The role of pulmonary rehabilitation in managing bronchiectasis.

Fang Ya*

Department of Respiratory and Critical Care Medicine, Rehabilitation School of Capital Medical University, Beijing, China

Abstract

Bronchiectasis is a chronic respiratory condition characterized by the permanent widening and destruction of the airways in the lungs. Pulmonary rehabilitation is a crucial component in the management of bronchiectasis, aimed at improving the patient's lung function and overall quality of life. In this review, the role of pulmonary rehabilitation in managing bronchiectasis is explored, including its benefits, components, and potential drawbacks.

Keywords: Pulmonary rehabilitation, Bronchiectasis, Lungs.

Introduction

The Role of Pulmonary Rehabilitation in Managing Bronchiectasis: Pulmonary rehabilitation is a multi-disciplinary approach to the management of bronchiectasis that involves a combination of exercise, education, and breathing techniques [1]. The goal of pulmonary rehabilitation is to improve the patient's lung function and overall physical and emotional well-being [2].

One of the major benefits of pulmonary rehabilitation for bronchiectasis patients is that it helps to improve their overall quality of life. Patients who participate in pulmonary rehabilitation have been found to have increased energy levels, reduced shortness of breath, and improved physical function [3]. Additionally, pulmonary rehabilitation has been shown to be effective in reducing the risk of hospitalization and improving survival rates in severe cases of bronchiectasis.

Another benefit of pulmonary rehabilitation is that it can help to reduce the progression of bronchiectasis [4]. By improving the patient's lung function and physical activity levels, the rehabilitation helps to reduce the workload on the heart and lungs, thereby slowing the progression of the disease. This is particularly important for patients with severe bronchiectasis, who are at a higher risk of heart and lung complications.

The components of pulmonary rehabilitation for bronchiectasis patients typically include exercise training, breathing techniques, and education on disease management. Exercise training may involve aerobic and strength-training activities, while breathing techniques may include pursed-lip breathing and diaphragmatic breathing [5]. Education on disease management may cover topics such as proper coughing techniques, avoiding infections, and managing medications [6].

Despite the benefits of pulmonary rehabilitation, there are also potential drawbacks that should be considered. One of the main drawbacks is the time commitment required for the rehabilitation program, as it typically involves regular visits to a rehabilitation centre [7]. Additionally, the rehabilitation program may not be covered by all insurance plans, making it cost-prohibitive for some patients. Finally, some patients may experience difficulty in adhering to the rehabilitation program due to physical limitations or other factors.

Conclusion

In conclusion, pulmonary rehabilitation plays a critical role in the management of bronchiectasis, helping to improve the patient's lung function, physical activity levels, and overall quality of life. While there are potential drawbacks to the rehabilitation, such as time commitment and cost, the benefits far outweigh the risks for most patients. For bronchiectasis patients who require rehabilitation, working closely with a healthcare provider and rehabilitation team to determine the best course of treatment is crucial. With the proper care and management, pulmonary rehabilitation can be an effective tool in the treatment of bronchiectasis

References

1. Chalmers JD, Goeminne P, Aliberti S, et al. The bronchiectasis severity index. An international derivation and validation study. Am J Respir Crit Care Med. 2014;189(5):576-85.
2. Chalmers JD, Aliberti S, Filonenko A, et al. Characterization of the “frequent Exacerbator phenotype” in bronchiectasis. Am J Respir Crit Care Med. 2018;197(11):1410-20
3. Araujo D, Shteinberg M, Aliberti S, et al. The independent contribution of Pseudomonas aeruginosa infection to long-term clinical outcomes in bronchiectasis. Eur Respir J. 2018;51(2).

***Correspondence to:** Fang Ya, Department of Respiratory and Critical Care Medicine, Rehabilitation School of Capital Medical University, Beijing, China, E-mail: yahuxi@ccmu.edu.cn

***Received:** 05-Jan-2023, Manuscript No. AARRP-23-89116; **Editor assigned:** 07-Jan-2023, PreQC No. AARRP-23-89116(PQ); **Reviewed:** 20-Jan-2023, QC No. AARRP-23-89116; **Revised:** 25-Jan-2023, Manuscript No. AARRP-23-89116(R); **Published:** 01-Feb-2023, DOI:10.35841/aarrp-4.1.131*

***Citation:** Ya F. The role of pulmonary rehabilitation in managing bronchiectasis. Res Rep Pulmonol. 2023;4(1):131*

4. Saleh AD, Kwok B, Brown JS, et al. Correlates and assessment of excess cardiovascular risk in bronchiectasis. Eur Respir J. 2017;50(5).
5. McDonnell MJ, Aliberti S, Goeminne PC, et al. Comorbidities and the risk of mortality in patients with bronchiectasis: an international multicentre cohort study. Lancet Respir Med. 2016;4(12):969-79.
6. Brill SE, Patel ARC, Singh R, et al. Lung function, symptoms and inflammation during exacerbations of non-cystic fibrosis bronchiectasis: a prospective observational cohort study. Respir Res. 2015;16.
7. McDonnell MJ, Aliberti S, Goeminne PC, et al. Multidimensional severity assessment in bronchiectasis: an analysis of seven European cohorts. Thorax. 2016;71(12):1110-8.

Citation: *Ya F. The role of pulmonary rehabilitation in managing bronchiectasis. Res Rep Pulmonol. 2023;4(1):131*