Necessity for an alternate approach in the management of COVID – 19 in vaccine allergic and unvaccinated population.

Comment [MTV1]: The case reported is not about allergies, but it can be supported by explaining the effect of siddah treatment for allergies on both: introduction and discussion.

Abstract:

The COVID-19 vaccines offer protection against the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) by developing an immune response to the same. Further, there are mass vaccination programs being conducted across the globe and India administered COVID – 19 vaccinesfor more than 90 crores people as on October 2021. However, there are still a bunch of people yet to receive vaccination. Adding to this, very few are found to be allergic to COVID – 19 vaccines. Hence there is a need for an alternative approach till the whole population of the world gets vaccinated. One such approach is prescribing Nilavembu kudineer and Kabha sura kudineer, a polyherbal Siddha medicine formulation of Traditional Indian system of Medicine. This case study highlights the positive effects and importance of the above mentioned polyherbal formulations in the management of mild to moderate COVID-19 patients. Hence, the same can be advised to the individuals who are yet to receive COVID-19 vaccine and persons who are allergic to COVID -19 vaccines.

Key words: Siddha Medicine, SARS-CoV-2 and COVID-19 Vaccine

Introduction:

India administered more than 90 crores of COVID-19 vaccination as of mid October 2021 and it has shown promising effects with decreased morbidity and mortality rate of Coronavirus disease across the country. Similar pattern of reduction in death rate was observed across the globe among the vaccinated populations[1-4]. However, researchers advised to take more precautions against usage of vaccination against patients with severe allergy to any components of COVID-19 vaccines[5-7]. Hence, there is a need for an alternate way for the people with vaccine allergy. Among the available literature it was found that usage of Indian systems of Medicine like Siddha medicine would be a suitable candidate for patients with severe vaccine allergy as well as patients who are waiting to receive the first or second dose of COVID – 19 vaccinations.Among the available Siddha polyhedral drugs, two important preparations namely Nilavembu kudineer and Kabha sura kudineer showed highly positive effects in decreasing the illness of COVID-19 in mild to moderate symptomatic patients[8-10]. In India, above Siddha medicines have been used to treat the dengue and chikungunya virus outbreak and found successful in treating the same[11]. In India, however, very little effort was made to use only Siddha treatment in the management of COIVD-19 patients. In this regard, we present this case report of a mild to moderate Coronavirus disease patient in Chennai who was treated totally with Siddha medications and was completely relieved of his symptoms and the test result was negative within five days.

Comment [MTV2]: References

Comment [MTV3]: as a complementary treatment

Case presentation

Patient information

The patient aged 41 years is a faculty of a premier college in Chennai, Tamil Nadu India. He is not vaccinated for COVID-19 vaccine. He is normally built with a height of 153 cms and weighing 68 kgs with no comorbidities.

Present medical history

Patient on the first day of illnessapproached his Siddha Physician, an Indian system of Medicine practitioner in Chennai for a consultation and started taking medication for his complaints. Since he lived in Chennai, he had self-quarantined due to the likelihood of a COVID-19 infection. Presenting symptoms were fever associatedwith body pain, mild cough from day one and loss of taste and smell from day 2 onwards. Medications like Nilavembu kudineer and Kabhasura Kudineer are clearly recommended for fever in Siddha pharmacopeia and hence the patient management was started as per Siddha's wisdom of Knowledge.

Past medical history

He had been under Siddha treatment (Siddha herbal concoctions) for a period of 1 month for renal calculus and it got dissolved which was confirmed with Ultrasound scan abdomen about 6 months ago.

Comment [MTV4]: Does this treatment enhance or help to Nilavembu kudineer and Kabha sura kudineer treatment?
Yes or no? commit it in discussion

Therapeutic intervention

Therapeutic intervention consisted of two siddha poly herbal decoctions namely Nilavembu Kudineer and Kabha sura Kudineer,normal diet and water of 3- 4 liters per day. The patient had self-quarantined from the first day of fever. Details of the Siddha medicines are:

- Nilavembu Kudineer 30 ml OD (after noon after meals)
- Kabha sura Kudineer 30 ml BD (morning and night after meals)

Both the medicines were taken for 1 week and details are given below.

Table 1 Details of the symptoms, duration, and laboratory investigation performed and medicines taken

Day	Date	Symptoms	Test	Siddha Treatment
1	09.08.2020	Severe body ache (8/10 on a scale of 1–10),mild cough and Temp: 100 °F	Not done	Nilavembu Kudineer and Kabhasura Kudineer (Dosageas given above)
2	10.08.2020	Severe body ache (8/10 on a scale of 1–10),mild cough and temperature:99 - 100 °F. Additionally the patient had loss of taste and smell	RT PCR test done in the Naso-pharyngeal and throat swab. **Detection of SARS-CoV-2** Ct Value: E gene :32.01 RdRp gene 32.32 (Laboratory Report 1)	Same medicines continued
3	11.08.2020	Body ache started decreasing**,** temperature becomesnormal, no cough **and**continued loss of taste and smell	Not done	Same medicines continued
4	12.08.2020	Completely normal except continued loss of taste and smell	Not done	Same medicines continued
5	13.08.2020	Completely normal except continued loss of taste and smell	Not done	Same medicines continued
6	14.08.2020	Completely normal. Taste and smell sensation - Normal	RT PCR test done in the Naso-pharyngeal and throat swab – **No Detection of SARS-CoV-2** (Laboratory Report 2)	Same medicines continued
7	15.08.2020	Completely normal.	Not done	Both the medicines were stopped

Outcome

Initially on day one there was a little high temperature of 100 °F, the symptoms started to subside. From day 3, there were no significant symptoms, except loss of taste and smell. Later, on day 6 there was normalization of his sensation of taste and smell.The patient followed all recommended instructions and the symptoms got normalized very quickly and there was no deterioration of the disease. There were no reported adverse effects.

Discussion:

Siddha medicine is one of India's oldest systems of medicine which are being practiced mainly in the southern part of India. The patient's condition has not worsened in the management of COVID – 19 with theabove-mentioned Siddha medicines. As a result, it's safe to speculate that treating with the above prescribed Siddha medicines for COVID-19 which halted the progress of the severity of the disease. In other words, it can be said that, the usage of Siddha medicines has stopped the patient to go for a critical condition like breathlessness and loss of consciousness. However, this case belongs to the category of mild to moderate illness of COVID-19. Additionally, the above-mentioned Siddha medicines can be prescribed under a qualified Siddha physician especially for those waiting to receive vaccination and those who are allergic to COVID-19 vaccines. Plenty of literatures are in support with our study where thousands of mild to moderate COVID-19 patients are recovered with only Siddha medicines in the quarantine centers, however they have used a different dosage of the abovementioned poly herbal preparations[8-10]. Further, limitation of this study includes - Siddha medicines are not generally advised for a critical patient. Further, this study is a single case study; a larger sample must be researched before a standard approach for the treatment of COVID-19 can be developed.

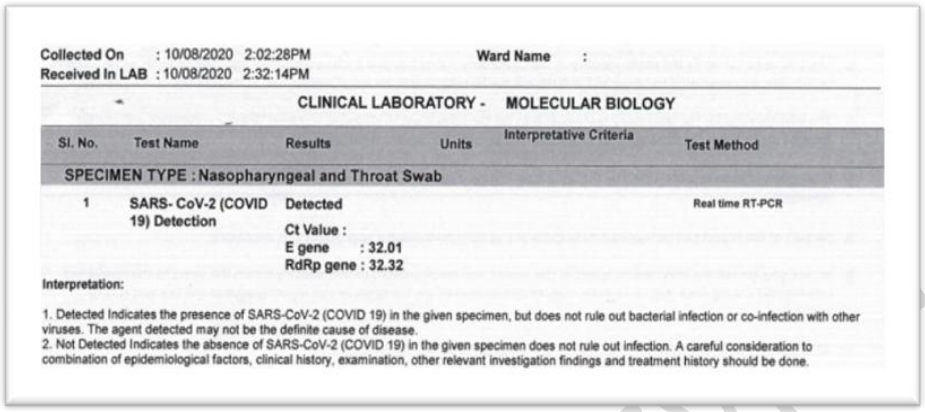
Conclusion:

The Siddha medicines namely Nilavembu and Kabhasura kudineer are found to highly effective in treating the mild to moderate COVID-19 patients. Hence the same can be advised to the individuals those who are yet to receive COVID-19 vaccine and persons those who are allergic to COVID -19 vaccines.

Comment [MTV5]: It is convenient to extend the discussion about some aspects, for example:
1. Why couldn't the reported case be a false negative or positive?
2. The recovery of smell and taste was rapid, the average recovery in patients without treatment is 15 days,
3. Allergies

Research suggested.

Fig 1: Laboratory Report 1: COVID -19 Positive report on Day 2



Collected On : 10/08/2020 2:02:28PM Ward Name :
Received In LAB : 10/08/2020 2:32:14PM

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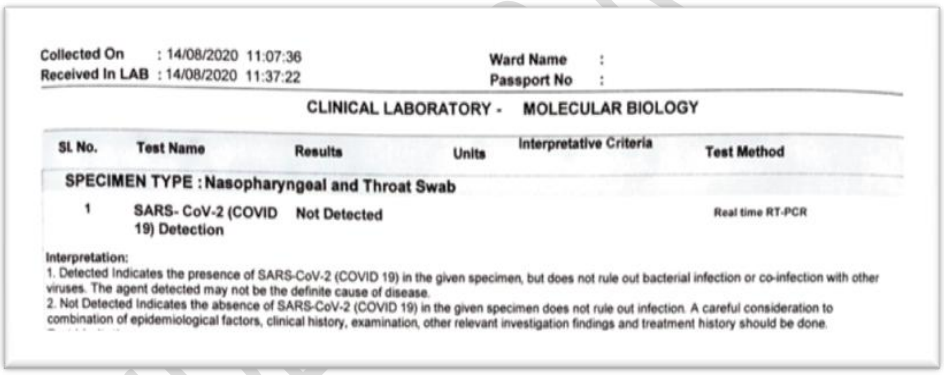
Sl. No.	Test Name	Results	Units	Interpretative Criteria	Test Method
SPECIMEN TYPE : Nasopharyngeal and Throat Swab					
1	SARS- CoV-2 (COVID 19) Detection	Detected Ct Value : E gene : 32.01 RdRp gene : 32.32			Real time RT-PCR

Interpretation:

1. Detected Indicates the presence of SARS-CoV-2 (COVID 19) in the given specimen, but does not rule out bacterial infection or co-infection with other viruses. The agent detected may not be the definite cause of disease.
2. Not Detected Indicates the absence of SARS-CoV-2 (COVID 19) in the given specimen does not rule out infection. A careful consideration to combination of epidemiological factors, clinical history, examination, other relevant investigation findings and treatment history should be done.

The patent naso-phrangeal and throat swab sample showed positive for COVID-19

Fig 2 Laboratory Report 2: COVID -19 negative report on Day 6



Collected On : 14/08/2020 11:07:36 Ward Name :
Received In LAB : 14/08/2020 11:37:22 Passport No :

CLINICAL LABORATORY - MOLECULAR BIOLOGY

Sl No.	Test Name	Results	Units	Interpretative Criteria	Test Method
SPECIMEN TYPE : Nasopharyngeal and Throat Swab					
1	SARS- CoV-2 (COVID 19) Detection	Not Detected			Real time RT-PCR

Interpretation:
1. Detected Indicates the presence of SARS-CoV-2 (COVID 19) in the given specimen, but does not rule out bacterial infection or co-infection with other viruses. The agent detected may not be the definite cause of disease.
2. Not Detected Indicates the absence of SARS-CoV-2 (COVID 19) in the given specimen does not rule out infection. A careful consideration to combination of epidemiological factors, clinical history, examination, other relevant investigation findings and treatment history should be done.

The patent naso-phrangeal and throat swab sample showed negative for COVID-19

NOTE:

The study highlights the efficacy of "Siddha medicine" which is an ancient tradition, used in some parts of India. This ancient concept should be carefully evaluated in the light of modern medical science and can be utilized partially if found suitable.

COMPETING INTERESTS DISCLAIMER:

Authors have declared that no competing interests exist. The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

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