



Nasal spray for Novel Coronavirus treatment by using combination of phytoextracts and immunomodulator: A review

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ABSTRACT

Indian continent is full of herbal and endemic plant species which are characteristically described in the Ayurvedic that can be very effective in long term immunity. So keeping in mind all the preventive measures and harms caused by Novel Coronavirus, we have considered some extracted compounds of some different species of these herbal plants of families like- Lamiaceae, Myrtaceae, Meliaceae etc. along with some immunomodulators which not only helps in stabilizing the extracts but also stimulates ones immune system. These plants family contain such significant chemicals that can be used for the treatment of SARS, MERS, Covid-19, Human Coronavirus OC43 etc. This herbal remedy hasn't any side-effect with daily uptake. This reduces or inhibits the viral growth as well develops the immune systems in routine manner. Therefore, we believe that these findings will open further possibilities and accelerate the works towards finding an antidote for this malady. We are trying to treat this pandemic condition with Herbal and Allopathy Method. Our main aim to make a Nasal spray with all ingredients as above discussed in specific composition to give the relief from this havoc.

Keywords: COVID-19; Immunomodulator; Indian Herbal Plants; Natural Extract, SARS MERS.

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INTRODUCTION

Novel Coronavirus is the type of SARS and MERS virus. It has become a great pandemic that created such a big mess and affected the health infrastructures all over the world. It has not only affected the lives of people but has also created great fallout in the economic status of the different countries. It is spreading like a wave in whole world that creating a havoc. Different countries in the world are facing troublesome in various manners, some are in mild form and some in vigorous mode. It has also break down the quality of well developed countries health infrastructure. The art of Ayurveda is prevailing all over the world since decades. Ayurvedic therapies and practices have been introducing some cases in medical use not only in India but also the affiliated countries. The main classical Ayurveda begins with the conveyance of medical knowledge from the ancient people to the modern physicians. The Ayurvedic medicinal therapies have been proved as far as the best for the treatment of many diseases related to skin, liver, kidney, etc. Also the use of herbal plants in preparing cure against various diseases is prevailing since decades. There have been various herbs which are used from different families like Meliaceae, Myrtaceae, and Lamiaceae etc[1]. They contain some compounds in their different plant parts which makes them worth important. Allopathy is another branch of science that deals with the treatment of patients suffering from severe acute diseases by using the different chemical formulas and compounds. Recently, a pharmaceutical drug known as Chloroquine and Hydroxychloroquine anti-malarial drug has been used and thought to be effective in the treatment of Novel Coronavirus[5][14]. But still it is not much as effective as we need to cure the patient from this severe illness.

There are many mixed reviews of using herbal medicines in the world but Ayush ministry of India brought many research proposal by various field that can be treat in possible manner by using various phytoextract. In some Chinese case studies observed that using of herbal and allopathic drugs could reduce the death rate and side effects[4]. Among the 125 herbal Chinese medicines, 13 were having positive results as well as 26 were used to treat the various respiratory problems such as Cough, etc.

rhizoma, Meliaecortex, Coptidis rhizoma, Phellodendron cortex and Sephorasubstrata radix etc[9]. Phytoextract compounds from these herbal medicines reduce the MHV increasing level that can also be used to corona virus symptoms like sore throat, runny nose, fever and dry cough[15]. In a Chinese case study the Litchi seeds having Flavonoid that can be used to treat Corona virus by inhibiting the proteinase activity which is essential for viral protein synthesis. Herbal medicines with allopathy were applied on more than 50 patients in Guangzhou as well as in Shanghai where patients became negative in one week approximately and further no patient showed any kind of symptoms related to Coronavirus.

Allopathy and Ayurvedic, both are best at their end when used for any treatment. We all have learnt that both these two forms of cure are effective separately, as both have their own identity and unique place of importance in the world of medical sciences. It will prove that this new combination of medical treatment is better and worth essential at this need of hour. Moreover, the proper use of medical therapies is important to improve the patient's quality of life and routine functioning and lowers the danger of acute inflammatory provocation and complications. The most ordinary therapies for the fore-going diseases are nasal sprays that can be natural or allopathic in nature. This Intranasal route is probably preferred by both the sufferer and the medical practitioner. This method of nasal spray can be quite fast, simple and does not need any training to perform this task. Among all the pharmaceutical intranasal sprays, our herbal nasal spray can be proved as the best effective remedy as per the ingredients composition that can be totally eco-friendly as well as beneficial for many other respiration related diseases.

BENEFITS OF HERBAL MEDICINES TO CURE COVID19

The formation of our herbal nasal spray includes the combination of an Ayurvedic extract and an allopathic compounds or drugs. The ingredients it contains are the finely extracted compounds from the various plant parts of many herbs fall in the families mentioned above and along with the combination of an immunomodulators which is used to improve the immune system as well as the quality of life and the respiratory tract of the patient. The mixture of various extractions from the leaves of herbs like neem oil (*Azadirachta indica*)[13] also known as the Indian Lilac, Eucalyptus oil (*Eucalyptus globulus*)[11], Peppermint oil (*Mentha piperita*) and Tea-tree oil (*Mentha x piperita* etc[3]. can be used to treat the viral disease that have been reported in many Indian studies. We can extract the essential oils containing compounds like Rutin and Nimba from neem oil[7], Eucalyptal (1, 8- Cineplex)[8], Menthol from Peppermint[6], etc. from the herbs mentioned above and can combine them with an immunomodulator i.e. Vitamin D. As everyone knows about the benefits of vitamin D and recently it has also been found that it can be one of the best compounds to be used in preparing a vaccine against the Novel Coronavirus. We are supposed to use the most active form of vitamin D i.e. 1,25-dihydroxycholecalciferol D3 also known as Calcitriol[10]. It modulates the work of immune cells and makes them work strong at their action. This remedy can be made more beneficial and useful for the cure of various other respiratory diseases by adding some more extracts like Tulsi (*Ocimum tenuiflorum*) leaves extract that known as the Holy Basil. This essential oils combination along with the immunomodulator can be proved as one of the best treatment method for many respiratory problems together. The compounds these essential oils contain are very important and have antiviral, antibacterial as well as various antimicrobial, properties. We can combine the ingredients mentioned above in various concentrations as per the requirements. We can mix the ingredients with the roughly concentrations as Eucalyptal 0.2 mg, Rutin 0.5 mg, hpero 0.1 mg, Nimba 0.1 mg, vitamin D3 and menthol 40% approximately[2]. We have mentioned these concentrations typically on the basis of literature studies provided under various norms. This herbal nasal spray if given to infected patient then it can be effectively treat the viral infection and can prevent possibly. There are plenty of data that support the effectiveness of herbal medicines that use to treat the various infectious diseases like tuberculosis, influenza, asthma and whooping cough etc. in critical condition[12]. The concentrations can be set up as per the need of effectiveness along with the relevance of the type of respiratory disease for which this whole world looking for cure.

CONCLUSION

As we all are aware of the vast benefits of Indian herbs, the herbal nasal spray which we have suggested can provide better results in the cure of Novel Coronavirus. Herbs are always there for us to help when there is no option left. Their antiviral, antimicrobial, anti-inflammatory, antibacterial properties add to their speciality for being used in the herbal remedies. Our herbal nasal spray can prove this that the combination of two separate branches of medical sciences i.e. Ayurvedic and Allopathic can be the best way to treat a respiratory disease. The herbal remedies are always best to cure someone as they have almost negligible side effects. Also the immunomodulator, we have used is very important to take and beneficial for the health of the people in daily routine life. Vitamins strengthen our body and boost the immune system. So their uptake is very essential for a healthy life and their use in the form of

immunomodulator for the treatment of Novel Coronavirus can be proved best as per suggested by us because at this time when this Global Pandemic is increasing its strength day by day all over the world, one should have a strong immune system in order to prevent themselves from this dangerous infection.

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