Current strategies for management of persistent and severe asthma.

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Introduction

Asthma is a chronic respiratory condition that affects millions of people worldwide. It is characterized by recurrent episodes of breathlessness, wheezing, coughing, and chest tightness due to inflammation and narrowing of the airways. While most people with asthma can effectively manage their symptoms with appropriate treatment, a small subset of patients experience persistent and severe asthma that requires specialized management strategies. Persistent and severe asthma is defined as asthma that requires treatment with high-dose inhaled corticosteroids (ICS) plus a second controller medication and/or systemic corticosteroids to achieve adequate control of symptoms. Despite receiving optimal treatment, patients with persistent and severe asthma continue to experience frequent exacerbations, reduced lung function, and impaired quality of life. Therefore, the management of persistent and severe asthma requires a comprehensive approach that addresses both the underlying inflammation and other factors that contribute to asthma severity [1].

Here are some of the current strategies for the management of persistent and severe asthma:

Assessment and monitoring

The first step in the management of persistent and severe asthma is an accurate assessment of asthma severity and control. This involves a thorough evaluation of symptoms, lung function, medication use, and exacerbation history. Patients with persistent and severe asthma should also undergo regular monitoring of their symptoms, lung function, and medication side effects. Monitoring can be done through symptom diaries, peak flow measurements, and regular visits with a healthcare provider [2].

Optimization of medications

Patients with persistent and severe asthma require aggressive treatment with multiple medications to achieve adequate symptom control. The first-line therapy for persistent asthma is ICS, which reduces airway inflammation and improves lung function. For patients with persistent and severe asthma, high-dose ICS may be necessary, along with a second controller medication such as a long-acting beta-agonist (LABA), leukotriene receptor antagonist (LTRA), or a biologic medication. Biologic medications are a relatively new class of asthma medications that target specific inflammatory pathways involved in asthma. These medications are reserved for patients with severe asthma who have evidence of type 2 inflammations, as determined by biomarker testing. Biologics can reduce exacerbation rates, improve lung function, and improve quality of life in patients with severe asthma [3].

Comorbidities management

Comorbidities such as Gastroesophageal Reflux Disease (GERD), Obstructive Sleep Apnea (OSA), and obesity can contribute to the severity of asthma symptoms. Therefore, the management of persistent and severe asthma should also include the treatment of comorbidities. Treatment of GERD may include Proton Pump Inhibitors (PPIs) or histamine receptor antagonists (H2 blockers), while OSA may require the use of Continuous Positive Airway Pressure (CPAP) devices during sleep. Obesity can be managed through diet and exercise programs, and weight loss surgery may be considered for patients with morbid obesity [4].

Patient education and self-management

Effective self-management is crucial for patients with persistent and severe asthma to maintain adequate symptom control and prevent exacerbations. Patients should receive education on asthma triggers, medication use, and how to recognize and respond to worsening symptoms. Asthma action plans should be developed and reviewed regularly with healthcare providers. Patients should also be encouraged to engage in regular physical activity, adhere to a healthy diet, and quit smoking if they are smokers.

Shared decision-making

Shared decision-making is an important aspect of the management of persistent and severe asthma. This involves a collaborative approach between patients and healthcare providers to determine the best course of treatment based on the patient's values, preferences, and goals. Patients should be informed of the benefits and risks of various treatment options and be involved in the decision-making process [5].

Conclusion

The management of persistent and severe asthma requires a comprehensive approach that addresses both the underlying inflammation and other factors that contribute to asthma severity. The strategies discussed above, including assessment and monitoring, optimization of medications, comorbidity management, patient education, and shared decision-making, can all contribute to the successful management of persistent

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and severe asthma. However, it is important to note that the management of persistent and severe asthma is complex and often requires input from multiple healthcare providers, including pulmonologists, allergists, and primary care physicians. In addition, ongoing research is needed to identify new and effective treatments for patients with persistent and severe asthma. Overall, the management of persistent and severe asthma remains a significant challenge in healthcare, but with a comprehensive and collaborative approach, patients can achieve improved symptom control and quality of life. It is essential for patients with persistent and severe asthma to work closely with their healthcare providers and engage in self-management strategies to ensure optimal treatment outcomes.

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