

A Review of Salt Therapy as a Complementary Treatment for Enhancing Respiratory Wellness and Skin Ailment

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Abstract

Salt Therapy refers to a form of Complementary Therapy, which uses “salt” as the one and the only component. It is 100% natural, drug free and safe treatment for people of all ages including children. It was developed after recognition of Speleotherapy where patients were made to sit in natural salt caves for respiratory ailments and skin issues.¹² Studies of the atmosphere of the natural salt caves and the mechanics of salt speleotherapy showed that the main factor, which improves health are the smallest airborne particles of natural rock salt - dry sodium chloride aerosol (DSCA) of a certain size and concentration.¹

With the intent to provide easy reach to patients, salt rooms are made to provide salt therapy by creating atmosphere similar to a salt cave.

For a salt therapy session, with the help of a halo generator, atmosphere similar to a salt cave is created in salt rooms by controlled air medium which is saturated with DSCA with density range (0,5 to 15 mg/m³). The pharmaceutical salt containing particle size up 0,5 to 2, mm is used to generate salt aerosol. The constant level of desirable aerosol mass concentration is maintained automatically. Temperature of 24-26 °C and 40-50% humidity in the air medium are maintained by air conditioning system and dehumidifier.

The patients are made to sit in comfortable reclining chairs and asked to breathe normally. The salt particles generated from the halogenerator, once inhaled, travels through the sinuses and respiratory tract and goes deep into the lungs. It claims to absorb irritants, moisture, including allergens & toxins from the respiratory system and lungs. The salt particles put similar effect on skin by absorbing bacteria and other impurities responsible for many skin conditions.

Keywords: Salt therapy, Halo therapy, Speleotherapy, Wellness, Respiratory illness

Conflict of Interest: Preeti Shah is the founder of Plera Wellness Plus, and a salt therapy practitioner for Respiratory Wellness and Skin Problems.

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Introduction

Everything has its effects and side effects. Fast life, bustling cities and career oriented goals have seriously affected the environment and health of people.

Out of all issues, air pollution has become a serious issue especially for India. According to World Health Organisation (WHO), 9 out of 10 people in the world breathe polluted air.² The reason for concern is its effects on the health of individuals. Exposure to pollution for a long time can lead to respiratory and cardiovascular diseases such as asthma, bronchitis, lung cancer and heart attacks. The damage caused by air pollution is not restricted to respiratory system alone. It claims to affect sexual health as well.

Smoking is another issue which puts serious impact on health. According to WHO, almost half of the world's total children, breathe air polluted by tobacco smoke. Over 40% of children have atleast one smoking parent.³ Smoking adds significant problems ranging from respiratory issues, lung issues, issues related to sexual health including low sperm counts, poor vision, low immune system, high anxiety levels, and the list goes on. Smokers are at higher risk of developing lung cancer, cancer of mouth and throat as compared to non-smokers.

The good part is, people have become conscious about the environment and related mental and physical health issues. The adaptive human nature has kicked the idea of holistic approach and healthy life style with the changing environment. Prevention is worth a pound of cure. And integrative medicine has made a considerable difference in recovery of patients or even taking precautions before hand.

Integrative medicine refers to "combining conventional medicine with complementary therapies". Complementary therapies are kind of therapies which don't interfere with their medication and patients are not asked to stop their current medication. Many general practitioners now take this approach as patients have showed interest in holistic approach. Further, studies have shown that integrative medicine does bring positive benefits to patients.

Salt Therapy - a complementary therapy

Salt Therapy refers to a form of complementary therapy which uses "salt" as the one and the only component. It taps into the incredible therapeutic



properties of pure salt to bring about a host of health benefits. It is 100% natural, drug free and safe treatment for people of all ages including children.

Wonders of salt

Salt contains over 80 minerals that the body requires to be healthy. It has the following properties:

- Antibacterial
- Anti-inflammatory
- Losing excess mucus and speeds up mucociliary transport
- Removing pathogens (i.e airborne pollen)
- Reduction of IgE level or immune system over sensitivity

If we peek into our ancient Ayurveda, benefits of salt are well recognised and accepted. We all are well versed with the term salt water gargles to ease sore throat symptoms or *Neti Pot* for clearing nasal tract infections. Allopathic drugs too support use of saline water in clearing bacteria, infection and inflammation especially in the respiratory tract.

Apart from providing therapeutic effect, salt rocks, when heated, do generate negative ions. Negative ions are invisible molecules that are created in nature as air molecules, which break apart due to sunlight, radiation and moving air and water. Places like mountains, beaches, waterfalls claim to have the most negative ions as nearly as tens of thousands as compared to thousands or hundreds of negative ions at average work place/ home. We experience the power of negative ions when they reach our bloodstream. They are believed to produce biochemical reactions that increase levels of serotonin, which is also called as mood chemical or happiness hormone that regulates mood, reduces anxiety levels, prevents depression and boosts our energy.⁴ That's why we instantly feel revitalized at mountains and beaches even after spending as little time as 20 minutes.

Salt therapy

Salt therapy is believed to have originated back in 1800s where it was noticed that salt mine workers did not experience respiratory problems or lung disease in comparison to other miners and that is how *speleotherapy* came in lime light. Spelotherapy refers to therapy where patients are made to sit in a natural salt cave for respiratory ailments and skin related problems.¹² The atmosphere in the natural salt cave was helping patients to recover from their respiratory ailments and skin related problems. Studies of the atmosphere of the natural salt caves and the mechanics of salt speleotherapy showed that the main factor, which improves health are the smallest airborne particles of natural rock salt- dry sodium chloride aerosol (DSCA) of a certain size and concentration.¹

Salt therapy/Halo therapy has been developed after recognition of Speleotherapy, with the intent to provide easy accessibility to patients. It is provided in special rooms called as Salt Rooms. Salt rooms are usually made of salt coated walls, salt rocks and salt bricks. Walls and grounds are covered with salt to make it look like a salt cave. Halogenerator is a medical device installed in a salt room, which creates unique microclimate, similar to the climate of a natural salt cave. Since salt rooms are man-made, efficacy of salt therapy treatment is highly dependant on the quality of the salt rooms.

Salt Therapy has been claimed to:

- Relieve respiratory ailments
- Reduce asthma, allergies, sinusitis, migraine, bronchitis and lung issues
- Alleviate skin conditions like eczema and psoriasis
- Provide relaxation, calms mind and emotions, re-

talizes and refreshes

- Balancing hormones with increasing energy levels
- Leads to better sleep
- Lessens joint pain and helps reduce muscle cramps
- Detoxifies body

Salt Rooms

At our salt therapy centre, the salt room is made with salt coated walls, himalayan salt bricks and ground covered with loose salt to give a salt cave like look. Peaceful orange glow emitting from himalayan salt bricks create an atmosphere like a large unheated sauna made of salt. When himalayan salt bricks light up, they diffuse negative ions compensating for the general lack of such ions in our bustling cities. Apart from improving air quality, they function as very powerful energizers.

During salt therapy sessions, halo generator helps in creating an atmosphere like salt cave in the salt room. The controlled air medium in the salt room is saturated with DSCA. The Pharmaceutical Salt, free from iodine and anti-caking agents, used to generate aerosol, generates salt particles of the required size (less than 10 µm). Studies have shown that such particles penetrate deep into the respiratory system and skin. Level of desirable aerosol mass concentration is automatically and constantly maintained. Air conditioning system and dehumidifier maintains the required humidity levels of air medium.

The patients are made to sit in comfortable reclining chairs and asked to breathe normally. The salt particles generated from the halogenerator, once inhaled, travel through the sinuses and respiratory tract and goes deep into the lungs. It claims to absorb irritants, moisture, including allergens & toxins from the respi-

| Package | Designed For Group | Helps With |
|----------------------|--|--|
| Detox | Anyone can take this package | enhancing respiratory wellness, building immunity against common cold-cough and city pollution. |
| Smokers Wellness | Smokers who smoke in mild, moderate or extreme level | internally cleans up the intoxicated respiratory system and detoxify body. It helps reducing discomfort caused by smoking. |
| Kids Wellness | Kids (age 1.5 years to 12 years) | in treating allergies, enhancing respiratory wellness, building immunity against common cold-cough and city pollution |
| Sportsman Wellness | Sports person | improving sports performance. It strengthens lungs capacity, increases stamina and endurance. It helps in reducing joint pain, quicker recovery from injuries, muscle soreness and cramps. |
| Respiratory Ailments | Anyone suffering from Respiratory ailment | absorb irritants, moisture, including allergens & toxins from the respiratory system and lungs. And it clears infection by killing bacteria, clearing mucus and reducing inflammation. |
| Skin Disease | Anyone suffering from Skin Disease | absorbing bacteria, clearing infection and other impurities responsible for many skin conditions. |

ratory system and lungs. The salt particles put similar effect on skin by absorbing bacteria and other impurities responsible for many skin conditions.

One session of salt therapy usually lasts from 30 minutes to one hour. Patients are recommended to take number of sessions according to their health problems. i.e. for detox, smokers wellness, respiratory or skin ailments, sportsmen wellness, kids wellness etc.

What our experience says

For smokers who have smoked in mild, moderate or extreme levels, 7 sessions of salt therapy were given at regular intervals. It resulted in reducing discomfort caused by smoking i.e. smokers cough, muscle weakness, breathlessness, frequent headaches etc. It also reduced anxiety levels and corrected sleep issues. Few smokers had complaints of less urge for water and loss of appetite. The same improved at a considerable level. Further, clearer respiratory system increased oxygen carrying capacity of lungs, which increased their energy level and that led to less urge for smoking in most of the patients.

Kids respond to salt therapy very effectively. It helped children in treating persistent cough/cold, due to allergies, pollution etc. It increased energy levels, improved sleep patterns.

Detox package was given to non-smokers and patients having no respiratory/skin issues. They experienced improvement in breathing. One hour in salt room provided relaxation, bringing about mental and emotional calming and rejuvenation that led to better sleep. It also added increased energy levels. Few patients had complaints of chocked ear which also improved.

For sportsmen, it helped in improving breathing, added relaxation, reducing joint pains, quicker recovery from injuries, muscle soreness and cramps.

What various studies say

Negative ions help the human body release more serotonin, reducing anxiety by elevating mood. Generally speaking, negative ions increase the flow of oxygen to the brain; resulting in higher alertness, decreased drowsiness, and more mental energy," says Pierce J. Howard, PhD, author of *The Owners Manual for the Brain*.⁴

According to study over effect of DSCA on the respiratory tract of tobacco smokers, DSCA inhalation produced positive effect on the airways of tobacco smokers. DSCA relieves the main clinical signs (of cough and sputum), improves local defence mecha-

nisms and strengthens resistance of mucous membranes of tobacco smokers owing to decreased colonization activity of pathogenic micro-organisms and increased SIgA.⁵

Salt therapy procedures resulted in improvement of clinical state in 85% of mild and moderate asthma cases, 75% of severe asthma cases and 97% of chronic bronchitis and bronchiectasis. The number of common cold cases during cold season was reduced to half.⁶

Discussion

1) Need for Integrated Approach

While we all know fast life adds stress at a considerable level which puts serious effects on health, researchers at Yale University School of Medicine have found that mental stress can lead to sudden death (particularly important for people with a history of abnormal heart rhythms).⁷ Healthy life style and complementary therapies are useful in improving mental and emotional health. There is need to have integrated approach, which includes conventional drug with complementary therapies focusing on mental and emotional health.

2) Drug Resistance

Another important point for considering complementary therapies is "issue of drug resistance", which is the reduction in effectiveness of a medication. WHO started World Antibiotic Awareness week which aimed to increase global awareness of antibiotic resistance (AMR) to encourage best practices among the general public, health workers and policy makers to avoid aggravation and spread of antibiotic resistance.⁸

3) Are complementary therapies helpful to patients for better recovery?

According to Cancer Research, UK, "An overview of studies (a meta-analysis) published in 2012 suggested that around half of people with cancer use some sort of complementary therapy at some time during their illness. Many complementary therapies concentrate on relaxation and reducing stress. They might help to calm emotions, relieve anxiety and increase general sense of health and well-being. Many doctors, cancer nurses and researchers are interested in the idea that positive emotions can improve health."⁹

4) Is salt therapy free from side effects?

Salt therapy is drug free therapy and claimed to be free from adverse effects. It doesn't use any component other than pharmaceutical salt. If we consider relation of usage of salt and hypertension, with salt

therapy, by inhalation salt enters in the respiratory tract, lungs and skin. It does not enter into stomach, kidney or heart, reducing probable adverse effects. Moreover, if we consider amount of salt which is infused in the room for inhalation, the concentration of salt is 0,5-15 mg/m³ (milligram per cubic metre). To put in perspective the daily recommended salt intake for the average adult according to WHO guideline is less than 5 gram.¹⁰ Hence, the amount of salt entering in the respiratory system through inhalation is extremely low even for patients with hypertension.

Conclusion

Salt therapy helps in combating respiratory, lungs and skin related ailments. Salt therapy studies have shown that DSCA possessed anti-inflammatory activity in the respiratory tract, muco-regulatory action. Hence, it enhances drainage of the bronchi, activates alveolar macrophages, improves biocenosis and local humoral immunity.^{6,11} This provides people with chronic upper respiratory conditions, seasonal allergies, sinusitis, bronchitis and skin disorders significant benefits. Evaluation of respiratory symptoms and functional parameters by persons with risk factors of lung diseases confirmed their significant changes under the action of DSCA.⁶ Apart from that, salt therapy gives indirect benefits i.e detoxifying body, promoting relaxation, mental and emotional calming and rejuvenation, balancing hormones and increasing energy levels, better sleep, reducing joint pain and muscle cramps.

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