

SYMPTOM BASED PREVENTIVE AND CURATIVE PROTOCOL FOR HOMOEOPATHIC MANAGEMENT OF COVID-19

In the current scenario of COVID-19 pandemic outbreak, we are proposing a protocol in collaboration with Homoeopathy Department and National AYUSH Mission to improve the immunity of people residing in Kerala. Rapid Action Epidemic Control Cell Homoeopathy (RAECH), Kerala, was constituted as per GO(Rt) No: 2543/04/H & FWD dated 07/09/2004. This cell was inaugurated on 15.12.2004 under Department of Homoeopathy. Epidemic Control Measures are being initiated under the supervision of RAECH by distributing preventive medicines, conducting medical camps, health awareness programmes and seminars throughout the State, during the periods of epidemic outbreaks. During the past epidemic outbreaks Department of Homoeopathy and Homoeopathic Medical Education have successfully conducted various immunization programmes to support the public health interventions in Kerala. In this regard we are proposing a protocol for enhancing the immunity of people in Kerala by using Homoeopathic medicinal interventions as follows,

Phase-I:

Preventive and immuno booster approach:

According to the recommendations of the Central AYUSH Ministry we propose to use Arsenicum Album 30 (Ars. Alb.30) for prophylaxis. By upgrading the immunological memory of human beings using an external stimulus through lipid functionalized As_2O_3 (Ars. Alb), we can improve the specific immunity of public against SARS-CoV-2. Ars. Alb is a well-established drug for clinical management of diseases with presenting symptoms similar to COVID-19. As_2O_3 is widely used in modern medicine and nanomedicine trials for improving immunity and reduce inflammation due to immunocompromised diseases¹⁻¹⁰. In homoeopathic pharmacopeia of India, the preparation of Ars.Alb. is clearly mentioned and Ars.Alb. 30 is considered as an established drug derived from mineral sources which can deliver therapeutic action at nanomaterial dose¹⁰⁻¹⁵.

More importantly As_2O_3 and its various formulations have a significant role in PML isoforms and these PML gene regulations have crucial role in generating antiviral defense mechanism¹². In the context of COVID-19 pandemic outbreak As_2O_3 based homoeopathic prophylaxis will help the human body to experience an immunological learning from artificial immunochallenge raised through Ars.Alb. Glycerin present in Ars. Alb. elevates the blood plasma osmolality thereby extracting water from tissues into interstitial fluid and plasma, which in turn helps the associated As_2O_3 to perforate through the cell membranes. Thus, the Ars.Alb. entered in to the cellular environment will create an immunological stress¹⁵⁻²⁰. The body will auto activate the defensive mechanism to fight this immunocompromised situation and these quantum biological variations will manifest as the symptom picture of Ars. Alb. As per homoeopathic prophylaxis we use Ars.Alb. compound due to its similarity with symptoms manifested in COVID-19 infected patients. Which depicts that the person subjected to homoeopathic prophylaxis will develop an immunomemory which can defend against the SARS-CoV-2 virus. In conclusion we propose a

highly effective, safe and economically viable personalized, precision intervention to improve the immunity of common public. Ars.Alb is used as an CDSCO approved drug in India without any contra indications till date. In conclusion we propose a state wide homoeopathic prophylaxis for preventing the COVID-19 pandemic outbreak. It can be carried out in accordance with the COVID-19 protocol in collaboration with Local Self Government Departments through ASHA workers, KUDUMBA SREE members, selected health workers and volunteers. The fund required for the activities can be mobilized with the help of National AYUSH Mission, Local Self Government Departments and Plan Funds.

Phase-II:

Integrated approach for clinical management

COVID19-Homoeopathic Mission Monitoring Team will be constituted under the SLEG. Homoeopathic Expert Team will be formed based on the SLEG recommendations. Standard homoeopathic medicinal intervention protocol will be adopted for managing the clinical conditions with presenting symptoms similar to the symptoms of COVID-19.

Laboratory diagnosis:

It is recommended to measure the baseline values of CBC,RFT,LFT,CRP,RBS,ECG,USG,PFT, BP, RR, PFT, ESR, procalcitonin, ferritin, D -dimer, total and subpopulations of lymphocytes, IL-4, IL-6, IL-10, TNF- α , INF- α , LDH, CK-MB, Troponins and other indicators of inflammation and immune status, which can help evaluate clinical progress, alert severe and critical tendencies, and provide a basis for the formulation of treatment strategies. Most patients with COVID-19 have a normal level of procalcitonin with significantly increased levels of (-reactive protein. A rapid and significantly elevated C-reactive protein level indicates a possibility of secondary infection. D -dimer levels are significantly elevated in severe cases, which is a potential risk factor for poor prognosis. Patients with a low total number of lymphocytes at the beginning of the disease generally have a poor prognosis. Severe patients have a progressively decreased number of peripheral blood lymphocytes. The expression levels of IL-6 and IL-10 in severe patients are increased greatly. Monitoring the levels of IL-6 and IL-10 is helpful to assess the risk of progression to a severe condition. Severe and critically ill patients are vulnerable to secondary bacterial or fungal infections. Early diagnosis, treatment and isolation should be carried out whenever possible. Dynamic monitoring of lung imaging, oxygenation index and cytokine levels are helpful for early identification of patients who may develop into severe and critical cases.

Clinical diagnosis:

Clinical diagnosis is based on symptom analysis, symptom picture group analysis and symptom dynamics during homoeopathic medicinal intervention based on standard homoeopathic medicinal intervention protocol.

Standard Homoeopathic Medicinal Intervention Protocol (SHMIP):

SHMIP is based on classical homoeopathic approach. The symptoms of the patient will be diagnosed through observations and questions. These symptoms are grouped in to different categories and the medicines indicated for the obtained symptom picture is identified and prescribed according to the susceptibility of patient. The dose of the medicine is determined based on the severity of symptoms which can be corelated to the laboratory diagnosis. The cure is determined by the complete relief from symptoms which can be identified from the standard laboratory diagnosis data by comparing to the corresponding baseline values.

Drugs used:

All the drugs used in Homoeopathic medicinal interventions are approved by CDSCO and listed in Homoeopathic pharmacopeia of India. Till date there no contraindications are reported for the drugs listed in this protocol.

A	<p>Patient with presenting mild symptoms similar to clinical symptoms of sore throat/cough/rhinitis/diarrhea/fever/respiratory issues/lung/heart/liver/kidney/neurological diseases/hypertension/haematological disorders/diabetes/cancer/HIV-AIDS/pregnant lady/cardiovascular diseases/fall in blood pressure/respiratory distress/endocrine disorders/influenza/influenza like illness/porphyria/myasthenia gravis/epilepsy/somnolence/dyspnea/convulsions.</p> <p>On worsening of symptoms/clinical features patient will be referred to COVID-19 centers. Treatment will be carried out by adhering to the standard safety measures and isolation/quarantine protocols for COVID-19.</p>
B	<p>Category A+ Patient with mild/moderate level presenting symptoms similar to clinical symptoms of COVID-19. On worsening of symptoms/clinical features patient will be referred to COVID-19 centers.</p> <p>Treatment will be carried out by adhering to the standard safety measures and isolation/quarantine protocols for COVID-19.</p>
C	<p>Patient with severe presenting symptoms similar to clinical symptoms of COVID-19/test +ve in PCR/Rapid screening test for SARS-CoV-2.</p> <p>Patient will be referred to COVID-19 centers and homoeopathic treatment can be provided as an adjuvant.</p> <p>An expert medical team from homoeopathy department will observe and follow up the symptomatic variations in patients subjected to medications according to the current COVID-19 protocol issued by the Health and Family welfare Department, Govt. of</p>

COVID-19 HOMOEOPATHIC TREATMENT GUIDELINES FOR KERALA
Based on the symptom picture and clinical diagnosis, the patient will be categorized in to three groups A,B and C

A	B	C		
<p style="text-align: center;">Symptomatic Treatment</p> <p>Categorization should be reassessed in every 12-24 hours</p> <p>The homoeopathic drugs recommended are (Based on Symptoms and clinical correlation from laboratory diagnosis)</p> <p>Drugs recommended:</p> <ul style="list-style-type: none"> > Aconite > Belladonna > Bryonia, > Gelsemium > Hep Sulph > Ipecac > Ferrum Phos > Nux Vom > Pulsatilla > Rhustox > Ars. Alb. > China > Arnica > Veratum Alb 	<p style="text-align: center;">Symptomatic Treatment</p> <p>Categorization should be reassessed in every 24-48 hours</p> <p>The homoeopathic drugs recommended are (Based on Symptoms and clinical correlation from laboratory diagnosis)</p> <p>Drugs Recommended:</p> <table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> > Antium Tart > Phos > Carboic Acid > Carbo Veg > Camphor > Chelidonium > Iodum > Lachesis > Lycopodium > Merc sol > Pyrogen > Sulphur </td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> > Digitalis > Ammon Carb > Veratum Viride > Hydrocyanic Acid > Tuberculinim > Ars Alb > Calc Iod > Apis Mel </td> </tr> </table>	<ul style="list-style-type: none"> > Antium Tart > Phos > Carboic Acid > Carbo Veg > Camphor > Chelidonium > Iodum > Lachesis > Lycopodium > Merc sol > Pyrogen > Sulphur 	<ul style="list-style-type: none"> > Digitalis > Ammon Carb > Veratum Viride > Hydrocyanic Acid > Tuberculinim > Ars Alb > Calc Iod > Apis Mel 	<p style="text-align: center;">Symptomatic Treatment</p> <p>Categorization should be reassessed in every 72 hours</p> <p>The homoeopathic drugs recommended as an adjuvant with the protocol for category C issued by Health and Family Welfare Department, Govt. of Kerala</p> <p>(Based on Symptoms and clinical correlation from laboratory diagnosis)</p> <p>A thorough evaluation with regards to progression of the pathology and individual's characteristics would determine the drug selection.</p> <p>Drugs Recommended:</p> <ul style="list-style-type: none"> > Camphor > Kali Iodide > Calc. Iod.
<ul style="list-style-type: none"> > Antium Tart > Phos > Carboic Acid > Carbo Veg > Camphor > Chelidonium > Iodum > Lachesis > Lycopodium > Merc sol > Pyrogen > Sulphur 	<ul style="list-style-type: none"> > Digitalis > Ammon Carb > Veratum Viride > Hydrocyanic Acid > Tuberculinim > Ars Alb > Calc Iod > Apis Mel 			

Annexure I :References

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Annexure I

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