

Case Report

Modern and Complementary Alternative Medicine (CAM) in the times of COVID-19: A Case Study

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ABSTRACT

The second wave of COVID-19 lead to innumerable sorrow due to untimely demise of People worldwide. The patients have suffered from “hypoxia” during this COVID-19 pandemic and rushed to the hospital for oxygen support. Hypoxia refers to a state when oxygen is not available in sufficient amounts at the tissue level for maintenance of adequate homeostasis. This can be due to inadequate oxygen delivery to the tissues due to low blood supply or low oxygen content in the blood (hypoxemia). Oxygen saturation below 90% can lead to adverse effects on the other organs of the body including brain, heart and kidneys and require external oxygen supplementation. During COVID-19, the caregivers had started experimenting with various alternative therapies. Complementary and Alternative Medicine (CAM) is diagnosis, treatment and/or prevention which complement mainstream medicine by diversifying the conceptual frameworks of medicine. Inhalation of camphor, carom, eucalyptus oil and clove tied in a cloth (potli) was one of the CAM being promoted on social media. This case study is to document a personal experience of using a ‘potli’, a complementary alternative medicine together with regular prophylaxis for maintaining oxygen saturation levels in a condition of hypoxia.

Key words: Case study, COVID-19, complementary alternative medicine, Hypoxia

INTRODUCTION

“Potli” in Hindi is a term used for a cloth in which various items are put and tied together to carry. This can be of any size. Here we are referring to a small piece of cotton cloth in which herbs are put together, bound and held or carried in hand. The “potli” of ayurvedic herbal ingredients became popular on social media during COVID-19 time. It was touted as a panacea for hypoxia faced by corona cases [1]. It comprised of 5 gms of carom seeds (ajwain), five pieces of cloves, three or four pieces of small camphor balls, with 4 or 5 drops of eucalyptus oil tied into a small cotton cloth.

This case study is based on a personal experience where the relevance of traditional method on alleviating nasal congestion and improved airflow was used on a COVID-19 patient in an emergency situation [2].

CASE PRESENTATION

My mother who is a 65 year old with no comorbidities was found COVID-19 positive on 9th April 2021 after fever and bodyache. After around 7 days of home management and consistent fever of 102, oxygen saturation was dipping from 96 to 94, steroids (Dexamethasone 8 mg) were administered on night of 15th April on doctor’s advice (Medicine Consultant, Tertiary Care Hospital). Unable to maintain saturation levels above 94 after a day (after two doses of Dexa

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8 mg), the reading on oximeter dipped from 88 to 85 in a matter of few seconds [3]. So we put her on room concentrator around 10:30 pm on night of 16th April 2021 keeping Oxygen level at 94 for 2 litre per minute. After that, she slept effortlessly during the night. We caregivers however remained on guards throughout the night [4]. It was at around 5 am in the morning of 17th April when the reading on oximeter after being on the room concentrator was gradually dropping and though SO₂ was at 91, the pulse rate dipped to 48. Frantically, I tried to call doctors but none was available as it was quite early in the morning. So, I immediately called the ambulance to take her to the hospital emergency [5]. In the meantime, we calibrated the oxygen concentrator to its full capacity of 5 ltrs. Oxygen saturation was increased to and maintained at over 95. When the ambulance arrived we transferred her to it. But to our surprise the oxygen support in it was not functioning [6]. I carried a ‘portable oxygen can’ used for travelers and athletes and also carried a ‘potli’ which I made “for my mother” the very last evening. The potli was made as per the message being circulated on social media (whatsApp) on its effectiveness in increasing the oxygen levels. My mother was feeling quite comfortable sniffing it last evening. As my mother was on room concentrator till the time ambulance arrived, oximeter reading showed 97. However, it was dipping steadily, till the time we sat in the ambulance to start 20 kms journey to hospital, the O₂ saturation was already on 94-93. Fortunately I was also carrying a portable ‘oxygen can’ which helped in sustaining the oxygen levels almost for next 8-9 kms before it got exhausted [7]. Before leaving for the hospital, I had somehow grabbed onto that potli and took it out when the can was empty and for the next 10 kms we had to rely on the ‘potli’. Since the oximeter was constantly on my mother’s finger I saw her oxygen levels dipping till 79 but with oxygen puffs managed it till 85. However, it was due to the ‘potli’ that the saturation could be increased from 85 to 92 while we reached the hospital emergency gate.

After we reached the hospital emergency, everything was done quite quickly; initially my mother was put under observation for next 4-5 hours, tests and evaluating the severity of the lung infection and status of the blood. Since the case was severe and the lung involvement was quite much she was transported to the ICU in a dedicated COVID facility at the hospital [8]. We were taken aback initially on learning

about her lungs condition and on her referral to the ICU. But we gained confidence with hope that best care shall be given to her as she was in safe hands. Mother was admitted with 6 ltr requirement on high nasal flow cannula but by 20th April (after three days of admission) she was down to 3 ltr requirement and was put on nasal prongs. She showed improvement after 5 days of Remdesvir course along with antibiotics and steroids (dexamethasone, ceftriaxone, azithromycin, remdesivir) [9]. By 22nd April she turned two times covid negative. After observing her for next two days, she was discharged on night of 24th April. The ‘potli’ during the time she was hospitalized was also used frequently in between once she was on nasal prongs as it used to give her a soothing effect and less feeling of oxygen deficiency. After one week of 24 hours oxygen support, it was gradually weaned off and after almost three weeks of discharge, she did not require any external oxygen support. As of 22nd November 2021 she is fine with God’s grace (Figure 1) [10].

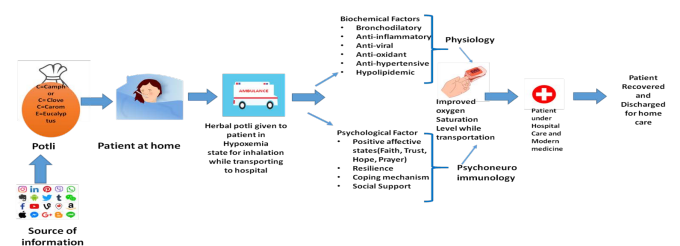


Figure 1. Diagrammatic representation of ‘Potli’ used in addition to the treatment and the multiple factors influencing the recovery of the patient. Bringing patient’s perspective into light, from turning asymptomatic to symptomatic followed by testing for COVID-19 and coming out as positive, there was a slight setback when the patient found out that she is COVID-19 positive. The condition deteriorated every day during 9 days of home management with constant fever though the administration of steroids one day at home before moving to hospital made her feel better. When the oxygen deteriorated and she had to be put on room concentrator, the patient was completely unaware on what was being done probably due to medication but effortlessly complied [11]. Her sudden admission to hospital, compliance and acceptance made things pretty smooth for the caregivers. It came as an initial shock on learning of her condition and admission at ICU as I only took her to hospital on the pretext of getting a checkup done physically. “Kaise theek hungi main”? (How will I get better) when I reassured on phone that we shall all be together as a family. There was a slight pessimism on sudden

admission but she moved with the flow. Her gratitude to the health care workers reflected in every day conversation [12]. There were few instances (2-3) where her morale was low for instance she sent a picture of the oxygen cylinder quoting it as “my lifesupport mechanism”, another episode where on a trial of gradually weaning off from oxygen cylinder the healthcare worker left her with no one to monitor and she gasped for breath. But it was her grit and resilience that made her successfully pass it through. Since the patient in question has been spiritually oriented, a devout follower of ‘right karma’, and religious spiritual texts, the disease psychologically was combated successfully with compliance and faith in almighty [13].

Constant touch with her son through video calls who lives abroad and family here (husband, daughter, son-in-law along with her extended family) augmented her social support mechanism. Positive affective state such as faith, prayer, and hope facilitated and influenced her recovery drastically in addition to the regular prophylaxis as supported by research worldwide. It can be related with Matarazzo’s concept of “behavioral immunogens,” which serves to strengthen the host resistance by preventing subsequent pathogenesis and facilitating salutogenesis, or healing [14].

DISCUSSION

The authors probed into the biochemical composition of the ingredients used in the potli and the physiological and psychological mechanism that might have augmented the recovery of the patient from COVID. Merad and Martin in 2020 showed that in most of the cases of COVID-19 positive patients, there are chances to develop lung abnormalities. This anomalous condition and hyperactive inflammatory responses to SARS-CoV-2 are considered to be the major causes of disease severity and death in COVID-19 patients, owing to increased levels of circulating cytokines, profound lymphopaenia, and substantial mononuclear cell infiltration in the lungs and other vital organs including heart, spleen, lymph nodes, and kidneys [15].

Several studies have demonstrated that the aromatic plants and their essential oils have anti-inflammatory,

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immunomodulatory, bronchodilatory, antiviral and antibacterial properties which renders them as promising therapeutic products against a large number of viruses (Herpes virus-1, Herpes virus-2, HIV, Adeno virus, Hepatitis B Virus, Enterovirus 71, JUNV, etc.) and even against SARS-CoV-1. Thus the 96% of the genetic similarity of SARS-CoV-1 with SARS-CoV-2 gives rise to hope that these herbal products may be active against SARSCoV- 2 infection too and maintain the level of oxygen inside the human body [16].

CONCLUSION

There is no conclusive evidence in the present case report to support the usefulness of the combination of these medicinal plant products to reduce the viral load and/or symptoms. But after taking into consideration the biochemical, antiviral properties and traditional therapeutic use of eucalyptus oil, camphor, clove, ajwain in respiratory disorders and its activity against different types of viruses, with its anti-inflammatory, immune-stimulatory, and antithrombotic properties, indicating attractive features highlights its potential to prevent and control the SARS-CoV-2-associated disease. However, in the present case report, the relevance of using potli throughout these days was found effective owing to providing soothing sensation and a feeling of oxygen sufficiency during the critical phase of the patient while transporting her to the hospital. It was eventually the timely medical care, the CAM, allopathic medication (Modern medicine), patient’s body response and her psychological state of compliance, optimism and faith in the almighty that worked in tandem for optimal recovery.

If a single idea could summarize the rabbinic perspective on healing, it would be this from Etz Hayim, that “recovery from illness is the combined result of our actions, our attitudes, and divine grace.”(Kushner , 2001; p662).

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