The role of oxygen therapy in managing emphysema.

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Abstract

Emphysema is a type of chronic obstructive pulmonary disease (COPD) that is characterized by the destruction of the air sacs in the lungs, leading to difficulty in breathing. Oxygen therapy is a common treatment for emphysema patients, aimed at alleviating symptoms and improving their quality of life. In this review, the role of oxygen therapy in managing emphysema is explored, including its benefits, methods of administration, and potential drawbacks.

Keywords: Emphysema, Chronic obstructive pulmonary disease, Oxygen therapy, Lungs.

Introduction

The Role of Oxygen Therapy in Managing Emphysema: Oxygen therapy is a crucial component in the management of emphysema as it helps to increase the oxygen saturation levels in the bloodstream, thereby alleviating breathing difficulties and reducing the strain on the heart [1]. This therapy involves the use of supplemental oxygen, either through a nasal cannula or a mask, to provide the patient with an increased concentration of oxygen [2].

One of the major benefits of oxygen therapy for emphysema patients is that it helps to improve their overall quality of life. Patients who receive supplemental oxygen have been found to have increased energy levels, reduced shortness of breath, and improved sleep patterns [3]. Additionally, oxygen therapy has been shown to be effective in reducing the risk of hospitalization and improving survival rates in severe cases of emphysema.

Another benefit of oxygen therapy is that it can help to reduce the progression of emphysema. By providing the patient with an increased concentration of oxygen, the therapy helps to reduce the workload on the heart, thereby slowing the progression of the disease [4]. This is particularly important for patients with severe emphysema, who are at a higher risk of heart failure and other complications.

The methods of administering oxygen therapy for emphysema include the use of a nasal cannula or a mask. A nasal cannula is a small, flexible tube that is placed in the nostrils and connected to a portable oxygen tank. The mask, on the other hand, covers the nose and mouth and is connected to a larger oxygen tank. Both methods are effective and the choice between the two will depend on the patient's needs and preferences [5].

Despite the benefits of oxygen therapy, there are also potential drawbacks that should be considered. One of

the main drawbacks is the cost of the therapy, as it can be expensive to purchase the necessary equipment and supplies [6]. Additionally, the therapy requires regular monitoring and maintenance to ensure that it is working effectively and safely. Finally, some patients may experience discomfort or inconvenience when using the equipment, particularly if they are required to use it for extended periods of time.

Conclusion

In conclusion, oxygen therapy plays a critical role in the management of emphysema, helping to alleviate symptoms, improve quality of life, and reduce the progression of the disease. While there are potential drawbacks to the therapy, such as cost and discomfort, the benefits far outweigh the risks for most patients. For emphysema patients who require supplemental oxygen, working closely with a healthcare provider to determine the best course of treatment is crucial. With the proper care and management, oxygen therapy can be an effective tool in the treatment of emphysema.

References

- Croxton TL, Bailey WC. Long-term oxygen treatment in chronic obstructive pulmonary disease: recommendations for future research: an NHLBI workshop report. Am J Respir Crit Care Med. 2006;174(4):373-78.
- 2. Doherty DE, Petty TL, Bailey W, et al. Recommendations of the 6th long-term oxygen therapy consensus conference. Respir Care. 2006;51(5):519-25.
- 3. Albert RK, Au DH, Blackford AL, et al. A randomized trial of long-term oxygen for COPD with moderate desaturation. N Engl J Med. 2016;375(17):1617-27.
- 4. O'Driscoll BR, Howard LS, Davison AG. BTS Guideline for emergency oxygen use in adult patients. Thorax. 2008;63(S6):1-68.

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- 5. Górecka D, Gorzelak K, Sliwiński P, et al. Effect of longterm oxygen therapy on survival in patients with chronic obstructive pulmonary disease with moderate hypoxaemia. Thorax. 1997;52(8):674-79.
- 6. Stein DA, Bradley BL, Miller WC. Mechanisms of oxygen effects on exercise in patients with chronic obstructive pulmonary disease. Chest. 1982;81(1):6-10.