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Letter to the Editor / Editöre Mektup

Can the Therapeutic Effect of Salt Therapy be Integrated with Exercise?

Tuz Terapisinin Terapötik Etkisi Egzersizle Bütünleştirilebilir mi?

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Dear Editor,

Salt therapy is a treatment that uses natural environments, or environments that have been designed to resemble them, to reduce health problems in individuals with breathing difficulties for various reasons. Salt therapy is examined in two parts: speleotherapy (natural cave environment) and halotherapy. Speleotherapy is a therapeutic treatment involving the inhalation of salt particles in a natural cave environment, which is particularly beneficial for individuals with respiratory diseases. Halotherapy is a form of treatment that improves respiratory functions by accommodating individuals in artificially prepared salt rooms inspired by speleotherapy.[1] It is emphasized that inhalation of salt particles with salt therapy reduces inflammation and improve airway permeability.[2]

Today, exercise plays a central role in improving respiratory function. It is well-known that various types of exercise (such as aerobic, strength training and flexibility exercises) can significantly increase pulmonary capacity during rehabilitation.[3] Exercises performed as part of pulmonary rehabilitation have been shown to effectively increase the strength and endurance of respiratory muscles, as well as maintain and increase overall muscle mass and strength. It causes an increase in the exercise and functional capacity of individuals.[4] At this point, we propose that the combined use of exercise and salt therapy (speleotherapy and halotherapy) could be more effective in improving pulmonary function in people with various diseases, as well as in healthy individuals. Integrating the anti-inflammatory effects obtained from salt therapy with exercise therapy, which is one of the basic components of pulmonary rehabilitation, can further increase the benefits obtained. In this way, it can contribute to improving the quality of life by making people feel better physically and psychologically. This approach is open to scientific evaluation in future studies with a high level of evidence.

The literature contains only a few studies that have evaluated the combination of exercise and salt therapy. A combined programme of speleotherapy and pulmonary rehabilitation was found to be more effective in increasing functional capacity in geriatric individuals than either treatment applied separately.[5] One study reported that a physiotherapy program including respiratory gymnastics and halotherapy improved functional status and quality of life in children with bronchial asthma.[6] Similarly, a study of patients with ankylosing spondylitis found that combining multiple treatment methods, including speleotherapy, improved functionality.[7] In a recent study with elite boxers, resistance training performed in a salt cave environment provided significant improvements in punch speed, jump, reaction time, VO_2 max and balance.[8] However, salt therapy has been reported to provide a supportive environment for healthy individuals to relax and reduce stress.[9]

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Exercise programs in salt caves and halotherapy rooms under physiotherapist supervision may increase quality of life in both healthy individuals and those with chronic respiratory diseases. However, studies on this integration are limited and often have methodological weaknesses, highlighting the need for high-quality randomized controlled trials. In this context, future studies should aim to standardize exercise type (aerobic, resistance, flexibility, etc.), intensity (low, moderate, high), duration, frequency, and progression principles, as well as parameters specific to the salt room, such as particle concentration, temperature, humidity, and session order. Furthermore, clarifying the integration of these two therapies (whether the exercise is performed in the salt room or in consecutive sessions) is crucial. While salt therapy is generally reported to have no serious side effects, it is contraindicated in conditions such as thyroid dysfunction, tuberculosis, hypertension, cardiovascular failure, infectious diseases, high fever, open wounds, and cancer.[10] Therefore, to ensure the safe implementation of exercise and salt therapy together, high-quality methodological studies should focus more on side effects and contraindications. This approach will guide the strengthening of therapeutic effects and the safe application of the obtained results to different populations.

Keywords: Exercise, halotherapy, salt therapy, speleotherapy

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REFERENCES

1. Puławska A, Manecki M, Flasza M, Styszko K. Origin, distribution, and perspective health benefits of particulate matter in the air of underground salt mine: a case study from Bochnia, Poland. Environ Geochem Hlth. 2021;43(9):3533-56.
2. Lazarescu H, Simionca I, Hoteteu M, et al. Surveys on therapeutic effects of "halotherapy chamber with artificial salt-mine environment" on patients with certain chronic allergenic respiratory pathologies and infectious-inflammatory pathologies. J Med Life. 2014;7(2):83.
3. Feng Z, Wang J, Xie Y, Li J. Effects of exercise-based pulmonary rehabilitation on adults with asthma: a systematic review and meta-analysis. Respir Res. 2021;22:1-12.
4. Spruit MA, Singh SJ, Garvey C, et al. An official American Thoracic Society/European Respiratory Society statement: key concepts and advances in pulmonary rehabilitation. Am J Respir Crit Care Med. 2013;188(8):e13-e64.
5. Mętel S, Kostrzon M, Adamiak J, et al. The influence of speleotherapy combined with pulmonary rehabilitation on functional fitness in older adults–preliminary report. Ther Adv Respir Dis. 2020;14:1753466620926952.
6. Karaganova I, Mindova S. Study of the effect of the combination of halotherapy and breathing gymnastics in children with bronchial asthmas. J IMAB. 2024;30(3):5619-22.
7. Van der Zee-Neuen A, Bogensberger K, Fuchs J, Wildburger S, Ritter M. AB0937 improvements in disease activity and functional impairment after multimodal spa therapy in ankylosing spondylitis patients. Annals of the Rheumatic Diseases. 2024;83:1778.
8. Söyler M, Çinar A, Deliceoğlu G, Koçbay T. The effect of high intensity resistance training performed in the speleotherapy (salt cave) environment in olympic national boxers on body and some physical parameter abilities. Health. 2021;181(61):8-65.
9. Zajac J, Bojar I, Helbin J, Kolarzyk E, Owoc A. Salt caves as simulation of natural environment and significance of halotherapy. Ann Agric Environ Med. 2014;21(1):124-7.
10. Vladeva EP, Ovcharova LP. Halotherapy-benefits and risks. Scripta Scientifica Salutis Publicae. 2018;4:22-6.