli, A.; Theodoridou, M.; Maltezou, H.C. Post-COVID syndrome: Incidence, clinical spectrum, and challenges for primary healthcare professionals. *Arch. Med. Res.* **2021**.

© 2021 IJIM (An International Journal of Indian Medicine | Official publication of Ayurveda Research & Career Academy.(ARCA)

INTERNATIONAL JOURNAL OF INDIAN MEDICINE

IIFS IMPACT FACTOR : 2.125

Indexed by



International Category Code (ICC):
 ICC-1702

International Journal Address (IJA):
 IJA.ZONE/258276217634