Management of COVID-19 with Siddha and Western Medicine – An Integrative Case Report

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ABSTRACT

Renaissance in acceptance of the Siddha system of medicine in all over India happened during the current scenario of coronavirus disease-2019 (COVID–19) pandemic. The classical texts of Siddha medicine contain descriptions of the symptoms of COVID–19 as a syndrome like definition that may be correlated with KabaSuram. A 49-year-old female residing at New Delhi who got COVID-19 positive with comorbidity of hypothyroidism treated successfully using an integrative treatment plan (Siddha and Allopathic) as per Government-mandated COVID–19 treatment guidelines. The patient developed symptoms such as fever, sore throat, cold, cough with expectoration, difficulty in breathing, chest congestion, and body ache. Initially the patient took Western Medicine (WM) for five days but the symptoms did not subside. After five days an integrated treatment including Siddha medicine (Internal and external medicines) initiated at In Patient ward, Safdarjung Hospital. The health of the patient improved within 3 days and all her symptoms got relieved within 10 days. After completion of treatment, she tested reverse transcription - polymerase chain reaction (RT-PCR) and it was negative on 14th day. Another patient who was admitted with her got COVID–19 positive turned negative only after 30 days as she missed the integrative medicine by probability. The reported case had a prospective follow-up for six months and found to be free of post-COVID complications. Since, this case report based on a single case which shows a positive outcome is incapable of generalizing the conclusion. Further suitable clinical trials need to be conducted to assess its efficacy. The status of the summary is reported as per CASE REPORT (CARE) guidelines.

Keywords: COVID-19, integrative medicine, SARS CoV-2, Siddha, Western medicine

Introduction

Coronavirus disease 2019 (COVID-19) has developed into a pandemic and wreaking havoc in the human life. As of now, December 17, 2021, there have been 271,963,258 confirmed cases of COVID–19, including 5,331,019 deaths reported to the World Health Organization.⁵ This article briefly hypothesizes how far Siddha medicines work in COVID-19 with an integrative approach with modern Western Medicine (WM).

Case Presentation

Patient information

The information of patient and vitals were given in the Table:1

Present medical history

The patient was a frontline warrior working as a Nursing Officer, Safdarjung Hospital, New Delhi. During the first wave of COVID,
owing to her recurrent exposure with COVID-19 patients, she developed mild symptoms such as sore throat, cough, and fever with body pain on 28/05/2020. On 31/05/2020, she had confirmed as COVID-19 positive. After starting antipyretics for three days, there was no improvement in her health. As her symptoms got worsen, she was immediately admitted in COVID special ward at Safdarjung Hospital on 3/6/2020. Even though she was at IPD (In Patient Department), she opted to select an integrative treatment in Siddha Clinical Research Unit, Safdarjung Hospital, based on hearsay evidence. The integrative treatment plan started from 04/06/2020.

**Past medical history**

She has been a known case of hypothyroidism for 12 years under medication.

**Diagnostic Assessment**

The patient was diagnosed on the basis of clinical symptoms as well as RT-PCR test for COVID-19. [Figure 1]

| Table 1: Information of the patient |
|------------------------------------|
| **Patient details**                | **Vitals of the patient** |
| Name-XXX                            | Blood pressure-110/70 mm/hg |
| Age-49 years                        | Heart rate-76/mins          |
| Sex-Female                          | Temperature-Febnile         |
| Marital status-Married              | Pallor-No                   |
| Occupation-Nursing Officer,         | Icterus-Nil                 |
| Safdarjung Hospital, New Delhi      |                             |
| Height-155 cm; Weight-63 kg         | Cynosis-Nil                 |

**Treatment Schedule**

The Siddha medicines supplied to the patient from Siddha Clinical Research Unit, Safdarjung Hospital. The WM given from the pharmacy of the Safdarjung Hospital, New Delhi, as per the guidelines released by the Ministry of Health dated 12/05/2020.[9]

**Internal medicine**

The internal medicines which were given to the patient was tabulated as in Table:2

**External medicine**

The Siddha external medicines were given and application methods were taught to the patient as in Table:3

**Follow-Up and Study Outcome**

The daily follow-up of the patient had taken through phone calls. After taking both Siddha and WM the temperature gradually decreased within two days and breathing difficulty settled after four days. She resolved from all her symptoms after 10 days with the integrative treatment and her RT-PCR test became negative on 13/06/2020 [Figure 2]. Her temperature changes and improvement of symptoms are displayed in the following table [Table 4].

**Outcome**

During the integrative treatment, there was resolution of symptoms gradually within 10 days. There were no adverse or
unanticipated events during the course of treatment. She was in follow-up for six months till December 2020, she did not developed any of the post-COVID complications.

**Symptom assessment**

The patient’s subjective symptoms like body pain and dyspnoea assessed by a numerical rating scale (NRS)\(^\text{[13]}\) and medical research council (MRC) breathlessness\(^\text{[14]}\) scale, respectively (before and after treatment). Table 5 shows the improvement of the both symptoms.

**Discussion**

The principles of *Siddha* nosology suggest that COVID-19 can be categorized as *iyyasuram* associated with *sannipathasuram* in its later stages.\(^\text{[15]}\) The medical intervention is based to restore homeostasis of the three humours (*Vali, Azhal, Iyyam*). The herbal and herbo-mineral preparations often possess several therapeutic properties due to multiple compositions and various signalling pathways.\(^\text{[16]}\) *Iyyam* humour typically denotes phlegm, in which there is either vitiation, aggravation of *Iyyam* pertaining commonly to respiratory system as well as affecting other systems.\(^\text{[17]}\)

So, the treatment procedure was also carried out as per the guideline of the *Siddha* texts. The *KabaSura Kudineer* which was given as a first choice of drug which is quoted under the topic of *Iyyasuram*.\(^\text{[18]}\) It is already proven that the Aqueous Extract of *KabaSura Kudineer Choornam* (AEKKC) possesses a vital antipyretic effect.\(^\text{[19]}\) Further medicines were administered to manage the symptoms. The Ministry of AYUSH in coordination with the stakeholders of Traditional *Siddha* Medicine had published the guidelines for *Siddha* practitioners for managing stagewise

**Table 4: Improvement of Patient’s Health**

| Date          | Patient condition                                                  |
|---------------|-------------------------------------------------------------------|
| 28/05/2020 -  Before COVID positive | Malaise, cold and cough, mild body ache                           |
| 31/05/2020    | Temperature 101. RT-PCR - positive                                |
| 03/06/2020 -  At the time of hospitalisation | Temperature 102, difficulty in breathing, chest congestion, cold, cough with expectoration, and body pain |
| 04/06/2020 - 1st day of *Siddha* medication along with modern medicines | Temperature 101.5, difficulty in breathing, chest congestion, cold, cough with expectoration, and body pain |
| 07/06/2020    | Temperature 99, breathing difficulty and chest congestion reduced. Cold, cough with expectoration, and body pain persists. |
| 10/06/2020    | Temperature - Normal, breathing difficulty relieved. Cold and cough with expectoration reduced. Body ache persisted. |
| 13/06/2020    | COVID-19 RT-PCR negative. Body ache reduced well.                |
COVID illness through *Siddha* medicine. Based on this, the prescription has also derived.[20]

The drug *Brahmananda Bainava Mathirai* is a tablet mentioned in the *Siddha* text to treat all kinds of fevers. *Thalasathi Vadagam* (TSV) is a polyherbal chewable tablet, and *Ammukkara Choornam* which indicated for the *Kaiham* disorders that is, respiratory illness such as sore throat, cold, cough, bronchial asthma, etc.[21] In this case, the patient had treated integratedly with WM *Siddha* medicines. By this integration, the early clinical improvement in breathlessness was observed. After that, gradually the existing symptoms were resolved and the patient also did not develop the post-COVID complications.

Primary care physicians play a major role in the management of COVID-19. Primary care physicians need to be aware of the Indian traditional system of medicine if incorporated it in their management plan, it prevents the deterioration of the disease into critical stage. Siddha Medicine offers safer formulations in treating pandemics, or to reduce the health burden of COVID-19 victims.

**Conclusion**

Severe acute respiratory syndrome corona virus - 2 (SARS CoV-2) that mainly affects the respiratory system. In this particular case, the patient's condition became worse during the management of Western medication alone. But when integrative treatment is given (i.e., both *Siddha* and modern medicine), the patient responded well for the COVID-19 symptoms. By this case report, it is concluded that it is the need of the hour to explore the safety and efficacy of the *Siddha* intervention along with integrative approach for COVID-19 during this pandemic.

**Key Points**

COVID-19 with pre-existing comorbidities is a distinct entity that rapidly evolves and may abruptly culminate in a critical illness. Timely management will prevent the patients from become going into critical stage. If *Siddha* medicine is administered along with WM, rapid recovery will appear and also may prevent the reinfection and post-COVID complications.

**Limitation of the Study**

Since this is a single-case study, it needs further clinical trials on large sample size to appreciate the efficacy of the *Siddha* medicines in COVID-19.

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**Informed consent**

An informed consent was obtained from the patient for the ethical purpose.

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**Conflicts of interest**

There are no conflicts of interest.

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