Review Article

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EARLY STEAM INHALATION THE FIRST CRUCIAL STEP IN COMBATING EVIL – THE COVID-19

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ABSTRACT

Hot water is good for throat, but the coronavirus 2019 (COVID-19) hidden behind sinuses about 3-4 days. There was no way through which the warm water would reach behind sinuses. The virus that is hiding behind the sinuses enters the lungs within 4 to 5 days and causes respiratory problems. Inhaling vapor reaches the back of the sinuses. Steam inhalation thins mucus and clears nasal passages and reduces inflammation of the upper respiratory tract or inhibits viral replication due to the heat of the steam. The virus is paralyzed at 50 ° C. The virus becomes so weak at 60 ^{0}C that it can be resisted by the human immune system. The virus is completely dead at 70 °C. COVID-19 can be killed by breathing vapours through the nose and mouth, according to doctors. Symptoms of mild to moderate infection (COVID-19) usually disappear through vapor inhalation. If everyone started a week-long streaming campaign, the pandemic would end soon. The deadly COVID-19 is likely to be eliminated if everyone inhales steam during the week. There are no negative consequences to this exercise, and it is inexpensive. This review article describes the benefits of inhalation of steam and its use as an adjunct treatment during the COVID-19 pandemic.

KEYWORDS: COVID-19, Steam, Inhalation, Benefits.

INTRODUCTION

A RESEARCH FOR AN EFFECTIVE TREATMENT FOR THE COVID-19 INFECTION IS STILL UNDERWAY. THERE ARE PRESENTLY NO RANDOMISED CLINICAL TRIALS

During the current pandemic, finding possible treatments for COVID-19 infection and breaking the chain of transmission is usually a challenge. Urgent investigations for an effective treatment for the COVID-19 infection is still underway. There are presently no randomised clinical trials on specific treatments that improve outcomes for patients with COVID-19 infection (1). Patients with upper respiratory tract infections and colds have relied on steam inhalation as a home treatment. Steam inhalation thins mucus and clears nasal passages, as well as reducing inflammation of the upper respiratory tract lining and inhibiting virus multiplication (2). Prevention methods for COVID-19 infection include social distance, using face masks, and hand washing (3). Steam inhalation is believed to be beneficial in reducing upper respiratory tract symptoms, transmission and shedding of the virus. There is limited medical literature on steam inhalation and treatment of COVID-19 infection. The benefits of steam inhalation and its use as an additional therapy during the COVID-19 pandemic are discussed in this review paper.

STEAM INHALATION AND COVID-19

Coronavirus are usually heat sensitive and are often damaged by temperatures that humans can tolerate. Humid and hot air inhalation causes an increase in nasal mucosa temperature anda decrease in chemical secretion by mast cells (4). A study revealed that steam inhalation decreases histamine levels in nasal mucus, which causes a decrease in nasal congestion and the leaking of blood vessels (5). Smoke inhalation reduces flu symptoms by reducing rhinovirus and coronavirus. Steam inhalation helps improve the moisture content in the nasal lining and reduces the production of histamine and tryptase by reducing the reaction between allergies and T-lymphocytes or basophils. In addition, steam helps to maintain the nasal mucosa, lowering secretion of mucus and causing permeability in vessels (6).

Furthermore, steam inhalation reduces nasal irritation, coughing, and congestion related to exposure to allergens (7). In a study of a Thai population, the effect of inhalation of vapours (42 ° C to 44 ° C) on nasal congestion or other nasal problems including itchy nasal, runny nose, sneeze, eye issues, headache, face, and post nasal pain drops showed a significant increase after inhalation of vapor (8). The inhaled vapor condenses over the nasal mucosa and causes an increase in the moisture content above the nasal mucosa (9). In addition, steam inhalation also reduces the osmolarity of the mucus, so that phlegm and thick nasal secretions are excreted from the nasal glands (10).

BENEFITS OF EARLY STEAM INHALATION IN COVID-19

Symptoms of COVID-19 infection usually decrease dramatically after steaming (Figure. 1).

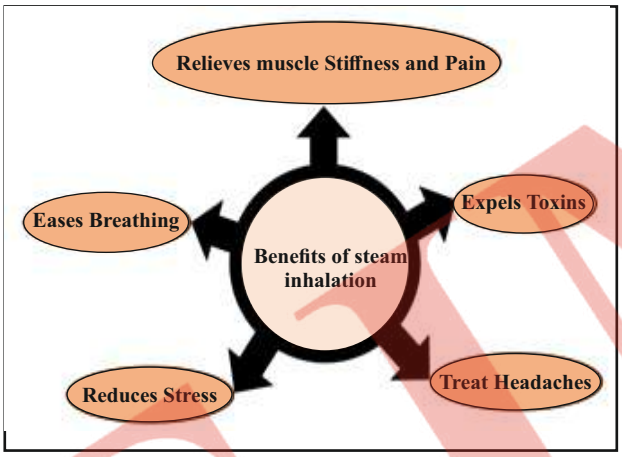

Fig 1. Benefits of Early Steam Inhalation in COVID-19

It is postulated that inhalation of vapor reduces air congestion by loosening inhalation secretions (11). Steam inhalation is useful for relieving pressure build-up in the sinuses and making it easier for the sinuses to pass or exit. It also smooths the lining of the sinonasal area and clears blockages in the nasal cavity. It also helps to reduce the risk of headaches. Steam inhalation is also useful for stopping further transmission of the infection. Steam inhalation helps to release endorphins in the body, which will help a person to relieve stress and feel good in the COVID-19 pandemic. The release of endorphins also makes it easier to sleep well. The steam helps to open the airways, which improve breathing.

The heat from inhaling the steam increases blood flow to the body, which helps to relax muscles. Steam inhalation helps to lower the level of cortisol in the bloodstream. Cortisol is a hormone that responds to the body's mental or physical stress. When the cortisol levels in the body is decreased, a person feels calmer and happier. It also decreases the inflammation response and immune response associated with viral infections of the respiratory system, particularly the upper respiratory tract. In patients with COVID-19, inhaling stream improves nasal symptoms such congestion, itching, sneeze, nosebleeds, post nasal discharge, face irritation, and headaches. Steam inhalation improves ciliary function, thereby helping to clear mucous membranes, congestion, improve breathing and reduce coughing (12). Steam inhalation is an effective adjuvant treatment for patients without symptoms and symptoms of COVID-19. It usually relieves breathing problems and helps patients with COVID-19 recover quickly. Steam inhalation is an effective adjunct treatment for COVID-19 infection.

STEAM INHALATION TECHNIQUES

COVID-19 sufferers are advised to inhale steam two to three times a day from conventional steamers on the available in the market, or they simply boil water and inhale the steam produced (10). In addition to a steamer, a pan or bowel can be used to inhale steam. Water in a steamer is usually boiled with the help of electricity. After the water boils, it produces steam and can be used for inhalation. If used on children, boiled water should be cooled before use for inhalation of vapours. When inhaling steam, the patients should cover head and neck with a thick towel or cloth so that the steam can directly enter the nostrils. Do not let steam escape from the towels or hand towels. The patient should also inhale the vapours, but not enough stress if they feel uncomfortable. The steam inhalation lasts a few minutes and is done two or three times a day. Steam inhalation has been shown to condense upper airways. After this inhalation, the patient will be free from nasal congestion and secretions from the sinuses. After inhalation of vapours, the mucous membranes loosen and cough. Helps reduce hypoxia and make patients asymptomatic. Steam inhalation is a simple and affordable way to treat COVID-19 infection, that helps to reduce the extent of infection and COVID-19 transmission.

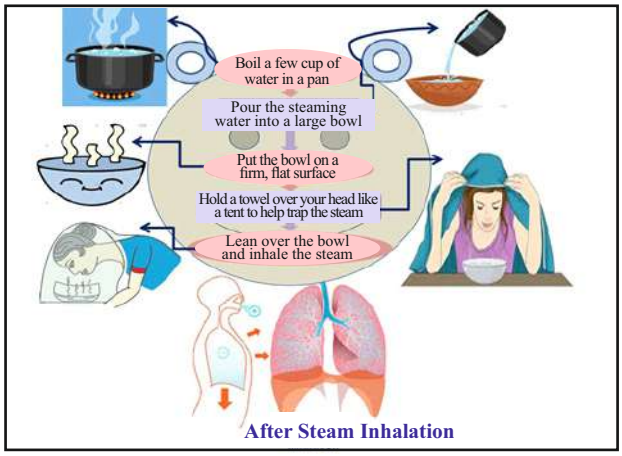

Fig 2. Representation Of Steam Inhalation Technique

CONCLUSION

Steam inhalation is an inexpensive, convenient and widely used therapeutic option for preventing COVID-19 infection. The readily available and relatively low cost of inhalation of vapours make them an attractive option for treating viral infections of the upper respiratory tract. Steam inhalation should be allowed as an addition to washing hands, maintaining distance and using face masks to effectively control COVID-19 infection in the current pandemic. More study in Asian and Western nations is needed to establish the efficacy of steam inhalation in COVID-19 patients.

ABBREVIATION

COVID-19 - Coronavirus disease-19

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