Oxygen revival: Enhancing health through oxygen therapy techniques.

Gicom Luci*

Department of Medicine, Weill Cornell Medicine, New York, NY, USA

Introduction

Oxygen, the elixir of life, is fundamental to sustaining human existence. Oxygen therapy, a medical intervention aimed at delivering higher concentrations of oxygen to individuals with respiratory conditions or in need of increased oxygen levels, plays a pivotal role in enhancing health and improving overall well-being. "Oxygen Revival" encapsulates the significance of oxygen therapy techniques, exploring their diverse applications, benefits, and advancements in medical care [1].

Oxygen therapy involves the administration of supplemental oxygen to individuals whose respiratory system may be compromised due to various conditions. It aims to increase the amount of oxygen available to the body's tissues, supporting vital functions and improving overall health [2].

Numerous medical conditions may necessitate oxygen therapy. Chronic obstructive pulmonary disease (COPD), pneumonia, asthma exacerbations, cystic fibrosis, and various respiratory infections are among the conditions where oxygen therapy can be beneficial. Additionally, individuals with certain heart conditions or those recovering from surgery may also benefit from supplemental oxygen [3].

Oxygen therapy techniques encompass various methods of delivering oxygen to patients. Nasal cannulas, which deliver oxygen through small tubes placed in the nostrils, are commonly used for individuals requiring low to moderate levels of oxygen. Masks, both simple face masks and more specialized masks like Venturi masks or non-rebreather masks, are utilized for higher concentrations of oxygen or for individuals needing precise oxygen delivery [4].

For individuals with chronic respiratory conditions requiring continuous oxygen supplementation, home oxygen therapy becomes an integral part of their daily lives. Portable oxygen concentrators or oxygen tanks allow individuals the freedom to move and engage in daily activities while receiving the necessary oxygen support [5].

The primary goal of oxygen therapy is to improve oxygen levels in the body, thereby alleviating symptoms and improving quality of life. Benefits include increased energy levels, reduced shortness of breath, improved cognitive function, better sleep, and enhanced overall well-being. By providing the body with adequate oxygen, therapy techniques support vital organ functions and aid in the healing process [6]. Pulse oximetry, a non-invasive method of monitoring oxygen levels in the blood, is an essential tool in managing oxygen therapy. By using a small device called a pulse oximeter, healthcare providers can measure oxygen saturation levels in the blood, ensuring that patients receive the appropriate amount of supplemental oxygen [7].

While oxygen therapy offers numerous benefits, it also presents challenges and considerations. Ensuring proper oxygen delivery, avoiding complications such as oxygen toxicity, and addressing potential fire hazards associated with oxygen use are crucial aspects of therapy management. Moreover, adapting to the lifestyle changes necessitated by continuous oxygen supplementation may present emotional and practical challenges for individuals [8].

Medical advancements continue to refine and improve oxygen therapy techniques. Innovations in oxygen delivery devices, such as high-flow nasal cannulas and portable oxygen concentrators, offer more efficient and convenient options for patients. Research efforts also focus on optimizing oxygen delivery methods to enhance effectiveness and patient comfort [9].

A personalized approach to oxygen therapy considers each patient's unique needs and circumstances. Tailoring the therapy to suit the individual's condition, lifestyle, and preferences promotes better adherence and ensures optimal outcomes. Education and support from healthcare providers play a crucial role in empowering patients to adhere to prescribed oxygen therapy regimens [10].

Conclusion

"Oxygen Revival" embodies the transformative impact of oxygen therapy techniques on enhancing health and improving the lives of individuals with respiratory conditions. From its diverse applications and delivery methods to its benefits in alleviating symptoms and improving quality of life, oxygen therapy stands as a cornerstone in respiratory care. By embracing advancements, individualizing care, addressing challenges, and providing comprehensive support, the journey through oxygen therapy becomes a pathway to revitalizing health, restoring vitality, and embracing life with renewed vigor.

Reference

1. Timmerman R, Paulus R, Galvin J, et al. Stereotactic body radiation therapy for inoperable early stage lung cancer. JAMA. 2010;303:1070–6.

Citation: Luci G. Oxygen revival: Enhancing health through oxygen therapy techniques. J Clin Resp Med. 2023;7(6):180

^{*}Correspondence to: Gicom Luci, Department of Medicine, Weill Cornell Medicine, New York, NY, USA. E-mail: lucigicom@med.cor

Received: 06-Nov-2023, Manuscript No. AAJCRM-23-122829; **Editor assigned**: 09- Nov-2023, PreQC No. AAJCRM-23-122829 (PQ); **Reviewed**: 23- Nov-2023, QC No. AAJCRM-23-122829; **Revised**: 25- Nov-2023, Manuscript No. AAJCRM-23-122829 (R); **Published**: 31- Nov-2023, DOI: 10.35841/aajcrm-7.6.180

- Lagerwaard FJ, Senan S, van Meerbeeck JP, et al. Has 3-D conformal radiotherapy (3D CRT) improved the local tumour control for stage I non-small cell lung cancer? Radiother Oncol. 2002;63:151–7.
- 3. Verstegen NE, Oosterhuis JW, Palma DA, et al. Stage I-II non-small-cell lung cancer treated using either stereotactic ablative radiotherapy (SABR) or lobectomy by videoassisted thoracoscopic surgery (VATS): outcomes of a propensity score-matched analysis. Ann Oncol. 2013;24:1543–8.
- 4. Dupuy DE, Zagoria RJ, Akerley W, et al. Percutaneous radiofrequency ablation of malignancies in the lung. AJR Am J Roentgenol. 2000;174:57–9.
- 5. Bargellini I, Bozzi E, Cioni R, et al. Radiofrequency ablation of lung tumours. Insights Imaging. 2011;2:567–76.
- 6. Scagliotti GV, Parikh P, Von Pawel J, et al. Phase III study comparing cisplatin plus gemcitabine with cisplatin

plus pemetrexed in chemotherapy-naive patients with advanced-stage non-small-cell lung cancer. J Clin Oncol. 2008;26:3543–51.

- Kris MG, Natale RB, Herbst RS, et al. Efficacy of gefitinib, an inhibitor of the epidermal growth factor receptor tyrosine kinase, in symptomatic patients with non-small cell lung cancer: A randomized trial. JAMA. 2003;290:2149–58.
- Lynch TJ, Bell DW, Sordella R, et al. Activating mutations in the epidermal growth factor receptor underlying responsiveness of non-small-cell lung cancer to gefitinib. N Engl J Med. 2004;350:2129–39.
- 9. Maemondo M, Inoue A, Kobayashi K, et al. Gefitinib or chemotherapy for non-small-cell lung cancer with mutated EGFR. N Engl J Med. 2010;362:2380–88.
- Borghaei H, Paz-Ares L, Horn L, et al. Nivolumab versus Docetaxel in Advanced Nonsquamous Non–Small-Cell Lung Cancer. N Engl J Med. 2015;373:1627–39.